UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☐ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2022

☑ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number 001-37511

Sunrun Inc.
(Exact name of Registrant as specified in its Charter)

Delaware
(State or other jurisdiction of incorporation or organization)

225 Bush Street, Suite 1400
San Francisco, California 94104
(Address of principal executive offices and Zip Code)

26-2841711
(I.R.S. Employer Identification No.)

(415) 580-6900
(Registrant’s telephone number, including area code)

Sunrun Inc.

(Exact name of Registrant as specified in its Charter)

225 Bush Street, Suite 1400
San Francisco, California 94104

(Registrant’s telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class Trading Symbol(s) Name of each exchange on which registered
Common Stock, $0.0001 par value per share RUN Nasdaq Global Select Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☒ No ☐

Indicate by check mark whether the Registrant has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files) Yes ☒ No ☐

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definition of “large accelerated filer”, “accelerated filer”, “smaller reporting company”, and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐

Non-accelerated filer ☐ (Do not check if a smaller reporting company)

Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management’s assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, based on the closing price of the shares of common stock on The Nasdaq Stock Market on, June 30, 2022 was approximately $4.8 billion.

As of February 17, 2023, the number of shares of the registrant’s common stock outstanding was 214,416,497.

Portions of the information called for by Part III of this Form 10-K is hereby incorporated by reference from the definitive Proxy Statements for our annual meeting of stockholders, which will be filed with the Securities and Exchange Commission not later than 120 days after December 31, 2022.
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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The discussion in this Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the Private Securities Litigation Reform Act of 1995, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as “may,” “will,” “should,” “expects,” “plans,” “goals,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential,” “continue,” “likely,” or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans or intentions. Forward-looking statements contained in this Annual Report on Form 10-K include, but are not limited to, statements about:

- the potential impact of regulatory and policy development and changes;
- the availability of rebates, tax credits and other financial incentives, and decreases to federal solar tax credits;
- the potential impact of volatile or rising interest rates on our interest expense;
- our industry’s, and specifically our, continued ability to manage costs (including, but not limited to, equipment costs) associated with solar service offerings;
- potential changes in the retail price of utility-generated electricity or electricity from other energy sources;
- the sufficiency of our cash, investment fund commitments and available borrowings to meet our anticipated cash needs;
- our need and ability to raise capital, refinance existing debt, and finance our operations and solar energy systems from new and existing investors;
- our investment in research and development and new product offerings;
- determinations by the Internal Revenue Service ("IRS") of the fair market value of our solar energy systems;
- our ability to manage our supply chains and distribution channels and the impact of natural disasters, geopolitical conflicts, the COVID-19 pandemic, and other events beyond our control;
- our business plan and our ability to effectively manage our growth, including our rate of revenue growth;
- our ability to further penetrate existing markets, expand into new markets and our expectations regarding market growth (including, but not limited to, expected cancellation rates);
- our expectations concerning relationships with third parties, including the attraction, retention and continued existence of qualified solar partners;
- the impact of seasonality on our business;
- our strategic partnerships and investments and the expected benefits of such partnerships and investments;
• the potential effects of the COVID-19 pandemic, including its variants, supply chain disruptions, inflation, tariffs and trade barriers, export regulations, geopolitical conflicts and other macroeconomic conditions on our business and operations, results of operations and financial position;

• our ability to realize the anticipated benefits of past or future investments, strategic transactions, or acquisitions, and risk that the integration of these acquisitions may disrupt our business and management;

• our ability to protect our intellectual property and customer data, as well as to maintain our brand;

• the willingness of and ability of our solar partners to fulfill their respective warranty and other contractual obligations;

• our ability to renew or replace expiring, canceled or terminated Customer Agreements at favorable rates or on a long-term basis;

• the ability of our solar energy systems to operate or deliver energy for any reason, including if interconnection or transmission facilities on which we rely become unavailable;

• our expectations regarding certain performance objectives and the renewal rates and purchase value of our solar energy systems after expiration of our Customer Agreements;

• the calculation of certain of our key financial and operating metrics and accounting policies; and

• our ability to capitalize on the market opportunities created by the electrification of the U.S. economy with renewable energy.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the section titled “Risk Factors” and elsewhere in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. These risks and uncertainties may be amplified by evolving economic and regulatory conditions, including increasing or volatile interest rates. The extent to which these risks and uncertainties impact our business, operations, and financial results, including the duration and magnitude of such effects, will depend on numerous factors, including, but not limited to, the duration, rapidity, and intensity of these conditions, how widespread their impact is and will continue to be on our industry, and how quickly and to what extent more predictable and stable economic conditions resume. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Annual Report on Form 10-K may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Annual Report on Form 10-K to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this Annual Report on Form 10-K and the documents that we reference in this Annual Report on Form 10-K and have filed with the Securities and Exchange Commission (the “SEC”) as exhibits to this Annual Report on Form 10-K with the understanding that our actual future results, levels of activity, performance, and events and circumstances may be materially different from what we expect.
SELECTED RISKS AFFECTING OUR BUSINESS

Investing in our common stock involves numerous risks, including the risks described in “Part I, Item 1A. Risk Factors”, of this Annual Report on Form 10-K. Below are some of these risks, any one of which could materially adversely affect our business, financial condition, results of operations and prospects.

Selected Risks Related to the Solar Industry

• The solar energy industry is an emerging market which is constantly evolving and may not develop to the size or at the rate we expect.
• We have historically benefited from declining costs in our industry, and our business and financial results may be harmed as a result of recent and any continued increases in costs associated with our solar service offerings and any failure of these costs to continue declining as we currently expect. If we do not reduce our cost structure in the future, our ability to continue to be profitable may be impaired.
• We face competition from traditional energy companies as well as solar and other renewable energy companies.

Selected Risks Related to Our Operating Structure and Financing Activities

• We need to raise capital to finance the continued growth of our operations and solar service business. If capital is not available to us on acceptable terms, as and when needed, our business and prospects would be materially and adversely impacted. In addition, our business is affected by general economic conditions and related uncertainties affecting markets in which we operate. Volatility in current economic conditions could adversely impact our business, including our ability to raise financing.
• Volatility and increases in interest rates raise our cost of capital and may adversely impact our business.
• We expect to incur substantially more debt in the future, which could intensify the risks to our business.

Selected Risks Related to Regulation and Policy

• We rely on certain utility rate structures, such as net metering, to offer competitive pricing to customers in all of our current markets, and changes to those policies, such as those recently decided by the California Public Utilities Commission, may significantly reduce demand for electricity from our solar service offerings.
• Electric utility statutes and regulations and changes to such statutes or regulations may present technical, regulatory and economic barriers to the purchase and use of our solar service offerings that may significantly reduce demand for such offerings.
• Regulations and policies related to rate design could deter potential customers from purchasing our solar service offerings, reduce the value of the electricity our systems produce, and reduce any savings that our customers could realize from our solar service offerings.

Selected Risks Related to Our Business Operations

• Our growth depends in part on the success of our relationships with third parties, including our solar partners.
• We and our solar partners depend on a limited number of suppliers of solar panels, batteries, and other system components to adequately meet anticipated demand for our solar service offerings. Any shortage, bottlenecks, delay, detentions or component price change from these suppliers, or the acquisition of any of these suppliers by a competitor, could result in sales and installation delays, cancellations and loss of market share.
• If we fail to manage our recent and future growth effectively, we may be unable to execute our business plan, maintain high levels of customer service, or adequately address competitive challenges.
• The COVID-19 pandemic, including its variants, has had and could continue to have an adverse impact on our business, operations and the markets and communities in which we operate.
• We may not realize the anticipated benefits of past or future investments, strategic transactions, or acquisitions, and integration of these acquisitions may disrupt our business and our management.

• A failure to hire and retain a sufficient number of employees and service providers in key functions would constrain our growth and our ability to timely complete customers’ Projects and successfully manage customer accounts.

• Regulators may limit the type of electricians qualified to install and service our solar and battery systems in California, which may result in workforce shortages, operational delays, and increased costs.

• Our results of operations may fluctuate from quarter to quarter, which could make our future performance difficult to predict and could cause our results of operations for a particular period to fall below expectations, resulting in a decline in the price of our common stock.

• Our actual financial results may differ materially from any guidance we may publish from time to time.

Selected Risks Related to Taxes and Accounting

• Our ability to provide our solar service offerings to customers on an economically viable basis depends in part on our ability to finance these systems with fund investors who seek particular tax and other benefits.

• If the IRS makes determinations that the fair market value of our solar energy systems is materially lower than what we have claimed, we may have to pay significant amounts to our fund investors, and our business, financial condition and prospects may be materially and adversely affected.

• Our business currently depends on the availability of utility rebates, tax credits and other benefits, tax exemptions and exclusions, and other financial incentives, on the federal, state, and/or local levels. We may be adversely affected by changes in, or interpretation of the application of, these laws or other incentives to us, and the expiration, elimination or reduction of these benefits could adversely impact our business.

If we are unable to adequately address these and other risks we face, our business may be harmed.
Item 1. Business.

Overview

Sunrun’s (the “Company,” “our,” “we”) mission is to provide our customers with clean, affordable solar energy and storage, and a best-in-class customer experience. In 2007, we pioneered the residential solar service model, creating a low-cost solution for customers seeking to lower their energy bills. By removing the high initial cost and complexity of cash system sales that used to define the residential solar industry, we have fostered the industry’s rapid growth and exposed an enormous market opportunity. Our relentless drive to increase the accessibility of solar energy is fueled by our enduring vision: to create a planet run by the sun.

We are engaged in the design, development, installation, sale, ownership and maintenance of residential solar energy systems (“Projects”) in the United States. We provide clean, solar energy typically at savings compared to traditional utility energy. Our primary customers are residential homeowners. We also offer battery storage along with solar energy systems to our customers in select markets and sell our services to certain commercial developers through our multi-family and new homes offerings. After inventing the residential solar service model and recognizing its enormous market potential, we have built the infrastructure and capabilities necessary to rapidly acquire and serve customers in a low-cost and scalable manner. Today, our scalable operating platform provides us with a number of unique advantages. First, we are able to drive distribution by marketing our solar service offerings through multiple channels, including our diverse partner network and direct-to-consumer operations. This multi-channel model supports broad sales and installation capabilities, which together allow us to achieve capital-efficient growth. Second, we are able to provide differentiated solutions to our customers that, combined with a great customer experience, we believe will drive meaningful margin advantages for us over the long term as we strive to create the industry’s most valuable and satisfied customer base.

Our core solar service offerings are provided through our lease and power purchase agreements, which we refer to as our “Customer Agreements” and which provide customers with simple, predictable pricing for solar energy that is insulated from rising retail electricity prices. While customers have the option to purchase a solar energy system outright from us, most of our customers choose to buy solar as a service from us through our Customer Agreements without the significant upfront investment of purchasing a solar energy system. With our solar service offerings, we install solar energy systems on our customers’ homes and provide them the solar power produced by those systems for typically a 20- or 25-year initial term. In addition, we monitor, maintain and insure the system during the term of the contract. In exchange, we receive predictable cash flows from high credit quality customers and qualify for tax and other benefits. We finance portions of these tax benefits and cash flows through tax equity, non-recourse debt and project equity structures in order to fund our upfront costs, overhead and growth investments. We develop valuable customer relationships that can extend beyond this initial contract term and provide us an opportunity to offer additional services in the future, such as our home battery storage service. Since our founding, we have continued to invest in a platform of services and tools to enable large scale operations for us and our partner network, and these partners include solar integrators, sales partners, installation partners and other strategic partners. The platform includes processes and software, as well as fulfillment and acquisition of marketing leads. We believe our platform empowers new market entrants and smaller industry participants to profitably serve our large and under penetrated market without making the significant investments in technology and infrastructure required to compete effectively against established industry players. Our platform provides the support for our multi-channel model, which drives broad customer reach and capital-efficient growth.

Delivering a differentiated customer experience is core to our strategy. We emphasize a customized solution, including a design specific to each customer’s home and pricing configurations that typically drive both customer savings and value to us. We believe that our passion for engaging our customers, developing a trusted brand, and providing a customized solar service offering resonates with our customers who are accustomed to a traditional residential power market that is often overpriced and lacking in customer choice.
We have experienced substantial growth in our business and operations since our inception in 2007, as well as through our acquisition of Vivint Solar on October 8, 2020. As of December 31, 2022, we operated the largest fleet of residential solar energy systems in the United States. We have a Networked Solar Energy Capacity of 5,667 megawatts as of December 31, 2022, which represents the aggregate megawatt production capacity of our solar energy systems that have been recognized as deployments, from our inception through the measurement date. Our Gross Earning Assets as of December 31, 2022 were approximately $12.4 billion. Please see the section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Key Operating Metrics” for more details on how we calculate Networked Solar Energy Capacity and Gross Earning Assets.

We also have a long track record of attracting low-cost capital from diverse sources, including tax equity and debt investors. Since inception we have raised tax equity investment funds to finance the installation of solar energy systems.

Our Multi-Channel Capabilities

Our unique, multi-channel capabilities offer consumers a compelling solar service through scalable, cost-effective and consumer-friendly channels. Customers can access our products through three channels: direct-to-consumer, solar partnerships and strategic partnerships.

Direct-to-Consumer

We sell solar service offerings and install solar energy systems for customers through our direct-to-consumer channel. These solar energy systems are offered to customers either under a Customer Agreement or for purchase. This channel consists of an online lead generation function, a telesales and field sales team, a direct-to-home sales force, a retail sales team and an industry-leading installation organization.

Solar Partnerships

We contract with diverse solar organizations that act as either exclusive or non-exclusive (depending on the terms of their contract with us) distributors of our solar service offerings and subcontractors for the installation of the related solar energy systems. Because of our commitment to these solar organizations and our vested interest in their success, we refer to them as our “solar partners,” although the actual legal relationship is that of an independent contractor. Our solar partners include:

- Solar integrators: trained and trusted partners who originate customers for our solar service offerings and procure and install the solar energy systems on our customers’ homes on our behalf as our subcontractors. Partnerships with solar integrators allow us to expand our brand, quickly enter new markets and drive capital-efficient growth. We compensate our solar integrators on a per solar energy system basis for generating Customer Agreements and the installation work they perform for us.

- Sales partners: sales and lead generation partners who provide us with high-quality leads and customers at competitive prices. We typically compensate our sales partners on a per customer basis for the sales and lead generation services they perform for us. All contracts are between the customer and us, based on a price set by us.

- Installation partners: trusted installation partners who procure and install a subset of our solar energy systems as our subcontractors and allow us to deploy a mix of in-house and outsourced installation capabilities more efficiently. We compensate our installation partners on a per solar energy system basis for the procurement of materials and installation work they perform for us. Installation partners are solely our subcontractors and do not enter into any agreements with our customers.

Our ability to connect specialized sales and installation firms on a single platform, which we license to our solar partners at no cost, allows us to enjoy the benefits of vertical integration without the additional fixed cost structure. This creates margin opportunities, system efficiencies and benefits from network effects in matching these ecosystem participants.
Strategic Partnerships

Our strategic partnerships encompass relationships with new market entrants not previously engaged in solar, including consumer marketing, retail and specialized energy retail companies. Our strategic partners find the residential solar market attractive, but recognize that significant barriers to entry make partnerships the preferred method to reach solar customers. Through these strategic arrangements, we typically market our solar service offerings to the strategic partner’s customer base and install the solar energy systems directly or through one of our solar partners. We manage the customer experience and retain the value of the economic relationship through the term of the customer’s contract and potential renewal period. We have executed strategic partnerships in competitive processes that give us access to millions of potential customers. As our industry grows, we believe that our unique platform and deep partnership experience position us to be the partner of choice for new market entrants. We believe that these broad strategic relationships will help us drive down our customer acquisition costs and make solar accessible to even more customers.

The combination of direct-to-consumer, solar partnerships and strategic partnerships offers distinct advantages. The direct-to-consumer channel allows us to scale rapidly, drive incremental unit costs down over the long term, and refine operational processes to share with our partners. Our solar partnerships and strategic partnerships enable nimble market entry and exit, while allowing for capital efficient growth. Together, this multi-channel strategy supported by our open platform allows us to reach more customers with our leading solar service without compromising our ability to provide exceptional customer service.

Customer Agreements

Since we were founded in 2007, we have been providing solar energy to residential customers at prices typically below utility rates through a variety of offerings, most commonly through our leases and power purchase agreements which we refer to as our “Customer Agreements.” Under our Customer Agreements, customers have the right to use and consume all electricity produced by the solar energy system on a continuous basis. Most Customer Agreements, other than those billed based on generation, entitle the customer to a refund for underproduction below a guaranteed amount, which we refer to as our “performance guarantee.” Either directly or through a solar partner, we construct a solar energy system on a customer’s home which generates electricity at set prices through Customer Agreements which typically have an initial term of 20 or 25 years. Rates for both forms of our Customer Agreements can be fixed for the duration of the contract or escalated at a pre-determined percentage annually. Upon installation, a system is interconnected to the local utility grid. The home’s energy usage is provided by the solar energy system with any additional energy needs provided by the local utility. Any excess solar energy, including amounts in excess of battery storage, that is not immediately used by our customers is exported to the utility grid using a bi-directional utility net meter, and the customer generally receives a credit for this excess power from their utility to offset future usage of utility-generated energy.

Although many of our customers choose to pay little-to-nothing upfront and instead receive a monthly bill, some customers choose to prepay an amount upfront, thereby reducing their monthly bill. The amount of an upfront payment is customized for each customer. Customers may also choose to fully prepay their 20- or 25-year contracts. The prepayment amount is based on the estimated amount of the solar energy system’s output over the typically 20- or 25-year term of the Customer Agreement. If the estimated production of the solar energy system is less than the actual production for a given year after the first full one to two years of the agreement, prepaid customers are refunded the difference at the end of each such year. If the solar energy system’s energy production is in excess of the estimate, we allow customers to keep the excess energy at no charge. After the initial term of the Customer Agreement, customers have the option to renew their contracts for the remaining life of the solar energy system, typically at a 10% discount to then-prevailing power prices, to purchase the system from us at its fair market value, or have us remove the system.

Regardless of the type of Customer Agreement our customers choose, we operate the system and agree to monitor it at no cost to the customer. System maintenance is included in our power purchase agreement (“PPA”) or lease. We offer an industry-leading performance guarantee to ensure that our customers are receiving the energy they expect at the price they expect. Our customers also receive up to a ten-year warranty for roof penetrations.
If a customer sells his or her home, the customer has the right to purchase the system or assign the Customer Agreement to the new homeowner, provided the new homeowner meets our credit requirements and agrees to be bound by the terms and conditions of the Customer Agreement. In connection with this service transfer, the customer may prepay all or a portion of the remaining payments due under the Customer Agreement to lower or eliminate the monthly rate to be paid by the new homeowner. If the customer fails to purchase the system or assign the Customer Agreement to a new homeowner, we may negotiate directly with the new homeowner to transfer the Customer Agreement (at times on modified terms) and/or look to the original customer to pay all remaining payments due. We have completed thousands of service transfers and, from inception through December 31, 2022, the aggregate expected net present value of the Customer Agreements once assigned represented approximately 100% of what it was prior to assignment.

Sales and Marketing

We sell our solar energy offerings through a scalable sales organization using both a direct-to-consumer approach across online, retail, mass media, digital media, canvassing, field marketing and referral channels as well as our diverse partner network. We sell to customers over the phone, online, in the field through canvassing and in-home sales and through our strategic retail sales partnerships. We also partner with sales-only organizations that focus on direct-to-consumer marketing and sales on our behalf, typically with a Sunrun-branded offering at point of sale, which further increases our brand and reach. We also generate sales volume through customer referrals. Customer referrals increase in relation to our penetration in a market and shortly after market entry become an increasingly effective way to market our solar energy systems. We believe that a customized, customer-focused selling process is important before, during and after the sale of our solar services to maximize our sales success and customer experience.

We train our sales team to customize their consultative presentation to the individual customer based on guidelines and principles outlined in our training materials. We are able to provide our sales team with real-time data and pricing tools through our proprietary technology which is designed to generate a tailored product offering with optimized pricing based on the actual characteristics of a customer’s home, including roof characteristics and shading, as well as actual energy usage. This allows our sales team to differentially price homes in the same geographic region quickly and effectively.

Supply Chain

We purchase equipment, including solar panels, inverters and batteries from a limited number of manufacturers and suppliers. If we fail to maintain or expand our relationships with these suppliers and manufacturers, or if one or more that we rely upon to meet anticipated demand reduces or ceases production, it may be difficult to quickly identify and qualify alternatives on acceptable terms. In addition, equipment prices may increase in the coming years, or not decrease at the rates we historically have experienced, due to tariffs or other factors. As discussed in Item 1A. Risk Factors "We have historically benefited from declining costs in our industry, and our business and financial results may be harmed as a result of recent and any continued increases in costs associated with our solar service offerings and any failure of these costs to continue declining as we currently expect. If we do not reduce our cost structure in the future, our ability to continue to be profitable may be impaired." Section 201 tariffs on solar modules were imposed beginning in 2018 and were extended through 2026.

In addition, federal agencies and Congress are increasing enforcement against the importation of products suspected of being manufactured with forced labor. U.S. customs enforcement and the implementation of a new federal law could negatively impact our supply chain and the availability of products that we use to conduct our business. See “Risks Related to the Solar Industry” below for more information.

Competition

We believe that our primary competitors are the traditional utilities that supply electricity to our potential customers. We compete with these traditional utilities primarily based on price (cents per kilowatt hour), predictability of future prices (by providing pre-determined annual price escalations), the backup power capabilities of our battery storage solution and the ease by which customers can switch to electricity generated by our solar energy systems.
We also compete with companies that are not regulated like traditional utilities but that have access to the traditional utility electricity transmission and distribution infrastructure pursuant to state and local pro-competitive and consumer choice policies, solar companies with business models that are similar to ours, and other renewable energy companies. Some customers might choose to subscribe to a community solar project or renewable subscriber program with these companies or their utilities, instead of installing a solar energy system on their home, which could affect our sales. Additionally, some utilities offer generation portfolios that are increasingly renewable in nature. We believe that we compete favorably with these companies based on our unique multi-channel approach and differentiated customer experience.

We also face competition from purely finance-driven organizations that acquire customers and then subcontract out the installation of solar energy systems, from installation businesses that seek financing from external parties, from large construction companies and utilities and from sophisticated electrical and roofing companies.

Intellectual Property

As of December 31, 2022, we had 53 issued patents and 16 filed patent applications in the United States relating to a variety of aspects of our solar solutions. Our issued U.S. patents will expire 20 years from their respective filing dates, with the earliest expiring in 2029. We intend to file additional patent applications as we continue to innovate through our research and development efforts.

Government Regulation

Although we are not regulated as a public utility in the United States under applicable national, state or other local regulatory regimes where we conduct business, we compete primarily with regulated utilities. As a result, we have developed and are committed to maintaining a policy team to focus on the key regulatory and legislative issues impacting the entire industry. We believe these efforts help us better navigate local markets through relationships with key stakeholders and facilitate a deep understanding of the national and regional policy environment.

To operate our systems, we obtain interconnection permission from the applicable local primary electric utility. Depending on the size of the solar energy system and local law requirements, interconnection permission is provided by the local utility directly to us and/or our customers. In almost all cases, interconnection permissions are issued on the basis of a standard process that has been pre-approved by the local public utility commission or other regulatory body with jurisdiction over net metering policies. As such, no additional regulatory approvals are required once interconnection permission is given.

Our operations are subject to stringent and complex federal, state and local laws, including regulations governing the occupational health and safety of our employees and wage regulations. For example, we are subject to the requirements of the federal Occupational Safety and Health Act, as amended (“OSHA”), the U.S. Department of Transportation (“DOT”), and comparable state laws that protect and regulate employee health and safety. We endeavor to maintain compliance with applicable DOT, OSHA and other comparable government regulations. However, we have in the past experienced workplace accidents and received citations from regulators resulting in fines, as discussed in Item 1A. Risk Factors “Compliance with occupational safety and health requirements and best practices can be costly, and noncompliance with such requirements may result in potentially significant penalties, operational delays and adverse publicity.” These incidents have not had a material impact on our business or our relations with our employees.

In Puerto Rico, we are subject to regulation as an electric power company by the Puerto Rico Energy Bureau and are required to comply with certain filing, certification, reporting and annual fee requirements. Regulation by the Puerto Rico Energy Bureau as an electric power company does not currently subject us to centralized utility-like regulation and currently we do not need the Puerto Rico Energy Bureau's approval of charges to customers.
Government Incentives

Federal, state and local government bodies provide incentives to owners, distributors, system integrators and manufacturers of solar energy systems to promote solar energy in the form of rebates, tax credits, payments for renewable energy credits associated with renewable energy generation and exclusion of solar energy systems from property tax assessments. These incentives enable us to lower the price we charge customers for energy from, and to lease, our solar energy systems, helping to catalyze customer adoption of solar energy as an alternative to utility-provided power. In addition, for some investors, the acceleration of depreciation creates a valuable tax benefit that reduces the overall cost of the solar energy system and increases the return on investment. The federal government also currently offers an investment tax credit (“Commercial ITC”) under Section 48(a) of the Internal Revenue Code of 1986, as amended (the “Code”), for the installation of certain energy properties, including solar power facilities owned for business purposes.

The Inflation Reduction Act of 2022 (the “IRA”) was signed into law by President Biden on August 16, 2022, and some of its notable provisions include:

- the eligibility of solar facilities placed in service in 2022 (regardless of when construction began) and prior to January 1, 2025 for a 30% investment tax credit (“Commercial ITC”) under Section 48(a) of the Internal Revenue Code of 1986 (the “Code”) (assuming apprenticeship and prevailing wage requirements are met; these requirements are deemed met for projects less than 1 MW), with standalone storage beginning in 2023;
- in the absence of meeting apprenticeship and prevailing wage requirements, the “base” amount of the Commercial ITC is 6% for facilities beginning construction prior to January 1, 2025 and 2% thereafter (however, as indicated above, the majority of our business qualifies for 30% base credits upon which “adders” could increase this amount up to 70% under certain circumstances);
- the eligibility of solar and storage facilities placed in service after 2024 and through at least 2032 for a 30% technology-neutral ITC under Section 48E of the Code (the “48E Credit”); and
- several new ITC adders under both the Commercial ITC and the 48E Credit, which apply to certain facilities placed in service beginning in 2023, including those meeting certain domestic content requirements, those located in “Energy Communities,” and those located in or that benefit low-income communities and tribal communities.

The federal government also offers a personal income tax credit under Section 25D of the Code (“Residential Clean Energy Credit”), for the installation of certain solar power facilities owned by residential taxpayers, which is applicable to customers who purchase a solar energy system outright as opposed to entering into a Customer Agreement. The Residential Clean Energy Credit was 26% if the facility was placed in service during 2020 or 2021; 30% for facilities placed in service from January 1, 2022 through December 31, 2032; 26% for facilities placed in service during 2033; and 22% for facilities placed in service during 2034. The Residential Clean Energy Credit is not available for property placed in service after December 31, 2034.

We and our tax equity partners have claimed and expect to continue to claim investment tax credits (“ITCs”) with respect to qualifying solar energy projects. In structuring tax equity partnerships and determining ITC eligibility, we have relied upon applicable tax law and published IRS guidance. On February 13, 2023, the U.S. Treasury issued initial guidance on an ITC “adder” for low-income communities and is expected to issue additional guidance on this and other ITC adders, as well as other newly enacted IRA provisions.

More than half of the states in the U.S., and many local jurisdictions, have established property tax incentives for renewable energy systems that include exemptions, exclusions, abatements and credits. Many states also have adopted procurement requirements for renewable energy. Approximately thirty states and the District of Columbia have adopted a renewable portfolio standard (and approximately eight other states have some voluntary goal) that requires regulated utilities to procure a specified percentage of total electricity delivered in the state from eligible renewable energy sources, such as solar energy systems, by a specified date. To prove compliance with such mandates, utilities must surrender solar renewable energy credits (“SRECs”) to the applicable authority. Solar energy system owners such as our investment funds often are able to sell SRECs to utilities directly or in SREC markets.
While there are numerous federal, state and local government incentives that benefit our business, some adverse actions, interpretations or determinations of new or existing laws or regulations could have a negative impact on our business. For example, in the future, Congress could revise or eliminate certain provisions in the Inflation Reduction Act that could negatively impact our business, such as reducing the percentage or duration of the ITC. Federal agencies may also issue tax guidance or regulations that could negatively impact our business, by, for example, narrowing the applicability of ITC adders or preventing certain businesses from participating.

Human Capital Management

At Sunrun, we love people and believe that focusing on and investing in our people is critical to our mission to work together to electrify homes and give all people the joy of clean, abundant energy from the sun.

At Sunrun, the foundation of all our talent programs and initiatives is fostering a culture of inclusive, connected and innovative teams. In 2022, we focused on aligning our human capital strategy to support a high performance, customer-focused culture where our employees can thrive and meet our customer needs. We created a sourcing and communities team to focus on attracting candidates from underrepresented populations and enhance our community partnerships, implemented a new learning management system, and continued to provide learning and development opportunities aimed at promoting engagement and retention.

Inclusion and Diversity. We believe we will accomplish our goals by having a diverse team that reflects the diversity of our customers and who can connect with the unique experiences and backgrounds of our customers. To help us continue to progress toward our goals, in 2022 we implemented requirements that a diverse slate of qualified candidates must be presented to hiring managers for all new management-level roles and above. Additionally, we require that our interview panels of all new management-level roles and above include a diverse panel of interviewers. We established Employee Resource Groups (“ERGs”) to promote connection and communication among our employees, foster inclusivity, assist in the development and facilitation of programming that supports personal and professional development while also supporting our objectives. In 2022 we launched the Disability + ERG focused on supporting the needs and recognizing the contributions of our employees with both seen and unseen disabilities. Our seven ERGs have grown to a membership of over 1,605 employees as of December 31, 2022. Annually, as part of our larger impact report on environment, sustainability and governance, we share details on our strategies, focus areas, outcomes achieved and workforce demographics.

Human Capital. As of December 31, 2022, we had approximately 12,408 full-time employees, inclusive of our active direct-to-home salesforce. Our front-line sales and installation teams are 83% of our total workforce. We also engage independent contractors and consultants. None of our employees are covered by collective bargaining agreements. We have not experienced any work stoppages.

Health and Safety. At Sunrun, we start with safety. We prioritize the safety, health, and welfare of our team members as part of our people-centric culture. Our safety strategy consists of four pillars: visible leadership, technical qualification and knowledge, operational discipline, and formal safety communications. To reinforce our safety culture of excellence, we have implemented many initiatives, including an expanded fall protection policy; the implementation of a zero-tolerance policy for violations; a required recurring competent persons and human factors training; onsite safety visits from the executive leadership team with each front-line manager; the adoption of a formal rewards and recognition program; and the incorporation of proactive safety targets within bonus structures.

Available Information

Our principal executive offices are located at 225 Bush Street, Suite 1400, San Francisco, California 94104, and our telephone number is (415) 580-6900. Our website address is www.sunrun.com. Information contained on, or that can be accessed through, our website does not constitute part of this Annual Report on Form 10-K and inclusions of our website address in this Annual Report on Form 10-K are inactive textual references only.

We file annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Exchange Act. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information that we file with the SEC electronically. Copies of our reports on Form 10-K, Forms 10-Q, Forms 8-K, and amendments to those reports may also be obtained, free of charge, electronically on the investor relations page on our website located at investors.sunrun.com as soon as reasonably practical after we file such material with, or furnish it to, the SEC.
We also use the investor relations page on our website as a channel of distribution for important company information. Important information, including press releases, analyst presentations and financial information regarding us, as well as corporate governance information, is routinely posted and accessible on the investor relations page on our website. Information on or that can be accessed through our website is not part of this Annual Report on Form 10-K, any other report or document we file with the SEC, and the inclusion of our website address is an inactive textual reference only.

The Sunrun design logo, “Sunrun” and our other registered or common law trademarks, service marks or trade names appearing in this Annual Report on Form 10-K are the property of Sunrun Inc. Other trademarks and trade names referred to in this Annual Report on Form 10-K are the property of their respective owners.
Item 1A. Risk Factors.

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes, before making a decision to invest in our common stock. The risks and uncertainties described below may not be the only ones we face. If any of the risks actually occur, our business, financial condition, results of operations, cash flows and prospects could be materially and adversely affected. In that event, the market price of our common stock could decline, and you could lose part or all of your investment.

Risks Related to the Solar Industry

The solar energy industry is an emerging market which is constantly evolving and may not develop to the size or at the rate we expect.

The solar energy industry is an emerging and constantly evolving market opportunity. We believe the solar energy industry is still developing and maturing, and we cannot be certain that the market will grow to the size or at the rate we expect. For example, we have experienced increases in cancellations of our Customer Agreements in certain geographic markets during various periods in our operating history. Any future growth of the solar energy market and the success of our solar service offerings depend on many factors beyond our control, including recognition and acceptance of the solar service market by consumers, the pricing of alternative sources of energy, a favorable regulatory environment, the continuation of expected tax benefits and other incentives, and our ability to provide our solar service offerings cost effectively. If the markets for solar energy do not develop to the size or at the rate we expect, our business may be adversely affected.

Solar energy has yet to achieve broad market acceptance and depends in part on continued support in the form of rebates, tax credits, and other incentives from federal, state and local governments. Additionally, there have been significant changes in the residential solar policy and pricing framework in California, which is one of our key markets and represents over 40% of our customer base. Newly adopted changes to California’s net metering policy in December 2022 present a significant change to the financial benefits California customers could receive from our solar systems and may negatively impact the financial attractiveness of our offerings in this market. Further if support diminishes materially for solar policy related to rebates, tax credits and other incentives, our ability to obtain external financing on acceptable terms, or at all, could be materially adversely affected. These types of funding limitations could lead to inadequate financing support for the anticipated growth in our business. Furthermore, growth in residential solar energy depends in part on macroeconomic conditions, retail prices of electricity and customer preferences, each of which can change quickly. Declining macroeconomic conditions, including in the job markets and residential real estate markets, could contribute to instability and uncertainty among customers and impact their financial wherewithal, credit scores or interest in entering into long-term contracts, even if such contracts would generate immediate and long-term savings.

Furthermore, market prices of retail electricity generated by utilities or other energy sources could decline for a variety of reasons, as discussed further below. Any such declines in macroeconomic conditions, changes in retail prices of electricity or changes in customer preferences would adversely impact our business.

Achieving net zero emissions by 2050 will require an unprecedented transformation of American energy systems and the adoption of a wide variety of clean energy, storage, and home electrification solutions. Our successful deployment of such products will depend on several factors outside our control, including shifting market conditions and policy frameworks. Our failure to adapt to changing market conditions, to compete successfully with existing or new competitors, and to adopt new or enhanced offerings could limit our growth and have a material adverse effect on our business and prospects.

We have historically benefited from declining costs in our industry, and our business and financial results may be harmed as a result of recent and any continued increases in costs associated with our solar service offerings and any failure of these costs to continue declining as we currently expect. If we do not reduce our cost structure in the future, our ability to continue to be profitable may be impaired.
Declining costs related to raw materials, manufacturing and the sale and installation of our solar service offerings have been a key driver in the pricing of our solar service offerings and, more broadly, customer adoption of solar energy. While historically the prices of solar panels and raw materials have declined, the cost of solar panels and raw materials have at times increased and may increase in the future, and such products’ availability could decrease, due to a variety of factors, including restrictions stemming from the COVID-19 pandemic, supply chain disruptions, inflation, tariffs and trade barriers, export regulations, geopolitical conflicts, regulatory or contractual limitations, industry market requirements, and changes in technology and industry standards.

For example, we and our solar partners purchase a significant portion of the solar panels used in our solar service offerings from overseas manufacturers. In January 2018, in response to a petition filed under Section 201 of the Trade Act of 1974, the United States imposed four-year tariffs on imported solar modules and imported solar cells not assembled into other products (the “Section 201 Module Tariffs”) that apply to all imports above a 2.5 gigawatts (GW) annual threshold. The Section 201 Module Tariffs were 30% in 2018 and stepped down by 5% each year. While the tariffs were scheduled to expire in February 2022, U.S. International Trade Commission recommended that the Biden Administration extend the tariffs for another four years. On February 4, 2022, the Biden Administration announced a four-year extension of the Section 201 tariffs starting at 14.75%, with a modest reduction to the tariff rate each year. The decision exempted bifacial modules from the tariffs as well as 5 GW of imported solar cells each year.

The United States also has, from time to time, considered tariffs on goods imported from other countries. For example, in August 2021, an anonymous group of U.S. solar manufacturers filed petitions with the U.S. Department of Commerce alleging that Chinese companies were evading antidumping and countervailing duty (AD/CVD) orders on crystalline silicon photovoltaic cells and modules, which are used in the production of solar panels. The petitioners requested a federal investigation into Chinese firms allegedly circumventing tariffs by manufacturing in Malaysia, Vietnam and Thailand, and sought to apply the existing tariffs on China to companies in these three countries. Ultimately, the Department of Commerce objected to the anonymous nature of the petition, and it expired. Subsequently, on February 8, 2022, Auxin Solar, a U.S.-based solar panel manufacturer, submitted a petition to the U.S. Department of Commerce to request country-wide circumvention inquiries pursuant to Section 781(b) of the Tariff Act of 1930 concerning crystalline silicon photovoltaic cells and modules assembled in Malaysia, Thailand, Vietnam and Cambodia using Chinese inputs. On April 1, 2022, the Department initiated the inquiries, and, after conducting an investigation, issued a preliminary decision on December 2, 2022, recommending that the Biden Administration impose tariffs on certain solar panel imports from the Southeast Asian countries.

Prior to the Department of Commerce issuing its preliminary decision, the Biden Administration issued an order in June 2022 that paused the collection of any new anti-dumping or countervailing duty of certain solar cells and modules exported from Cambodia, Malaysia, Thailand, and Vietnam for two years, until June 2024. The White House initiated this “bridge” action in advance of the Department of Commerce’s preliminary decision, in effect guaranteeing no new solar tariffs for 24 months. Nonetheless, the Department’s investigation had the effect of increasing module prices and affected supply. If imposed in June 2024, the related duties could further increase module prices and affect supply, which would negatively impact our supply chain and operations.

In addition, the withhold release order issued by the U.S. Customs and Border Protection (CBP) on June 24, 2021 applicable to certain silica-based products manufactured in the Xinjiang Uyghur Autonomous Region of China, and any other allegations regarding forced labor in China and U.S. trade regulations to prohibit the importation of any goods derived from forced labor, could also disrupt our business operations and supply chain. In particular, the Uyghur Forced Labor Prevention Act that President Biden signed into law on December 23, 2021 could affect our supply chain and operations. Intensive examinations, withhold release orders, and related governmental procedures have resulted in supply chain and operational delays throughout the industry, and we have implemented policies and procedures to maintain compliance and minimize delays. These and other similar trade restrictions that may be imposed in the future could cause delivery and installation delays, and restrict the global supply of polysilicon and solar products. This could result in near-term demand for available solar energy systems despite higher costs, increased costs of polysilicon and the overall cost of solar energy systems, and equipment shortages, potentially reducing overall demand for and limiting the supply of our products and services.

We cannot predict what actions may ultimately be taken with respect to tariffs or trade relations between the United States and other countries, what products may be subject to such actions, or what actions may be taken by the other countries in retaliation. The tariffs described above, the adoption and expansion of trade restrictions, the
occurrence of a trade war, or other governmental action related to tariffs, trade agreements or related policies have the potential to adversely impact our supply chain and access to equipment, our costs and ability to economically serve certain markets. Any such cost increases or decreases in availability could slow our growth and cause our financial results and operational metrics to suffer. We cannot predict whether and to what extent U.S. trade policies will change under the Biden Administration and cannot ensure that additional tariffs or other restrictive measures will not continue or increase.

Other factors may also impact costs, such as our choice to make significant investments to drive growth in the future.

We face competition from traditional energy companies as well as solar and other renewable energy companies.

The solar energy industry is highly competitive and continually evolving as participants strive to distinguish themselves within their markets and compete with large utilities. We believe that our primary competitors are the established utilities that supply energy to homeowners by traditional means. We compete with these utilities primarily based on price, predictability of price, and the ease by which homeowners can switch to electricity generated by our solar service offerings. If we cannot offer compelling value to customers based on these factors, then our business and revenue will not grow. Utilities generally have substantially greater financial, technical, operational and other resources than we do. As a result of their greater size, utilities may be able to devote more resources to the research, development, promotion and sale of their products or respond more quickly to evolving industry standards and changes in market conditions than we can. Furthermore, these competitors are able to devote substantially more resources and funding to regulatory and lobbying efforts.

Utilities could also offer other value-added products or services that could help them compete with us even if the cost of electricity they offer is higher than ours. In addition, a majority of utilities’ sources of electricity are non-solar, which may allow utilities to sell electricity more cheaply than we can. Moreover, regulated utilities are increasingly seeking approval to “rate-base” their own residential solar and battery businesses. Rate-basing means that utilities would receive guaranteed rates of return for their solar and battery businesses. This is already commonplace for utility-scale solar projects and commercial solar projects. While few utilities to date have received regulatory permission to rate-base residential solar or storage, our competitiveness would be significantly harmed should more utilities receive such permission because we do not receive guaranteed profits for our solar service offerings.

We face competition from other residential solar service providers, and we also may face competition from new entrants into the market as a result of the passage of the IRA and its anticipated impacts and benefits to the solar industry. Some of these competitors may have a higher degree of brand name recognition, differing business and pricing strategies, lower barriers to entry into the solar market, and greater capital resources than we have, as well as extensive knowledge of our target markets. If we are unable to establish or maintain a consumer brand that resonates with customers, maintain high customer satisfaction, or compete with the pricing offered by our competitors, our sales and market share position may be adversely affected, as our growth is dependent on originating new customers. We also face competitive pressure from companies that may offer lower-priced consumer offerings than we do.

In addition, we compete with companies that are not regulated like traditional utilities but that have access to the traditional utility electricity transmission and distribution infrastructure. These energy service companies are able to offer customers electricity supply-only solutions that are competitive with our solar service offerings on both price and usage of solar energy technology while avoiding the long-term agreements and physical installations that our current fund-financed business model requires. This may limit our ability to attract customers, particularly those who wish to avoid long-term contracts or have an aesthetic or other objection to putting solar panels on their roofs.

Furthermore, we face competition from purely finance-driven nonintegrated competitors that subcontract out the installation of solar energy systems, from installation businesses (including solar partners) that seek financing from external parties, from large construction companies and from electrical and roofing companies. In addition, local installers that might otherwise be viewed as potential solar partners may gain market share by being able to be the first providers in new local markets. Some of these competitors may provide energy at lower costs than we do.
Finally, as declining prices for solar panels and related equipment has resulted in an increase in consumers purchasing instead of leasing solar energy systems, we face competition from companies that offer consumer loans for these solar panel purchases.

As the solar industry grows and evolves, we will continue to face existing competitors as well as new competitors who are not currently in the market (including those resulting from the consolidation of existing competitors) that achieve significant developments in alternative technologies or new products such as storage solutions, EV chargers, loan products, or other programs related to third-party ownership. Our failure to adapt to changing market conditions, to compete successfully with existing or new competitors and to adopt new or enhanced technologies could limit our growth and have a material adverse effect on our business and prospects.

A material drop in the retail price of utility-generated electricity or electricity from other sources would harm our business, financial condition, and results of operations.

A customer’s decision to buy solar energy from us often stems from a desire to lower electricity costs. Decreases in the retail prices of electricity from utilities or other energy sources would harm our ability to offer competitive pricing and could harm our business. The price of electricity from utilities could decrease as a result of:

- the construction of a significant number of new power generation plants, including nuclear, coal, natural gas or renewable energy technologies;
- the construction of additional electric transmission and distribution lines;
- a reduction in the price of natural gas or other natural resources;
- energy conservation technologies and public initiatives to reduce electricity consumption;
- development of new energy technologies that provide less expensive energy, including storage; and
- utility rate adjustments and customer class cost reallocation.

A reduction in utility electricity prices would make the purchase of our solar service offerings less attractive. If the retail price of energy available from utilities were to decrease due to any of these or other reasons, we would be at a competitive disadvantage. As a result, we may be unable to attract new customers and our growth would be limited.

The production and installation of solar energy systems depends heavily on suitable meteorological and environmental conditions. If meteorological or environmental conditions are unexpectedly unfavorable, the electricity production from our solar service offerings may be below our expectations, and our ability to timely deploy new systems may be adversely impacted.

The energy produced and revenue and cash flows generated by a solar energy system depend on suitable solar and weather conditions, both of which are beyond our control. Furthermore, components of our systems, such as panels and inverters, could be damaged by severe weather or natural catastrophes, such as hailstorms, tornadoes, fires, or earthquakes. In these circumstances, we generally would be obligated to bear the expense of repairing the damaged solar energy systems that we own. Sustained unfavorable weather or environmental conditions also could unexpectedly delay the installation of our solar energy systems, leading to increased expenses and decreased revenue and cash flows in the relevant periods. Extreme weather conditions, as well as the natural catastrophes that could result from such conditions, can severely impact our operations by delaying the installation of our systems, lowering sales, and causing a decrease in the output from our systems due to smoke or haze. Weather patterns could change, making it harder to predict the average annual amount of sunlight striking each location where our solar energy systems are installed. This could make our solar service offerings less...
Climate change may have long-term impacts on our business, our industry, and the global economy.

Climate change poses a systemic threat to the global economy and will continue to do so until our society transitions to renewable energy and decarbonizes. While our core business model seeks to accelerate this transition to renewable energy, there are inherent climate-related risks to our business operations. Warming temperatures throughout the United States, and in California, our biggest market, in particular, have contributed to extreme weather, intense drought, and increased wildfire risks. These events have the potential to disrupt our business, our third-party suppliers, and our customers, and may cause us to incur additional operational costs. For instance, natural disasters and extreme weather events associated with climate change can impact our operations by delaying the installation of our systems, leading to increased expenses and decreased revenue and cash flows in the period. They can also cause a decrease in the output from our systems due to smoke or haze. Additionally, if weather patterns significantly shift due to climate change, it may be harder to predict the average annual amount of sunlight striking each location where our solar energy systems are installed. This could make our solar service offerings less economical overall or make individual systems less economical.

Our corporate mission is to create a planet run by the sun, and we seek to mitigate these climate-related risks not only through our core business model and sustainability initiatives, but also by working with organizations who are also focused on mitigating their own climate-related risks.

Risks Related to Our Operating Structure and Financing Activities

We need to raise capital to finance the continued growth of our operations and solar service business. If capital is not available to us on acceptable terms, as and when needed, our business and prospects would be materially and adversely impacted. In addition, our business is affected by general economic conditions and related uncertainties affecting markets in which we operate. Volatility in current economic conditions could adversely impact our business, including our ability to raise financing.

Our future success depends on our ability to raise capital from third parties to grow our business. To date, we have funded our business principally through low-cost tax equity investment funds. If we are unable to establish new investment funds when needed, or upon desirable terms, the growth of our solar service business would be impaired. Changes in tax law could also affect our ability to establish such tax equity investment funds, impact the terms of existing or future funds, or reduce the pool of capital available for us to grow our business.

The contract terms in certain of our existing investment fund documents contain various conditions with respect to our ability to draw on financing commitments from the fund investors, including conditions that restrict our ability to draw on such commitments if an event occurs that could reasonably be expected to have a material adverse effect on the fund or, in some instances, us. If we are not able to satisfy such conditions due to events related to our business, a specific investment fund, developments in our industry, including tax or regulatory changes, or otherwise, and as a result, we are unable to draw on existing funding commitments, we could experience a material adverse effect on our business, liquidity, financial condition, results of operations and prospects. If any of the investors that currently invest in our investment funds decide not to invest in future investment funds to finance our solar service offerings due to general market conditions, concerns about our business or prospects or any other reason, or materially change the terms under which they are willing to provide future financing, we would need to identify new investors to invest in our investment funds and our cost of capital may increase.

In addition, our business and results of operations are materially affected by conditions in the global capital markets and the economy. A general slowdown or volatility in current economic conditions, the level of U.S. national debt, currency fluctuations, unemployment rates, the availability and cost of credit, the U.S. housing market, tariffs, trade wars, inflation levels, interest rates, energy costs, and concerns over a slowing economy or other factors, could adversely affect our business, including our ability to raise financing.
There can be no assurance that we will be able to continue to successfully access capital in a manner that supports the growth of our business. Certain sources of capital may not be available in the future, and competition for any available funding may increase. We cannot be sure that we will be able to maintain necessary levels of funding without incurring high funding costs, unfavorable changes in the terms of funding instruments or the liquidation of certain assets. If we are unable to continue to offer a competitive investment profile, we may lose access to these funds or they may only be available on less favorable terms than those provided to our competitors or currently provided to us. If we are unable to arrange new or alternative methods of financing on favorable terms, our business, liquidity, financial condition, results of operations, and prospects could be materially and adversely affected.

Volatility and increases in interest rates raise our cost of capital and may adversely impact our business.

While interest rates have been at long-term historic lows in recent years, they have recently increased, and may continue increasing in the near future. Rising interest rates, including recent historic increases starting in 2021 and continuing throughout 2022, have and may continue to result in a decrease in our advance rates, reducing the proceeds we receive from certain investment funds. Because our financing structure is sensitive to volatility in interest rates, higher rates increase our cost of capital and may decrease the amount of capital available to us to finance the deployment of new solar energy systems. Our future success depends on our ability to raise capital from fund investors and obtain secured lending to help finance the deployment of our solar service offerings. Part of our business strategy is to seek to reduce our cost of capital through these arrangements to improve our margins, offset reductions in government incentives and maintain the price competitiveness of our solar service offerings. Rising base interest rates or credit spreads, which have, and may continue to be worsened by inflation, an economic recession, or other variables, may have an adverse impact on our ability to offer attractive pricing on our solar service offerings to customers, which could negatively impact sales of our solar energy offerings, and our cash flows. Because we typically enter into interest rate swaps shortly after the installation of a system, we are subject to higher interest rate risk between customer pricing through installation, which may cause volatility to our cash flows.

The majority of our cash flows to date have been from solar service offerings under Customer Agreements that have been monetized under various investment fund structures. One of the components of this monetization is the present value of the payment streams from customers who enter into these Customer Agreements. If the rate of return required by capital providers, including debt providers, rises as a result of a rise in interest rates, it will reduce the present value of the customer payment stream and consequently reduce the total value derived from this monetization. Any measures that we could take to mitigate the impact of rising interest rates could ultimately have an adverse impact on the value proposition that we offer customers.

We expect to incur substantially more debt in the future, which could intensify the risks to our business.

We and our subsidiaries expect to incur additional debt in the future, subject to the restrictions contained in our debt instruments. Some of our existing debt arrangements restrict our ability to incur additional indebtedness, including secured indebtedness, and we may be subject to similar restrictions under the terms of future debt arrangements. These restrictions could inhibit our ability to pursue our business strategies. Increases in our existing debt obligations would further heighten the debt related risk discussed above.

Furthermore, there is no assurance that we will be able to enter into new debt instruments on acceptable terms or at all. If we were unable to satisfy financial covenants and other terms under existing or new instruments, or obtain waivers or forbearance from our lenders, or if we were unable to obtain refinancing or new financings for our working capital, equipment, and other needs on acceptable terms if and when needed, our business would be adversely affected.

We may be required to make payments or contribute assets to our investors upon the occurrence of certain events, including one-time reset or true-up payments or upon the exercise of a redemption option by one of our tax equity investors.

Our investors in our tax equity investment funds typically advance capital to us based on, among other things, production capacity estimates. The models we use to calculate prepayments in connection with certain of our tax equity investment funds are updated at a fixed date occurring after placement in service of all applicable
solar energy systems or an agreed upon date (typically within the first year of the applicable term) to reflect certain specified conditions, as they exist at such date including the ultimate system size of the equipment that was sold or leased to the tax equity investment fund, the cost thereof, and the date the equipment went into service. In some cases, these true-up models also incorporate any changes in law, which would include any reduction in rates (and thus any reduction in the benefits of depreciation). As a result of this true-up, applicable payments are resized, and we may be obligated to refund a portion of the tax equity investor’s prepayments or to contribute additional assets to the tax equity investment fund. In addition, certain of our tax equity fund investors have the right to require us to purchase their interests in the tax equity investment funds after a set period of time, generally at a price equal to the greater of a set purchase price or fair market value of the interests at the time of the repurchase. Any significant refunds, capital contributions, or purchases that we may be required to make could adversely affect our liquidity or financial condition.

Loan financing developments could adversely impact our business.

The third-party ownership structure, which we bring to market through our solar service offerings, continues to be the predominant form of system ownership in the residential solar market in many states. However, with the development of new loan financing products, we have seen a modest shift from leasing and power purchase arrangements to outright purchases of the solar energy system by the customer (i.e., a customer purchases the solar energy system outright instead of leasing the system or buying power from us). Continued increases in third-party loan financing products and outright purchases could result in the demand for long-term Customer Agreements to decline, which would require us to shift our product focus to respond to the market trend and could have an adverse effect on our business. The majority of our customers have historically chosen our solar service offerings as opposed to buying a solar energy system outright. Our financial model is impacted by the volume of customers who choose our solar service offerings, and an increase in the number of customers who choose to purchase solar energy systems (whether for cash or through third-party financing) may harm our business and financial results.

Additionally, as discussed above, reductions in the Commercial ITC as scheduled may impact the attractiveness of solar energy to certain customers and could potentially harm our business. Reductions in, eliminations of, or expirations of, governmental incentives such as the Residential Energy Efficient Property Credit could reduce the number of customers who choose to purchase our solar energy systems.

Servicing our debt requires a significant amount of cash to comply with certain covenants and satisfy payment obligations, and we may not have sufficient cash flow from our business to pay our substantial debt and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.

We have substantial amounts of debt, including our Notes, our $600.0 million credit facility and the non-recourse debt facilities entered into by our subsidiaries, as discussed in more detail in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements, in each case, included in this periodic report. Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness depends on our future performance, which is subject to economic, financial, competitive, and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures to operate our business. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to timely repay or otherwise refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations and negatively impact our financial condition and prospects.

Indebtedness under certain of our Senior and Subordinated Debt Facilities bear interest at variable interest rates based on LIBOR, while our credit facility and certain other Senior and Subordinated Debt Facilities accrue interest at variable interest rates based on the Secured Overnight Financing Rate (or other benchmark rates based thereof, collectively, “SOFR”). The potential replacement of LIBOR with SOFR or an alternative reference rate in the applicable debt facilities where interest and interest rate swap payments are
based on LIBOR may adversely affect interest rates charged with respect to such facilities and may otherwise affect our financial condition and results of operations. Our debt facilities accruing interest based on SOFR may suffer from potential volatility and uncertainty around SOFR as a LIBOR replacement rate and increase our cost to hedge our floating rate exposure which could adversely affect our financial condition and results of operations.

In July 2017, the U.K. Financial Conduct Authority, the authority that regulates LIBOR, announced that it intended to stop compelling banks to submit rates for the calculation of LIBOR after 2021. In March 2021, the U.K. Financial Conduct Authority announced that all LIBOR tenors will either cease to be provided by any benchmark administrator or will no longer be representative (a) with respect to the 1-week and 2-month U.S. dollar LIBOR tenors, immediately after December 31, 2021 and (b) with respect to all other U.S. dollar LIBOR tenors, immediately after June 30, 2023. As a result, it appears highly likely that LIBOR will be discontinued or significantly modified by June 30, 2023. In July 2021, the Alternative Reference Rates Committee ("ARRC") in the U.S., a steering committee comprised of large U.S. financial institutions and other market participants organized to ensure a successful transition away from U.S. dollar LIBOR, has identified SOFR as its preferred alternative rate to LIBOR for use in derivatives and other financial contracts that are currently indexed to LIBOR. ARRC has proposed a paced market transition plan to SOFR from U.S. dollar LIBOR and organizations are currently working on industry-wide and company-specific transition plans as relating to derivatives and cash markets exposed to U.S. dollar LIBOR. We have certain financial contracts, including many of our Senior and Subordinated Debt Facilities, that remain indexed to U.S. dollar LIBOR. Furthermore, changes in the method of determining LIBOR, or the replacement of LIBOR with an alternative reference rate, may adversely affect interest rates on our current or future indebtedness. Any transition process may involve, among other things, increased volatility or illiquidity in markets for instruments that rely on LIBOR or SOFR, reductions in the value of certain instruments or the effectiveness of related transactions such as hedges, increased borrowing costs, uncertainty under applicable documentation, or difficult and costly consent or amendment processes. We are monitoring this activity and evaluating the related risks, and any such effects of the transition away from LIBOR may result in increased borrowing costs and reduced borrowing capacity, may impair our ability to refinance our indebtedness or hedge our exposure to floating rate instruments, or may result in difficulties, complications or delays in connection with future financing efforts, any of which could adversely affect our financial condition and results of operations. In addition, certain of our debt facilities accrue interest based on SOFR. Since the initial publication of SOFR, daily changes in the rate have, on occasion, been more volatile than daily changes in comparable benchmark or market rates, and SOFR over time may bear little or no relation to the historical actual or historical indicative data. Additionally, some of our credit facilities based on SOFR include a credit adjustment on SOFR due to LIBOR representing an unsecured lending rate while SOFR represents a secured lending rate. In addition, ARRC has imposed certain curbs on interdealer trading in SOFR derivatives, which reduce market liquidity and may raise hedging costs for us as end-users. The possible volatility of, and uncertainty around, SOFR as a LIBOR replacement rate, the applicable credit adjustment, and illiquidity in SOFR derivative markets could result in higher borrowing costs for us, which would adversely affect our financial condition, and results of operations.

We may not have the ability to raise the funds necessary to settle conversions of the Convertible Senior Notes in cash or to repurchase the Convertible Senior Notes upon a fundamental change, and our future debt may contain limitations on our ability to pay cash upon conversion or repurchase of the Convertible Senior Notes.

Holders of the Convertible Senior Notes (the “Notes”) will have the right to require us to repurchase all or a portion of their Notes upon the occurrence of a fundamental change under the indenture, which includes certain events such as a change of control, before the maturity date at a fundamental change repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid special interest, if any. In addition, upon conversion of the Notes, unless we elect to deliver solely shares of our common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the Notes being converted. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of Notes surrendered therefor or pay cash for Notes being converted. In addition, our ability to repurchase the Notes or to pay cash upon conversions of the Notes may be limited by law, by regulatory authority or by agreements governing our indebtedness at the time.

Our failure to repurchase Notes at a time when the repurchase is required by the indenture governing such Notes or to pay any cash payable on future conversions of the Notes as required by the indenture would constitute a default. A default under the indenture or the fundamental change itself could also lead to a default under
agreements governing our existing or future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the Notes or make cash payments upon conversions thereof.

We are subject to counterparty risk with respect to the capped call transactions.

In connection with our issuance of the Notes in January 2021, we entered into privately negotiated capped call transactions (the "Capped Call transactions") with certain financial institutions (the "option counterparties"). The option counterparties are financial institutions or affiliates of financial institutions, and we will be subject to the risk that one or more of such option counterparties may default under the Capped Call transactions. Our exposure to the credit risk of the option counterparties will not be secured by any collateral. If any option counterparty becomes subject to bankruptcy or other insolvency proceedings, with respect to such option counterparty’s obligations under the relevant Capped Call transaction, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at that time under such transaction. Our exposure will depend on many factors but, generally, an increase in our exposure will be positively correlated to an increase in our common stock market price and in the volatility of the market price of our common stock. In addition, upon a default by any of the option counterparties, we may suffer adverse tax consequences and dilution with respect to our common stock. We can provide no assurance as to the financial stability or viability of any of the option counterparties.

Risks Related to Regulation and Policy

We rely on certain utility rate structures, such as net metering, to offer competitive pricing to customers in all of our current markets, and changes to those policies, such as those recently decided by the California Public Utilities Commission, may significantly reduce demand for electricity from our solar service offerings.

As of December 31, 2022, a substantial majority of states have adopted net metering policies. Net metering policies allow homeowners to serve their own energy load using on-site generation while avoiding the full retail volumetric charge for electricity. Electricity that is generated by a solar energy system and consumed on-site avoids a retail energy purchase from the applicable utility, and excess electricity that is exported back to the electric grid generates a retail credit within a homeowner’s monthly billing period. At the end of the monthly billing period, if the homeowner has generated excess electricity within that month, the homeowner typically carries forward a credit for any excess electricity to be offset against future utility energy purchases. At the end of an annual billing period or calendar year, utilities either continue to carry forward a credit, or reconcile the homeowner’s final annual or calendar year bill using different rates (including zero credit) for the exported electricity.

Utilities, their trade associations, and fossil fuel interests in the country are currently challenging net metering policies, and seeking to eliminate them, cap them, reduce the value of the credit provided to homeowners for excess generation, or impose charges on homeowners that have net metering.

A few states have moved away from traditional full retail net metering and instead values excess generation by customers’ solar systems in various ways. For example, in 2017, Nevada enacted legislation, to restore net metering at a reduced credit and guarantee new customers the net metering rate in effect at the time they applied for interconnection for 20 years. In 2016, the Arizona Corporation Commission ("ACC") replaced retail net metering with a net-feed in tariff (a fixed export rate).

Some states set limits on the total percentage of a utility’s customers that can adopt net metering or set a timeline to evaluate net metering successor tariffs. For example, South Carolina passed legislation in 2019 that required review of net metering after two years. In 2021, the South Carolina Public Service Commission approved a portion of Duke Energy’s proposal that maintains the net metering framework with time-of-use rates and rejected a proposal from Dominion Energy to eliminate net metering altogether. In 2021 legislation, Illinois changed its net metering threshold from a percentage of customers to full retail net metering offered to a date certain (December 31, 2024) with a directed successor tariff that includes values that distributed resources provide to the distribution grid. New Jersey currently has no net metering cap; however, it has a threshold that triggers commission review of its net metering policy. These policies could be subject to change in the future, and other states we serve now or in the future may adopt net metering caps. If the net metering caps in these jurisdictions are reached without an
extension of net metering policies, homeowners in those jurisdictions will not have access to the economic value proposition net metering provides. Our ability to sell our solar service offerings may be adversely impacted by the failure to extend existing limits to net metering or the elimination of currently existing net metering policies. The failure to adopt a net metering policy where it currently is not in place would pose a barrier to entry in those states. Most recently, on April 26, 2022, Florida Governor DeSantis vetoed legislation that would have established a threshold date and percentage trigger when retail net metering would have faced declines in the immediate export rate.

Additionally, the imposition of charges that only or disproportionately impact homeowners that have solar energy systems, or the introduction of rate designs mentioned above, would adversely impact our business. Because fixed charges cannot easily be avoided with the installation of an on-site battery, which can mitigate or eliminate the negative impacts of net metering changes, these fixed charges have the potential to cause a more significant adverse impact. In June of 2021, two of four commissioners of the Federal Energy Regulatory Commission (“FERC”), including its chairperson, issued a letter stating there was a “strong case” such fixed charges in Alabama “may be violating the Commission’s PURPA regulations, undermining the statute’s purpose of encouraging Qualifying Facilities,” which is the Commission’s term for on-site generation. Litigation regarding the legality of these charges is ongoing in federal court. Most recently, on April 26, 2022, Florida Governor DeSantis vetoed legislation that would have allowed investor-owned utilities to petition the Public Service Commission for the ability to add fixed charges on solar customers. As part of the California Public Utilities Commission (“CPUC”) final decision on December 15, 2022, the CPUC rejected a solar specific fix charge on solar customers.

The California Public Utilities Commission issued a final decision on December 15, 2022, that revised its net metering policy, bringing finality to a proceeding that began in the third quarter of 2020. Over two years ago, the California investor-owned utilities, along with other parties, sought to significantly reduce the level of compensation for customer-owned generation and to impose large fixed fees on solar customers. The CPUC released a Proposed Decision on the matter in December 2020. On February 3, 2021, the CPUC paused the proceeding “until further notice” to “consider revisions to the proposed decision.” After California Governor Gavin Newsom said at a press conference there is “work to do” on the proposal, in May 2022, the CPUC requested additional feedback from parties on rate design options. The final decision creates no new fixed charges - no non-bypassable charges, minimum bills, or grid participation charges for solar and solar plus storage customers. Determination of whether to create fixed charges on all residential customers has been deferred to a new docket, and the CPUC will be considering income graduated fixed chargers. In mid-April 2023, customers will be transitioned to the new net metering tariff, now called a “net billing tariff,” or “NBT,” and exports will be credited at an avoided cost calculator rate. Additionally, the final decision made no retroactive changes to legacy net metering customers.

The final CPUC decision presents a significant change to the financial benefits California customers could receive from our solar systems and may negatively impact the financial attractiveness of our solar and solar plus storage offerings in this market, which may adversely impact our financial performance and the costs of our operations. This new framework may result in increased demand for our solar plus storage offerings, thereby increasing the importance of procuring a variety of battery storage products and potentially accentuating supply chain risks related to battery storage systems. The new NBT pricing framework may also result in the introduction of new product offerings and pricing structures at Sunrun and throughout the solar and utilities industries. This may result in increased competition and uncertainty regarding the demand for such new products and offerings.

Similarly, certain California municipal utilities, which are not regulated by the CPUC and would not be governed by the CPUC’s net metering policy, have also reviewed their net metering policies. In September 2021, the Sacramento Municipal Utility District (SMUD) ordered a change in its solar tariff, reducing the compensation of solar energy exported to the grid for new solar customers effective March 1, 2022. Such reviews have been taking place at California municipal utilities since 2015. More of our revenue is generated in California than any other state, and these potential changes in policies could result in a significant reduction in our revenue.

Electric utility statutes and regulations and changes to such statutes or regulations may present technical, regulatory and economic barriers to the purchase and use of our solar service offerings that may significantly reduce demand for such offerings.

Federal, state and local government statutes and regulations concerning electricity heavily influence the market for our solar service offerings and are constantly evolving. These statutes, regulations, and administrative rulings relate to electricity pricing, net metering, consumer protection, incentives, taxation, competition with utilities and the interconnection of homeowner-owned and third party-owned solar energy systems to the electrical grid. These statutes and regulations are constantly evolving. Governments, often acting through state utility or public
service commissions, change and adopt different rates for residential customers on a regular basis and these changes can have a negative impact on our ability to deliver savings, or energy bill management, to customers.

In addition, many utilities, their trade associations, and fossil fuel interests in the country, which have significantly greater economic, technical, operational, and political resources than the residential solar industry, are currently challenging solar-related policies to reduce the competitiveness of residential solar energy. Any adverse changes in solar-related policies could have a negative impact on our business and prospects.

Regulations and policies related to rate design could deter potential customers from purchasing our solar service offerings, reduce the value of the electricity our systems produce, and reduce any savings that our customers could realize from our solar service offerings.

All states regulate investor-owned utility retail electricity pricing. In addition, there are numerous publicly owned utilities and electric cooperatives that establish their own retail electricity pricing through some form of regulation or internal process. These regulations and policies could deter potential customers from purchasing our solar service offerings. For example, some utilities in states such as Arizona and Utah have sought and secured rate design changes that reduce credit for residential solar exports to below the retail rate and impose new charges for rooftop solar customers. Utilities in additional states may follow suit. Such rate changes can include changing rates to charge lower volume-based rates—the rates charged for kilowatt hours of electricity purchased by a residential customer—while raising unavoidable fixed charges that an end customer is subject to when they purchase solar energy from third parties, and levying charges on homeowners based on their point of maximum demand during a month (referred to as "demand charge"). For example, the Arizona Public Service Company offers residential demand charge rate plans and if our solar customers have subscribed to those plans, they may not realize typical savings from our offerings. These forms of rate design could adversely impact our business by reducing the value of the electricity our solar energy systems produce compared to retail net metering, and reducing any savings customers realize by purchasing our solar service offerings. These proposals could continue or be replicated in other states. In addition to changes in general rates charged to all residential customers, utilities are increasingly seeking solar-specific charges (which may be fixed charges, capacity-based charges, or other rate charges). Any of these changes could materially reduce the demand for our offerings and could limit the number of markets in which our offerings are competitive with electricity provided by the utilities.

We are not currently regulated as a utility under applicable laws, but we may be subject to regulation as a utility in the future or become subject to new federal and state regulations for any additional solar service offerings we may introduce in the future.

Most federal, state, and municipal laws do not currently regulate us as a utility. As a result, we are not subject to the various regulatory requirements applicable to U.S. utilities. However, any federal, state, local or other applicable regulations could place significant restrictions on our ability to operate our business and execute our business plan by prohibiting or otherwise restricting our sale of electricity. These regulatory requirements could include restricting our sale of electricity, as well as regulating the price of our solar service offerings. For example, the New York Public Service Commission and the Illinois Power Agency have issued orders regulating distributed energy providers in certain ways as if they were energy service companies, which increases the regulatory compliance burden for us in such states. If we become subject to the same regulatory authorities as utilities in other states or if new regulatory bodies are established to oversee our business, our operating costs could materially increase.

Our business depends in part on the regulatory treatment of third-party-owned solar energy systems.

Our Customer Agreements are third-party ownership arrangements. Sales of electricity by third parties face regulatory challenges in some states and jurisdictions. These challenges pertain to issues such as whether third-party-owned systems qualify for the same rebates, tax exemptions or other non-tax incentives available for homeowner-owned solar energy systems, whether third-party-owned systems are eligible at all for these incentives, whether our customer agreements are properly characterized as leases or power purchase agreements, and whether third-party-owned systems are eligible for net metering and the associated significant cost savings. In 2021, South Carolina enacted legislation providing a solar property tax exemption. Texas and Connecticut clarified through legislation that third-party owned residential solar systems would be treated the same as customer-owned systems, and would qualify for the existing residential solar property tax exemption. Adverse regulatory treatment of third-
party ownership arrangements could reduce demand for our solar service offerings, adversely impact our access to capital and cause us to increase the price we charge customers for energy.

Interconnection limits or circuit-level caps imposed by regulators may significantly reduce our ability to sell electricity from our solar service offerings in certain markets or slow interconnections, harming our growth rate and customer satisfaction scores.

Interconnection rules establish the circumstances in which rooftop solar will be connected to the electricity grid. Interconnection limits or circuit-level caps imposed by regulators may curb our growth in key markets. Utilities throughout the country have different rules and regulations regarding interconnection and some utilities cap or limit the amount of solar energy that can be interconnected to the grid. Our systems do not provide power to customers until they are interconnected to the grid.

Interconnection regulations are based on claims from utilities regarding the amount of solar energy that can be connected to the grid without causing grid reliability issues or requiring significant grid upgrades. Although recent rulings from the Hawaii Utilities Commission have helped resolve some problems, historically, interconnection limits or circuit-level caps have slowed the pace of our installations in Hawaii. Similar interconnection limits could slow our future installations in Hawaii or other markets, hampering our growth rate and customer satisfaction scores. Similarly, the California and Hawaii Public Utilities Commissions require the activation of some advanced inverter functionality to head off presumed grid reliability issues, which may require more expensive equipment and more oversight of the operation of the solar energy systems over time. As a result, these regulations may hamper our ability to sell our offerings in certain markets and increase our costs, adversely affecting our business, operating results, financial condition, and prospects. We expect utility requirements to incorporate these advanced functions provided by the IEEE 1547-2018/UL-1741 SB inverters and that they will become more commonplace. Additional states are expected to adopt the usage of advanced inverters to align with California's anticipated requirement that all new systems use inverters certified to the new UL 1741 SB standard. This requirement could become effective in California during the second quarter of 2023.

Risks Related to Our Business Operations

Our growth depends in part on the success of our relationships with third parties, including our solar partners.

A key component of our growth strategy is to develop or expand our relationships with third parties. For example, we are investing resources in establishing strategic relationships with market players across a variety of industries, including large retailers, to generate new customers. These programs may not roll out as quickly as planned or produce the results we anticipated. A significant portion of our business depends on attracting and retaining new and existing solar partners. Negotiating relationships with our solar partners, investing in due diligence efforts with potential solar partners, training such third parties and contractors, and monitoring them for compliance with our standards require significant time and resources and may present greater risks and challenges than expanding a direct sales or installation team. If we are unsuccessful in establishing or maintaining our relationships with these third parties, our ability to grow our business and address our market opportunity could be impaired. Even if we are able to establish and maintain these relationships, we may not be able to execute on our goal of leveraging these relationships to meaningfully expand our business, brand recognition and customer base. This would limit our growth potential and our opportunities to generate significant additional revenue or cash flows.

We and our solar partners depend on a limited number of suppliers of solar panels, batteries, and other system components to adequately meet anticipated demand for our solar service offerings. Any shortage, bottlenecks, delay, detentions, or component price change from these suppliers, or the acquisition of any of these suppliers by a competitor, could result in sales and installation delays, cancellations, and loss of market share.

We and our solar partners purchase solar panels, inverters, batteries, and other system components from a limited number of suppliers, making us susceptible to quality issues, shortages, bottlenecks, and price changes. If we or our solar partners fail to develop, maintain and expand our relationships with these or other suppliers, we may be unable to adequately meet anticipated demand for our solar service offerings, or we may only be able to offer our
systems at higher costs or after delays. If one or more of the suppliers that we or our solar partners rely upon to meet anticipated demand ceases or reduces production, we may be unable to quickly identify alternate suppliers or to qualify alternative products on commercially reasonable terms, and we may be unable to satisfy this demand.

The acquisition of a supplier by one of our competitors could also limit our access to such components and require significant redesigns of our solar energy systems or installation procedures and have a material adverse effect on our business.

In particular, there is a limited number of suppliers of inverters, which are components that convert electricity generated by solar panels into electricity that can be used to power the home. For example, once we design a system for use with a particular inverter, if that type of inverter is not readily available at an anticipated price, we may incur delays and additional expenses to redesign the system. Further, the inverters on our solar energy systems generally carry only ten year warranties. If there is an inverter equipment shortage in a year when a substantial number of inverters on our systems need to be replaced, we may not be able to replace the inverters to maintain proper system functioning or may be forced to do so at higher than anticipated prices, either of which would adversely impact our business.

Similarly, there is a limited number of suppliers of batteries. Once we design a system for use with a particular battery, if that type of battery is not readily available from our supplier, we may incur delays and additional expenses to install the system or be forced to redesign the system. Global demand has increased for lithium-ion battery cells, which may cause challenges for our battery suppliers, including delays or price volatility. Any such delays or reduced availability of battery cells (or other component materials) may impact our sales and operating results. Further, these risks may increase as market demand for our solar and battery offering grows.

There have also been periods of industry-wide shortage of key components, including solar panels, batteries and inverters, in times of rapid industry growth or regulatory change. Further, new or unexpected changes in rooftop fire codes or building codes may require new or different system components to satisfy compliance with such newly effective codes or regulations, which may not be readily available for distribution to us or our suppliers. The manufacturing infrastructure for some of these components has a long lead time, requires significant capital investment and relies on the continued availability of key commodity materials, potentially resulting in an inability to meet demand for these components and, as a result, could negatively impact our ability to install systems in a timely manner. Additionally, any decline in the exchange rate of the U.S. dollar compared to the functional currency of our component suppliers could increase our component prices. Any of these shortages, delays or price changes could limit our growth, cause cancellations or adversely affect our operating margins, and result in loss of market share and damage to our brand.

Human rights issues in foreign countries and the U.S. government response to them could also disrupt our supply chain and operations. In particular, the withhold release order issued by U.S. Customs and Border Protection (CBP) on June 24, 2021 applicable to certain silica-based products manufactured in the Xinjiang Uyghur Autonomous Region of China, and any other allegations regarding forced labor in China and U.S. trade regulations to prohibit the importation of any goods derived from forced labor, could affect our operations. Further, the Uyghur Forced Labor Prevention Act that President Biden signed into law on December 23, 2021, which took effect on June 21, 2022, has affected, and may continue to affect, our supply chain and operations. Intensive examinations, withhold release orders, and related governmental procedures have resulted in supply chain and operational delays throughout the industry, and we have implemented policies and procedures to maintain compliance and minimize delays. These and other similar trade restrictions that may be imposed in the future could cause delivery and installation delays, and restrict the global supply of polysilicon and solar products. This, coupled with the passage of the Inflation Reduction Act, could result in near-term demand for available solar energy systems despite higher costs, as well as increased costs of polysilicon and the overall cost of solar energy systems, potentially reducing overall demand for our products and services.

In addition, our supply chain and operations (or those of our partners) could be subject to events beyond our control, such as earthquakes, wildfires, flooding, hurricanes, tsunamis, typhoons, volcanic eruptions, droughts, tornadoes, the effects of climate change and related extreme weather, public health issues and pandemics, war, terrorism, government restrictions or limitations on trade, and geo-political unrest and uncertainties. On February 24, 2022, Russia invaded Ukraine and the duration of the conflict and extensiveness of the impact are still evolving and indeterminable at this time. We currently do not, and do not plan to in the future, source any products,
materials, components, parts, or services directly from Russian or Ukrainian providers. As a result, we do not anticipate any material impacts to our supply chain directly arising from the invasion at this time.

As the primary entity that contracts with customers, we are subject to risks associated with construction, cost overruns, delays, customer cancellations, regulatory compliance, and other contingencies, any of which could have a material adverse effect on our business and results of operations.

We are a licensed contractor in certain communities that we service, and we are ultimately responsible as the contracting party for every solar energy system installation. We may be liable, either directly or through our solar partners, to customers for any damage we cause to them, their home, belongings, or property during the installation of our systems. For example, we, either directly or through our solar partners, frequently penetrate customers’ roofs during the installation process and may incur liability for the failure to adequately weatherproof such penetrations following the completion of construction. In addition, because the solar energy systems we or our solar partners deploy are high voltage energy systems, we may incur liability for any failure to comply with electrical standards and manufacturer recommendations.

For example, on December 2, 2020, the California Contractors State License Board (the “CSLB”) filed an administrative proceeding against Sunrun and certain of its officers related to an accident that occurred during an installation by one of our channel partners, Horizon Solar Power, which held its own license with the CSLB. On November 8, 2021, the parties entered into a stipulated settlement imposing citations and withdrawing the administrative proceeding with additional conditions. We consistently denied wrongdoing concerning the allegations in the administrative proceeding and made no admissions of wrongdoing incident to the settlement. We could face other similar claims or proceedings in the future, which, if not resolved favorably, could potentially result in fines, public reprimand, probation, or the suspension or revocation of certain of our licenses.

Completing the sale and installation of a solar energy system requires many different steps including a site audit, completion of designs, permitting, installation, electrical sign-off and interconnection. Customers may cancel their Customer Agreement, subject to certain conditions, during this process until commencement of installation, and we have experienced increased customer cancellations in certain geographic markets during certain periods in our operating history. We or our solar partners may face customer cancellations, delays or cost overruns which may adversely affect our or our solar partners’ ability to ramp up the volume of sales or installations in accordance with our plans. These cancellations, delays or overruns may be the result of a variety of factors, such as labor shortages or other labor issues, defects in materials and workmanship, adverse weather conditions, transportation constraints, construction change orders, site changes or roof conditions, geographic factors and other unforeseen difficulties, any of which could lead to increased cancellation rates, reputational harm and other adverse effects. For example, some customer orders are canceled after a site visit if we determine that a customer needs to make repairs to or install a new roof, or that there is excessive shading on their property. If we continue to experience increased customer cancellations, our financial results may be materially and adversely affected.

Policy can impact solar installation completion timelines. For example, in fall 2022, California passed SB 379, which imposes a required timeline for cities and counties to implement an online, automated solar permitting platform like SolarAPP+. Cities with populations over 50,000 and counties with populations over 150,000 will need to have instant, online, automated residential solar and storage permitting by September 30, 2023, which may increase the rate at which we install solar systems.

In addition, the installation of solar energy systems and other energy-related products requiring building modifications are subject to oversight and regulation in accordance with national, state and local laws and ordinances relating to building, fire and electrical codes, safety, environmental protection, utility interconnection and metering, and related matters. We also rely on certain of our and our partners’ employees to maintain professional licenses in many of the jurisdictions in which we operate, and our failure to employ properly licensed personnel could adversely affect our licensing status in those jurisdictions. It is difficult and costly to track the requirements of every individual authority having jurisdiction over our installations and to design solar energy systems to comply with these varying standards. Any new government regulations or utility policies pertaining to our systems may result in significant additional expenses to us and our customers and, as a result, could cause a significant reduction in demand for our solar service offerings.
As the demand for solar plus storage offerings grows, we anticipate facing additional operational challenges associated with the complexity of deploying storage solutions. For example, solar plus storage offerings tend to have longer cycle times due to factors such as lengthened permitting and inspection times and potential need of a main panel upgrade.

We have a variety of stringent quality standards that we apply in the selection, supervision, and oversight of our third-party suppliers and solar partners. We exercise oversight over our partners through written agreements requiring compliance with the laws and requirements of all jurisdictions, including regarding safety and consumer protections, by oversight of compliance with these agreements, and enforced by termination of a partner relationship for failure to meet those obligations. However, because our suppliers and partners are third parties, ultimately, we cannot guarantee that they will follow our standards or ethical business practices, such as fair wage practices and compliance with environmental, safety and other local laws; despite our efforts to hold them accountable to our standards. A lack of demonstrated compliance could lead us to seek alternative suppliers or contractors, which could increase our costs and result in delayed delivery or installation of our products, product shortages or other disruptions of our operations. Violation of labor or other laws by our suppliers and solar partners or the divergence of a supplier’s or solar partner’s labor or other practices from those generally accepted as ethical in the United States or other markets in which we do business could also attract negative publicity for us and harm our business, brand and reputation in the market.

If we fail to manage our recent and future growth effectively, we may be unable to execute our business plan, maintain high levels of customer service, or adequately address competitive challenges.

We have experienced significant growth in recent periods and we intend to continue to expand our business within existing markets, such as Puerto Rico, and in a number of new locations in the future, and with our product offerings, such as EV chargers. This growth has placed, and any future growth may continue to place, a significant strain on our management, operational and financial infrastructure. In particular, we have been in the past, and may in the future, be required to expand, train and manage our growing employee base and solar partners. Our management will also be required to maintain and expand our relationships with customers, suppliers, and other third parties and attract new customers and suppliers, as well as to manage multiple geographic locations.

During 2021, we experienced our highest customer growth in the past five years, and this trend of increased customer demand and sales productivity has increased our backlog of installation projects. Although installation capacity has grown significantly, it has been and may continue to be, outpaced by the growth of our backlog. An increase in backlog creates higher costs incurred in the period relative to completed installations. If we fail to appropriately manage our backlog in relation to the rate at which we install, it could adversely affect our financial performance and hinder our ability to compete effectively.

In addition, our current and planned operations, personnel, systems and procedures might be inadequate to support our future growth and may require us to make additional unanticipated investment in our infrastructure, including additional costs for the expansion of our employee base and our solar partners as well as marketing and branding costs. Our success and ability to further scale our business will depend, in part, on our ability to manage these changes in a cost-effective and efficient manner. If we cannot manage our growth, we may be unable to take advantage of market opportunities, execute our business strategies or respond to competitive pressures. This could also result in declines in quality or customer satisfaction, increased costs, difficulties in introducing new solar service offerings or other operational difficulties. Any failure to effectively manage growth could adversely impact our business, operating results, financial condition, and reputation.

The COVID-19 pandemic, including its variants, has had and could continue to have an adverse impact on our business, operations, and the markets and communities in which we operate.

Our business and financial condition have been, and could continue to be, affected by the COVID-19 pandemic. The COVID-19 pandemic has had an unprecedented impact on the U.S. economy and has impacted our business. The effects of COVID-19, such as the widespread growth in infections, travel restrictions, quarantines, return-to-work restrictions, government regulations, supply chain disruptions, workforce shortages, and site closures have impacted and may continue to impact our ability to staff sales and operations centers and install and maintain solar energy systems in the field, as well as direct-to-home sales activities. The rise and resurgence of increasingly
infectious variants, despite efforts to combat the virus with vaccinations, has presented additional challenges and unpredictability that have, and may continue to have, resulted in workforce constraints, delays, and additional costs, particularly in regions experiencing significant outbreaks.

The COVID-19 pandemic has also led to significant volatility in global financial markets, which could negatively affect our cost of and access to capital and could have an adverse impact on customer demand and the financial health and credit risk associated with our customers. Future disruptions or instability in capital markets could also negatively impact our ability to raise capital from third parties, such as tax equity partners, to grow our business. In addition, significant inflationary pressures, or a market correction resulting from the impacts of the COVID-19 pandemic, has and could continue to adversely affect our business and the value of our common stock. The full economic impact of the pandemic is still not known.

COVID-19 has caused disruptions to the supply chain across the global economy, including within the solar industry. Certain suppliers have experienced, and may continue to experience, delays related to a variety of factors, including logistical delays, and component shortages from upstream vendors. We continue to monitor the situation and are working closely with our solar partners and suppliers to develop contingency plans for potential operations and supply chain interruptions.

The ultimate impact of the pandemic is highly uncertain, beyond our control, dependent on future developments that cannot be accurately predicted, and subject to change. We will continue to monitor developments affecting our workforce, our customers, and our business operations generally and will take additional actions that we determine are necessary in order to mitigate the impacts, however, any steps we take may be inadequate and, as a result, our business may be harmed.

We typically bear the risk of loss and the cost of maintenance, repair and removal on solar energy systems that are owned or leased by our investment funds.

We typically bear the risk of loss and are generally obligated to cover the cost of maintenance, repair and removal for any solar energy system that we sell or lease to our investment funds. At the time we sell or lease a solar energy system to an investment fund, we enter into a maintenance services agreement where we agree to operate and maintain the system for a fixed fee that is calculated to cover our future expected maintenance costs. If our solar energy systems require an above-average amount of repairs or if the cost of repairing systems were higher than our estimate, we would need to perform such repairs without additional compensation. If a natural disaster results in a solar energy system being damaged, and the insurance proceeds are insufficient to cover our修复 costs, we could incur unforeseen costs that could impact our business. We purchase property insurance with industry standard coverage and limits approved by an investor's third-party insurance advisors to hedge against such risk, but such coverage may not cover our losses.

Product liability claims against us could result in adverse publicity and potentially significant monetary damages.

If our solar service offerings, including our racking systems, photovoltaic modules, batteries, inverters, or other products, injured someone, we would be exposed to product liability claims. Because solar energy systems and many of our other current and anticipated products are electricity-producing devices, it is possible that customers or their property could be injured or damaged by our products, whether by product malfunctions, defects, improper installation or other causes. We rely on third-party manufacturing warranties, warranties provided by our solar partners and our general liability insurance to cover product liability claims and have not obtained separate product liability insurance. Our solar energy systems, including our photovoltaic modules, batteries, inverters, and other products, may also be subject to recalls due to product malfunctions or defects. Any product liability claim we face could be expensive to defend and divert management’s attention. The successful assertion of product liability claims against us could result in potentially significant monetary damages that could require us to make significant payments, as well as subject us to adverse publicity, damage our reputation and competitive position and adversely affect sales of our systems and other products. In addition, product liability claims, injuries, defects or other problems experienced by other companies in the residential solar industry could lead to unfavorable market conditions.
conditions to the industry as a whole, and may have an adverse effect on our ability to attract customers, thus affecting our growth and financial performance.

Our business is concentrated in certain markets, putting us at risk of region-specific disruptions.

As of December 31, 2022, more than 40% of our customers were in California. This concentration of our customer base and operational infrastructure could lead to our business and results of operations being particularly susceptible to adverse economic, regulatory, political, weather and other conditions in this market, and in other markets that may become similarly concentrated, in particular the east coast, where we have seen significant growth recently. Recent changes to net metering policy and the tariff structure in California in December 2022 create additional uncertainty and challenges, given the size of our customer base in California.

Our corporate and sales headquarters are located in San Francisco, California, an area that has a heightened risk of earthquakes and nearby wildfires. We may not have adequate insurance, including business interruption insurance, to compensate us for losses that may occur from any such significant events. A significant natural disaster, such as an earthquake or wildfire, or a public health crisis, such as a pandemic, or civil unrest could have a material adverse impact on our business, results of operations and financial condition. In addition, acts of terrorism or malicious computer viruses could cause disruptions in our or our solar partners’ businesses or the economy as a whole. To the extent that these disruptions result in delays or cancellations of installations or the deployment of our solar service offerings, our business, results of operations and financial condition would be adversely affected.

Changes to the applicable laws and regulations governing direct-to-home sales and marketing may limit or restrict our ability to effectively compete.

We utilize a direct-to-home sales model as a primary sales channel and are vulnerable to changes in laws and regulations related to direct sales and marketing that could impose additional limitations on unsolicited residential sales calls and may impose additional restrictions such as adjustments to our marketing materials and direct-selling processes, and new training for personnel. If additional laws and regulations affecting direct sales and marketing are passed in the markets in which we operate, it would take time to train our sales professionals to comply with such laws, and we may be exposed to fines or other penalties for violations of such laws. If we fail to compete effectively through our direct-selling efforts, our financial condition, results of operations and growth prospects could be adversely affected.

Expansion into new sales channels could be costly and time-consuming. As we enter new channels, we could be at a disadvantage relative to other companies who have more history in these spaces.

As we continue to expand into new sales channels, such as direct-to-home, homebuilder, retail, and e-commerce channels and adapt to a remote selling model, we have incurred and may continue to incur significant costs. In addition, we may not initially or ever be successful in utilizing these new channels. Furthermore, we may not be able to compete successfully with companies with a historical presence in such channels, and we may not realize the anticipated benefits of entering such channels, including efficiently increasing our customer base and ultimately reducing costs. Entering new channels also poses the risk of conflicts between sales channels. If we are unable to successfully compete in new channels, our operating results and growth prospects could be adversely affected.

Obtaining a sales contract with a potential customer does not guarantee that the potential customer will not decide to cancel or that we will not need to cancel due to a failed inspection, which could cause us to generate no revenue despite incurring costs and adversely affect our results of operations.

Even after we secure a sales contract with a potential customer, we (either directly or through our solar partners) must perform an inspection to ensure the home, including the rooftop, meets our standards and specifications. If the inspection finds repairs to the rooftop are required in order to satisfy our standards and specifications to install the solar energy system, and a potential customer does not want to make such required repairs, we would lose that anticipated sale. In addition, per the terms of our Customer Agreements, a customer maintains the ability to cancel before commencement of installation, subject to certain conditions. Any delay or
cancellation of an anticipated sale could materially and adversely affect our financial results, as we may have incurred sales-related, design-related, and other expenses and generated no revenue.

The value of our solar energy systems at the end of the associated term of the lease or power purchase agreement may be lower than projected, which may adversely affect our financial performance and valuation.

We depreciate the costs of our solar energy systems over their estimated useful life of 35 years. At the end of the initial typically 20- or 25-year term of the Customer Agreement, customers may choose to purchase their solar energy systems, ask to remove the system at our cost or renew their Customer Agreements. Customers may choose to not renew or purchase for any reason, including pricing, decreased energy consumption, relocation of residence, or switching to a competitor product.

Furthermore, it is difficult to predict how future environmental regulations may affect the costs associated with the removal, disposal or recycling of our solar energy systems. If the value in trade or renewal revenue is less than we expect, we may be required to recognize all or some of the remaining unamortized costs. This could materially impair our future results of operations.

We are exposed to the credit risk of customers and payment delinquencies on our accounts receivables.

Our Customer Agreements are typically for 20 or 25 years and require the customer to make monthly payments to us. Accordingly, we are subject to the credit risk of customers. As of December 31, 2022, the average FICO score of our customers under a Customer Agreement with a monthly payment schedule remained at or above 740, which is generally categorized as a “Very Good” credit profile by the Fair Isaac Corporation. However, this may decline to the extent FICO score requirements under future investment funds are relaxed. While customer defaults have been immaterial to date, we expect that the risk of customer defaults may increase as we grow our business. Due to the immaterial amount of customer defaults to date, our reserve for this exposure is minimal, and our future exposure may exceed the amount of such reserves. If we experience increased customer credit defaults, our revenue and our ability to raise new investment funds could be adversely affected. If economic conditions worsen, certain of our customers may face liquidity concerns and may be unable to satisfy their payment obligations to us on a timely basis or at all, which could have a material adverse effect on our financial condition and results of operations.

We may not realize the anticipated benefits of past or future investments, strategic transactions, or acquisitions, and integration of these acquisitions may disrupt our business and management.

We have in the past and may in the future, acquire companies, Project pipelines, Projects, SRECs, products, or technologies or enter into joint ventures or other strategic transactions. For example, we completed the acquisition of Vivint Solar on October 8, 2020. Also, in July 2020, we announced a venture with SK E&S Co., Ltd. and other affiliated companies focused on home electrification. We may not realize the anticipated benefits of past or future investments, strategic transactions, or acquisitions, and these transactions involve numerous risks that are not within our control. These risks include the following, among others:

- failure to satisfy the required conditions and otherwise complete a planned acquisition, joint venture or other strategic transaction on a timely basis or at all;
- legal or regulatory proceedings, if any, relating to a planned acquisition, joint venture or other strategic transaction and the outcome of such legal proceedings;
- difficulty in assimilating the operations, systems, and personnel of the acquired company, especially given our unique culture;
- difficulty in effectively integrating the acquired technologies or products with our current products and technologies;
• difficulty in maintaining controls, procedures and policies during the transition and integration;

• disruption of our ongoing business and distraction of our management and employees from other opportunities and challenges due to integration issues;

• difficulty integrating the acquired company’s accounting, management information and other administrative systems;

• inability to retain key technical and managerial personnel of the acquired business;

• inability to retain key customers, vendors and other business partners of the acquired business;

• inability to achieve the financial and strategic goals for the acquired and combined businesses;

• incurring acquisition-related costs or amortization costs for acquired intangible assets that could impact our results of operations;

• significant post-acquisition investments which may lower the actual benefits realized through the acquisition;

• potential failure of the due diligence processes to identify significant issues with product quality, legal, and financial liabilities, among other things;

• moderating and anticipating the impacts of inherent or emerging seasonality in acquired customer agreements;

• potential inability to assert that internal controls over financial reporting are effective; and

• potential inability to obtain, or obtain in a timely manner, approvals from governmental authorities, which could delay or prevent such acquisitions.

Our failure to address these risks, or other problems encountered in connection with our past or future investments, strategic transactions, or acquisitions, could cause us to fail to realize the anticipated benefits of these acquisitions or investments, cause us to incur unanticipated liabilities, and harm our business generally. Future acquisitions could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, amortization expenses, incremental expenses or the write-off of goodwill, any of which could harm our financial condition or results of operations, and the trading price of our common stock could decline.

From time to time, we may pursue acquisitions of previously installed solar systems to further expand future solar and storage upsell and retrofit opportunities. While we do not expect such acquisitions to represent a material portion of our growth on an annual basis, we plan to pursue such transactions opportunistically. We may not realize the anticipated benefits of such transactions, and these transactions involve numerous risks that are not within our control.

Mergers and acquisitions are inherently risky, may not produce the anticipated benefits and could adversely affect our business, financial condition or results of operations.

If we are unsuccessful in developing and maintaining our proprietary technology, including our BrightPath software, our ability to attract and retain solar partners could be impaired, our competitive position could be harmed and our revenue could be reduced.
Our future growth depends on our ability to continue to develop and maintain our proprietary technology that supports our solar service offerings, including our design and proposal software, BrightPath. In addition, we rely, and expect to continue to rely, on licensing agreements with certain third parties for aerial images that allow us to efficiently and effectively analyze a customer’s rooftop for solar energy system specifications. In the event that our current or future products require features that we have not developed or licensed, or we lose the benefit of an existing license, we will be required to develop or obtain such technology through purchase, license or other arrangements. If the required technology is not available on commercially reasonable terms, or at all, we may incur additional expenses in an effort to internally develop the required technology. In addition, our BrightPath software was developed, in part, with U.S. federal government funding. When new technologies are developed with U.S. government funding, the government obtains certain rights in any resulting patents, including a nonexclusive license authorizing the government to use the invention for non-commercial purposes. These rights may permit the government to disclose certain confidential information related to BrightPath to third parties and to exercise “march-in” rights to use or allow third parties to use our patented technology. We are also subject to certain reporting and other obligations to the U.S. government in connection with funding for BrightPath. If we are unable to maintain our existing proprietary technology, our ability to attract and retain solar partners could be impaired, our competitive position could be harmed and our revenue could be reduced.

Disruptions to our solar production metering solution could negatively impact our revenue and increase our expenses.

Our ability to monitor solar energy production for various purposes depends on the operation of our metering solution. We could incur significant expense and disruption to our operations in connection with failures of our metering solution, including meter hardware failures and failure or obsolescence of the cellular technology that we use to communicate with those meters. For example, many of our meters operate on either the 3G or 4G cellular data networks, which are expected to sunset before the term of our Customer Agreements, and newer technologies we use today may become obsolete before the end of the term of Customer Agreements entered into now. Upgrading our metering solution may cause us to incur significant expense. Additionally, our meters communicate data through proprietary software, which we license from our metering partners. Should we be unable to continue to license, on agreeable terms, the software necessary to communicate with our meters, it could cause a significant disruption in our business and operations.

Problems with product quality or performance may cause us to incur warranty expenses and performance guarantee expenses, may lower the residual value of our solar energy systems and may damage our market reputation and cause our financial results to decline.

Customers who enter into Customer Agreements with us are covered by production guarantees and roof penetration warranties. As the owners of the solar energy systems, we or our investment funds receive a warranty from the inverter and solar panel manufacturers, and, for those solar energy systems that we do not install directly, we receive workmanship and material warranties as well as roof penetration warranties from our solar partners. Furthermore, one or more of our third-party manufacturers or solar partners could cease operations and no longer honor these warranties, leaving us to fulfill these potential obligations to customers, or such warranties may be limited in scope and amount, and may be inadequate to protect us. We also provide a performance guarantee with certain solar service offerings pursuant to which we compensate customers on an annual basis if their system does not meet the electricity production guarantees set forth in their agreement with us. Customers who enter into Customer Agreements with us are covered by production guarantees equal to the length of the term of these agreements, typically 20 or 25 years. We may suffer financial losses associated if significant performance guarantee payments are triggered.

Because of our limited operating history and the length of the term of our Customer Agreements, we have been required to make assumptions and apply judgments regarding a number of factors, including our anticipated rate of warranty claims and the durability, performance and reliability of our solar energy systems. Our assumptions could prove to be materially different from the actual performance of our systems, causing us to incur substantial expense to repair or replace defective solar energy systems in the future or to compensate customers for systems that do not meet their production guarantees. Product failures or operational deficiencies also would reduce our revenue from power purchase or lease agreements because they are dependent on system production. Any
widespread product failures or operating deficiencies may damage our market reputation and adversely impact our financial results.

Our business may be harmed if we fail to properly protect our intellectual property, and we may also be required to defend against claims or indemnify others against claims that our intellectual property infringes on the intellectual property rights of third parties.

We believe that the success of our business depends in part on our proprietary technology, including our software, information, processes and know-how. We rely on copyright, trade secret and patent protections to secure our intellectual property rights. Although we may incur substantial costs in protecting our technology, we cannot be certain that we have adequately protected or will be able to adequately protect it, that our competitors will not be able to utilize our existing technology or develop similar technology independently, that the claims allowed with respect to any patents held by us will be broad enough to protect our technology or that foreign intellectual property laws will adequately protect our intellectual property rights. Moreover, we cannot be certain that our patents provide us with a competitive advantage. Despite our precautions, it may be possible for third parties to obtain and use our intellectual property without our consent. Unauthorized use of our intellectual property by third parties, and the expenses incurred in protecting our intellectual property rights, may adversely affect our business. In the future, some of our products could be alleged to infringe existing patents or other intellectual property of third parties, and we cannot be certain that we will prevail in any intellectual property dispute. In addition, any future litigation required to enforce our patents, to protect our trade secrets or know-how or to defend us or indemnify others against claimed infringement of the rights of third parties could harm our business, financial condition, and results of operations.

We use “open source” software in our solutions, which may require that we release the source code of certain software subject to open source licenses or subject us to possible litigation or other actions that could adversely affect our business.

We utilize software that is licensed under so-called “open source,” “free” or other similar licenses. Open source software is made available to the general public on an “as-is” basis under the terms of a non-negotiable license. We currently combine our proprietary software with open source software but not in a manner that we believe requires the release of the source code of our proprietary software to the public. However, our use of open source software may entail greater risks than use of third-party commercial software. Open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. In addition, if we combine our proprietary software with open source software in a certain manner, we could, under certain open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar offerings with lower development effort and time.

We may also face claims alleging noncompliance with open source license terms or infringement or misappropriation of proprietary software. These claims could result in litigation, require us to purchase a costly license or require us to devote additional research and development resources to change our software, any of which would have a negative effect on our business and results of operations. In addition, if the license terms for open source software that we use change, we may be forced to re-engineer our solutions, incur additional costs or discontinue the use of these solutions if re-engineering cannot be accomplished on a timely basis. Few courts have interpreted open source licenses and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to use our proprietary software. We cannot guarantee that we have incorporated or will incorporate open source software in our software in a manner that will not subject us to liability or in a manner that is consistent with our current policies and procedures.

Any security breach, unauthorized access or disclosure, or theft of data, including personal information, we, our third party service providers, and suppliers gather, store, transmit, and use, or other hacking, cyber-attack, phishing attack, and unauthorized intrusions into or through our systems or those of our third party service providers, could harm our reputation, subject us to claims, litigation, financial harm, and have an adverse impact on our business.

In the ordinary course of business, we, our third party providers upon which we rely, and our suppliers receive, store, transmit, and use data, including the personal information of customers, such as names, addresses, email addresses, credit information and other housing and energy use information, as well as the personal
information of our employees. Unauthorized disclosure of such personal information, whether through a breach of our or those of our third party service providers and suppliers systems by an unauthorized party, including, but not limited to hackers, threat actors, sophisticated nation-states, nation-state-supported actors, personnel theft or misuse of information, or otherwise, could harm our business. In addition, we, our third party service providers upon which we rely, and our suppliers may be subject to a variety of evolving threats, such as computer malware (including as a result of advanced persistent threat intrusions), ransomware, malicious code (such as viruses or worms), social engineering (including spear phishing and smishing attacks), telecommunications failures, natural disasters and extreme weather events, general hacking and other similar threats. Cybersecurity incidents have become more prevalent, have occurred on our systems in the past, and could occur on our systems and those of our third parties in the future. Our team members who work remotely pose increased risks to our information technology systems and data, because many of them utilize less secure network connections outside our premises.

Inadvertent disclosure of confidential data, such as personal information, or if a third party were to gain unauthorized access to this type of data in our possession, has resulted in, and could result in future claims or litigation arising from damages suffered by those affected, government enforcement actions (for example, investigations, fines, penalties, audits, and inspections), additional reporting requirements and/or oversight, indemnification obligations, reputational harm, interruptions in our operations, financial loss, and other similar harms. In addition, we could incur significant costs in complying with the multitude of federal, state and local laws, and applicable independent security control frameworks, regarding the unauthorized disclosure of personal information. Although we have not experienced a material information security breach in the last three years, and have developed systems and processes to prevent or detect security breaches and protect the confidential information we receive, store, transmit, and use, we cannot assure you that such measures will provide absolute security. Finally, any perceived or actual unauthorized disclosure of such information, unauthorized intrusion, or other cyberthreat could harm our reputation, substantially impair our ability to attract and retain customers, interrupt our operations, and have an adverse impact on our business.

Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations. While we currently maintain cybersecurity insurance, such insurance may not be sufficient to cover us against claims, and we cannot be certain that cyber insurance will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim.

Our business is subject to complex and evolving laws and regulations regarding privacy and data protection ("data protection laws"). Many of these laws and regulations are subject to change and uncertain interpretation, and could result in claims, increased cost of operations, or otherwise harm our business.

The regulatory environment surrounding data privacy and protection is constantly evolving and can be subject to significant change. New data protection laws, including California legislation and regulation which affords California consumers an array of new rights, such as the right to be informed about what kinds of personal data companies have collected and why it was collected, pose increasingly complex compliance challenges and potentially elevate our costs. Complying with varying jurisdictional requirements could increase the costs and complexity of compliance, and violations of applicable data protection laws could result in significant penalties. Any failure, or perceived failure, by us to comply with applicable data protection laws could result in proceedings or actions brought against us by governmental entities or others, subject us to significant fines, penalties, judgments and negative publicity, require us to change our business practices, increase the costs and complexity of compliance, and adversely affect our business.

Damage to our brand and reputation or failure to expand our brand would harm our business and results of operations.

We depend significantly on our brand and reputation for high-quality solar service offerings, engineering and customer service to attract customers and grow our business. If we fail to continue to deliver our solar service offerings within the planned timelines, if our solar service offerings do not perform as anticipated or if we damage any customers’ properties or cancel Projects, our brand and reputation could be significantly impaired. We also depend greatly on referrals from customers for our growth. Therefore, our inability to meet or exceed customers’ expectations would harm our reputation and growth through referrals. We have at times focused particular attention on expeditiously growing our direct sales force and our solar partners, leading us in some instances to hire personnel or partner with third parties who we may later determine do not fit our company culture and standards.
Given the sheer volume of interactions our direct sales force and our solar partners have with customers and potential customers, it is also unavoidable that some interactions will be perceived by customers and potential customers as less than satisfactory and result in complaints. If we cannot manage our hiring and training processes to limit potential issues and maintain appropriate customer service levels, our brand and reputation may be harmed and our ability to grow our business would suffer. In addition, if we were unable to achieve a similar level of brand recognition as our competitors, some of which may have a broader brand footprint, more resources and longer operational history, we could lose recognition in the marketplace among prospectives, suppliers and partners, which could affect our growth and financial performance. Our growth strategy involves marketing and branding initiatives that will involve incurring significant expenses in advance of corresponding revenue. We cannot assure you that such marketing and branding expenses will result in the successful expansion of our brand recognition or increase our revenue. We are also subject to marketing and advertising regulations in various jurisdictions, and overly restrictive conditions on our marketing and advertising activities may inhibit the sales of the affected products.

A failure to hire and retain a sufficient number of employees and service providers in key functions would constrain our growth and our ability to timely complete customers’ Projects and successfully manage customer accounts.

To support our growth, we need to hire, train, deploy, manage and retain a substantial number of skilled employees, engineers, installers, electricians, sales and project finance specialists. Competition for qualified personnel in our industry is increasing, particularly for skilled personnel involved in the installation of solar energy systems. We have in the past been, and may in the future be, unable to attract or retain qualified and skilled installation personnel or installation companies to be our solar partners, which would have an adverse effect on our business. We and our solar partners also compete with the homebuilding and construction industries for skilled labor. As these industries grow and seek to hire additional workers, our cost of labor may increase. The unionization of the industry’s labor force could also increase our labor costs. Shortages of skilled labor could significantly delay a project or otherwise increase our costs. Because our profit on a particular installation is based in part on assumptions as to the cost of such project, cost overruns, delays or other execution issues may cause us to not achieve our expected margins or cover our costs for that project. In addition, because we are headquartered in the San Francisco Bay Area, we compete for a limited pool of technical and engineering resources that requires us to pay wages that are competitive with relatively high regional standards for employees in these fields. Further, we need to continue to expand upon the training of our customer service team to provide high-end account management and service to customers before, during and following the point of installation of our solar energy systems. Identifying and recruiting qualified personnel and training them requires significant time, expense and attention. It can take several months before a new customer service team member is fully trained and productive at the standards that we have established. If we are unable to hire, develop and retain talented technical and customer service personnel, we may not be able to realize the expected benefits of this investment or grow our business.

In addition, to support the growth and success of our direct-to-consumer channel, we need to recruit, retain and motivate a large number of sales personnel on a continuing basis. We compete with many other companies for qualified sales personnel, and it could take many months before a new salesperson is fully trained on our solar service offerings. If we are unable to hire, develop and retain qualified sales personnel or if they are unable to achieve desired productivity levels, we may not be able to compete effectively.

If we or our solar partners cannot meet our hiring, retention and efficiency goals, we may be unable to complete customers’ Projects on time or manage customer accounts in an acceptable manner or at all. Any significant failures in this regard would materially impair our growth, reputation, business and financial results. If we are required to pay higher compensation than we anticipate, these greater expenses may also adversely impact our financial results and the growth of our business.

Regulators may limit the type of electricians qualified to install and service our solar and battery systems in California, which may result in workforce shortages, operational delays, and increased costs.

On July 27, 2021, the CSLB decided that only electricians with a certain license (C-10) would be eligible to install energy storage systems in California (the "July CSLB Decision"). On November 29, 2021, the CSLB voted to postpone initiating a formal rulemaking process thereby commencing a stakeholder process to develop an
alternative regulatory proposal to be brought back to its Board in March 2022 and committing to adhere to a full rulemaking process in accordance with the California Administrative Procedure Act. In June 2022, the CSLB voted to commence the official rulemaking process on the required licensing to install storage systems in California, including notice and comment, in accordance with the CA Administrative Procedures Act. In the proposal, CSLB recommends that C46 license holders can install battery energy storage systems that do not exceed 80 kWh. For battery energy storage systems that exceed 80 kWh, a C10 license is proposed to be required.

While our workforce includes workers operating under both C-10 and C-46 licenses in California, there are a limited number of C-10 certified electricians in the state, which may result in workforce shortages, operational delays, and increased costs if the CSLB Decision stands. Obtaining a C-10 license can be an extended process, and the timing and cost of having a large number of our C-46 licensed electricians seek such additional qualification is unclear.

A significant portion of our customer base is in California, and as the state deals with growing wildfire risk and grid instability, an increasing number of our customers are choosing our solar and battery offerings. If we are unable to hire, develop and retain sufficient certified electricians, our growth of solar and battery customers in California may be significantly constrained, which would negatively impact our operating results.

Our workforce has led the industry in safely installing solar and battery systems for tens of thousands of customers across the country, and we intend to work with regulators, industry partners, and stakeholders to grow the solar and battery market throughout California.

The loss of one or more members of our senior management or key employees may adversely affect our ability to implement our strategy.

We depend on our experienced management team, and the loss of one or more key executives could have a negative impact on our business. With any change in leadership, there is a risk to organizational effectiveness and employee retention as well as the potential for disruption to our business. None of our key executives or our key employees are bound by employment agreements for any specific term, and we may be unable to replace key members of our management team and key employees in the event we lose their services. Integrating new employees into our management team could prove disruptive to our operations, require substantial resources and management attention and ultimately prove unsuccessful. An inability to attract and retain sufficient managerial personnel who have critical industry experience and relationships could limit or delay our strategic efforts, which could have a material adverse effect on our business, financial condition, and results of operations.

We are subject to legal proceedings, regulatory inquiries and litigation, and we have previously been, and may in the future be, named in additional legal proceedings, become involved in regulatory inquiries or be subject to litigation in the future, all of which are costly, distracting to our core business and could result in an unfavorable outcome, or a material adverse effect on our business, financial condition, results of operations, or the trading price for our securities.

We are involved in legal proceedings and receive inquiries from government and regulatory agencies from time to time. In the event that we are involved in significant disputes or are the subject of a formal action by a regulatory agency, we could be exposed to costly and time-consuming legal proceedings that could result in any number of outcomes. Although outcomes of such actions vary, any current or future claims or regulatory actions initiated by or against us, whether successful or not, could result in significant costs, costly damage awards or settlement amounts, injunctive relief, increased costs of business, fines or orders to change certain business practices, significant dedication of management time, diversion of significant operational resources, or otherwise harm our business.

If we are not successful in our legal proceedings and litigation, we may be required to pay significant monetary damages, which could hurt our results of operations. Lawsuits are time-consuming and expensive to resolve and divert management’s time and attention. Although we carry general liability insurance, our insurance may not cover potential claims or may not be adequate to indemnify us for all liability that may be imposed. We cannot predict how the courts will rule in any potential lawsuit against us. Decisions in favor of parties that bring
lawsuits against us could subject us to significant liability for damages, adversely affect our results of operations and harm our reputation.

A failure to comply with laws and regulations relating to our interactions with current or prospective residential customers could result in negative publicity, claims, investigations, and litigation, and adversely affect our financial performance.

Our business involves transactions with customers. We and our solar partners must comply with numerous federal, state and local laws and regulations that govern matters relating to our interactions with customers, including those pertaining to privacy and data security, consumer financial and credit transactions, home improvement contracts, warranties and direct-to-home solicitation, along with certain rules and regulations specific to the marketing and sale of residential solar products and services. These laws and regulations are dynamic and subject to potentially differing interpretations, and various federal, state and local legislative and regulatory bodies may expand current laws or regulations, or enact new laws and regulations, regarding these matters. Changes in these laws or regulations or their interpretation could dramatically affect how we do business, acquire customers, and manage and use information we collect from and about current and prospective customers and the costs associated therewith. We strive to comply with all applicable laws and regulations relating to our interactions with residential customers. It is possible, however, that these requirements may be interpreted and applied in a manner that is inconsistent from one jurisdiction to another and may conflict with other rules or our practices. Noncompliance with any such laws or regulations, or the perception that we or our solar partners have violated such laws or regulations or engaged in deceptive practices that could result in a violation, could also expose us to claims, proceedings, litigation and investigations by private parties and regulatory authorities, as well as substantial fines and negative publicity, each of which may materially and adversely affect our business. We have incurred, and will continue to incur, significant expenses to comply with such laws and regulations, and increased regulation of matters relating to our interactions with residential customers could require us to modify our operations and incur significant additional expenses, which could have an adverse effect on our business, financial condition, and results of operations.

Any investigations, actions, adoption or amendment of regulations relating to the marketing of our products to residential consumers could divert management’s attention from our business, require us to modify our operations and incur significant additional expenses, which could have an adverse effect on our business, financial condition, and results of operations or could reduce the number of our potential customers.

We cannot ensure that our sales professionals and other personnel will always comply with our standard practices and policies, as well as applicable laws and regulations. In any of the numerous interactions between our sales professionals or other personnel and our customers or potential customers, our sales professionals or other personnel may, without our knowledge and despite our efforts to effectively train them and enforce compliance, engage in conduct that is or may be prohibited under our standard practices and policies and applicable laws and regulations. Any such non-compliance, or the perception of non-compliance, has exposed us to claims and could expose us to additional claims, proceedings, litigation, investigations, or enforcement actions by private parties or regulatory authorities, as well as substantial fines and negative publicity, each of which may materially and adversely affect our business and reputation. We have incurred, and will continue to incur, significant expenses to comply with the laws, regulations and industry standards that apply to us.

Compliance with occupational safety and health requirements and best practices can be costly, and noncompliance with such requirements may result in potentially significant penalties, operational delays and adverse publicity.

The installation of solar energy systems requires our employees and employees of our solar partners to work with complicated and potentially dangerous electrical and utility systems. The evaluation and installation of our energy-related products also require these employees to work in locations that may contain potentially dangerous levels of asbestos, lead or mold or other substances. We also maintain large fleets of vehicles that these employees use in the course of their work. There is substantial risk of serious illness, injury, or death if proper safety procedures are not followed. Our operations are subject to regulation under the U.S. Occupational Safety and Health Act ("OSHA") and equivalent state laws. Changes to OSHA requirements, or stricter interpretation or enforcement of existing laws or regulations, could result in increased costs. If we fail to comply with applicable OSHA regulations,
even if no work-related serious illness, injury, or death occurs, we may be subject to civil or criminal enforcement and be required to pay substantial penalties, incur significant capital expenditures, or suspend or limit operations. Any accidents, citations, violations, illnesses, injuries or failure to comply with industry best practices may subject us to adverse publicity, damage our reputation and competitive position and adversely affect our business.

If our products do not work as well as planned or if we are unsuccessful in developing and selling new products or in penetrating new markets, our business, financial condition, and results of operations could be adversely affected.

Our success and ability to compete are dependent on the products that we have developed or may develop in the future. There is a risk that the products that we have developed or may develop may not work as intended, or that the marketing of the products may not be as successful as anticipated. The development of new products generally requires substantial investment and can require long development and testing periods before they are commercially viable. We intend to continue to make substantial investments in developing new products and it is possible that we may not develop or acquire new products or product enhancements that compete effectively within our target markets or differentiate our products based on functionality, performance or cost and thus our new technologies and products may not result in meaningful revenue. In addition, any delays in developing and releasing new or enhanced products could cause us to lose revenue opportunities and potential customers. Any technical flaws in product releases could diminish the innovative impact of our products and have a negative effect on customer adoption and our reputation. If we fail to introduce new products that meet the demands of our customers or target markets or do not achieve market acceptance, or if we fail to penetrate new markets, our business, financial conditions and results of operations could be adversely affected.

We have incurred losses and may be unable to sustain profitability in the future.

We have incurred net losses in the past and may continue to incur net losses as we increase our spending to finance the expansion of our operations, expand our installation, engineering, administrative, sales and marketing staffs, increase spending on our brand awareness and other sales and marketing initiatives, make significant investments to drive future growth in our business and implement internal systems and infrastructure to support our growth. We do not know whether our revenue will grow rapidly enough to absorb these costs and our limited operating history makes it difficult to assess the extent of these expenses or their impact on our results of operations. Our ability to sustain profitability depends on a number of factors, including but not limited to:

- growing our customer base;
- reducing our operating costs by lowering our customer acquisition costs and optimizing our design and installation processes and supply chain logistics;
- finding investors willing to invest in our investment funds on favorable terms;
- maintaining or further lowering our cost of capital;
- reducing the cost of components for our solar service offerings;
- growing and maintaining our channel partner network;
- maintaining high levels of product quality, performance, and customer satisfaction;
- mitigating the impact of the COVID-19 pandemic on our business; and
- growing our direct-to-consumer business to scale.
Even if we do sustain profitability, we may be unable to achieve positive cash flows from operations in the future.

Our results of operations may fluctuate from quarter to quarter, which could make our future performance difficult to predict and could cause our results of operations for a particular period to fall below expectations, resulting in a decline in the price of our common stock.

Our quarterly results of operations are difficult to predict and may fluctuate significantly in the future. We have experienced seasonal and quarterly fluctuations in the past and expect these fluctuations to continue. However, given that we are operating in a rapidly changing industry, those fluctuations may be masked by our recent growth rates and thus may not be readily apparent from our historical results of operations. As such, our past quarterly results of operations may not be good indicators of likely future performance.

In addition to the other risks described in this "Risk Factors" section, as well as the factors discussed in the "Management’s Discussion and Analysis of Financial Condition and Results of Operations" section, the following factors, among others, could cause our results of operations and key performance indicators to fluctuate:

- the expiration, reduction or initiation of any governmental tax rebates, tax exemptions, or incentives;
- significant fluctuations in customer demand for our solar service offerings or fluctuations in the geographic concentration of installations of solar energy systems;
- changes in financial markets, which could restrict our ability to access available and cost-effective financing sources;
- seasonal, environmental or weather conditions that impact sales, energy production, and system installations;
- the amount and timing of operating expenses related to the maintenance and expansion of our business, operations and infrastructure;
- announcements by us or our competitors of new products or services, significant acquisitions, strategic partnerships, joint ventures, or capital-raising activities or commitments;
- changes in our pricing policies or terms or those of our competitors, including utilities;
- changes in regulatory policy related to solar energy generation;
- the loss of one or more key partners or the failure of key partners to perform as anticipated;
- our failure to successfully integrate the Vivint Solar business;
- actual or anticipated developments in our competitors’ businesses or the competitive landscape;
- actual or anticipated changes in our growth rate;
- general economic, industry and market conditions beyond our control, such as the ongoing COVID-19 pandemic, inflationary pressures, other macroeconomic factors, and associated economic downturn; and
- changes to our cancellation rate.
In the past, we have experienced seasonal fluctuations in sales and installations, particularly in the fourth quarter. This has been the result of decreased sales through the holiday season and weather-related installation delays. Our incentives revenue is also highly variable due to associated revenue recognition rules, as discussed in greater detail in Management's Discussion and Analysis of Financial Condition and Results of Operations. Seasonal and other factors may also contribute to variability in our sales of solar energy systems and product sales. For these or other reasons, the results of any prior quarterly or annual periods should not be relied upon as indications of our future performance. In addition, our actual revenue or key operating metrics in one or more future quarters may fall short of the expectations of investors and financial analysts. If that occurs, the trading price of our common stock could decline and you could lose part or all of your investment.

Our actual financial results may differ materially from any guidance we may publish from time to time.

We have in the past provided, and may from time to time provide, guidance regarding our future performance that represents our management’s estimates as of the date such guidance is provided. Any such guidance is based upon a number of assumptions with respect to future business decisions (some of which may change) and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic, and competitive uncertainties and contingencies (many of which are beyond our control, including those related to the ongoing COVID-19 pandemic, inflationary pressures, other macroeconomic factors, and associated economic downturn). Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions that inform such guidance will not materialize or will vary significantly from actual results. Our ability to meet deployment volume, cost, net present value or any other forward-looking guidance is impacted by a number of factors including, but not limited to, the number of our solar energy systems purchased outright versus the number of our solar energy systems that are subject to long-term Customer Agreements, changes in installation costs, the availability of additional financing on acceptable terms, changes in the retail prices of traditional utility generated electricity, the availability of rebates, tax credits and other incentives, changes in policies and regulations including net metering and interconnection limits or caps, the availability of solar panels and other raw materials, as well as the other risks to our business that are described in this section. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date such guidance is provided. Actual results may vary from such guidance and the variations may be material. Investors should also recognize that the reliability of any forecasted financial data diminishes the farther in the future that the data is forecast. In light of the foregoing, investors should not place undue reliance on our financial guidance, and should carefully consider any guidance we may publish in context.

The requirements of being a public company may strain our resources, divert management’s attention and affect our ability to attract and retain qualified board members and officers.

We are subject to the reporting requirements of the Exchange Act, the listing requirements of the Nasdaq Stock Market and other applicable rules and regulations, including, among other requirements, U.S. laws regarding requirements to disclose efforts to identify the origin and existence of certain “conflict minerals.” Compliance with these rules and regulations has increased our legal and financial compliance costs, made some activities more difficult, time-consuming or costly and increased demand on our systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and results of operations and maintain effective disclosure controls and procedures and internal controls over financial reporting. Maintaining our disclosure controls and procedures and internal controls over financial reporting in accordance with this standard requires significant resources and management oversight. As a result, management’s attention may be diverted from other business concerns, which could harm our business and results of operations. Although we have already hired additional employees to comply with these requirements, we may need to hire more employees in the future, which will increase our costs and expenses.

Risks Related to Taxes and Accounting

Our ability to provide our solar service offerings to customers on an economically viable basis depends in part on our ability to finance these systems with fund investors who seek particular tax and other benefits.

Our solar service offerings have been eligible for federal investment tax credits, U.S. Treasury grants, and other tax benefits. We have relied on, and will continue to rely on, tax equity investment funds, which are financing
structures that monetize a substantial portion of those benefits, in order to finance our solar service offerings. If, for any reason, we are unable to continue to monetize those benefits through these arrangements, we may be unable to provide and maintain our solar service offerings for customers on an economically viable basis.

The availability of this tax-advantaged financing depends upon many factors, including:

- our ability to compete with other solar energy companies for the limited number of potential fund investors, each of which has limited funds and limited appetite for the tax benefits associated with these financings;

- the state of financial and credit markets;

- changes in the legal or tax risks associated with these financings; and

- legislative or regulatory changes or decreases to these incentives.

The federal government currently offers an investment tax credit ("Commercial ITC") under Section 48(a) of the Internal Revenue Code of 1986, as amended (the "Code"), for the installation of certain energy properties, including solar power and storage facilities owned for business purposes. The Commercial ITC was extended and expanded upon by the IRA, which was signed into law by President Biden on August 16, 2022. The IRA also created several ITC "adders" to further incentivize various types of solar and storage facilities.

Our inability to operationalize these tax credits, avail ourselves of IRA benefits in a timely fashion, or ensure the facilities we intend to qualify under the ITC adders satisfy the applicable requirements, could impact our ability to compete, and compromise or eliminate opportunities to financially benefit from these tax credits, which would adversely impact our business. Additional guidance regarding the ITC adders is expected from the U.S. Department of the Treasury ("U.S. Treasury"). This guidance will be necessary in determining whether and to what extent we may benefit from the various ITC adders, and our ability to incorporate it into our business operations, which will be further impacted by the timing of any additional guidance provided by the U.S. Treasury. On February 13, 2023, the U.S. Treasury issued initial guidance regarding the Low-Income Communities Bonus Credit, which stated that the U.S. Treasury and the IRS will not accept applications to use this adder until the third quarter of 2023, or thereafter. The U.S. Treasury also stated that further guidance is forthcoming and will address application procedures, additional criteria, applicable definitions, and other information necessary to submit an application. Without additional clarifying guidance, or changes to the program construct, we are likely to face challenges efficiently monetizing the Low-Income Communities Bonus Credit based on the initial program guidance.

The federal government also currently offers a personal income tax credit under Section 25D of the Code ("Residential Clean Energy Credit"), for the installation of certain solar power facilities owned by residential taxpayers, which is applicable to customers who purchase a solar energy system outright as opposed to entering into a Customer Agreement.

We and our tax equity partners have claimed and expect to continue to claim ITCs with respect to qualifying solar energy projects. However, the application of law and guidance regarding ITC eligibility to the facts of particular solar energy projects is subject to a number of uncertainties, in particular with respect to the new IRA provisions for which U.S. Treasury regulations ("Treasury Regulations") will continue to be forthcoming, and there can be no assurance that the IRS will agree with our approach in the event of an audit. The U.S. Treasury is expected to continue issuing Treasury Regulations and additional guidance with respect to the application of the newly enacted IRA provisions, and the IRS and U.S. Treasury may modify existing guidance, possibly with retroactive effect. Any of the foregoing items could reduce the amount of ITCs available to us and our tax equity partners. In this event, we could be required to indemnify tax equity partners for disallowed ITCs adjust the terms of future tax equity partnerships, or seek alternative sources of funding for solar energy projects, each of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Future reductions in the Commercial ITC and any further legislative reductions or changes to the Commercial ITC may impact the attractiveness of solar energy to certain tax equity investors and could potentially harm our business. Obtaining tax equity funding (and tax equity funding on advantageous terms) also may become more challenging. Additionally, the benefits of the Commercial ITC have historically enhanced our ability to provide
competitive pricing for customers. Reductions in, eliminations of, or expirations of, governmental incentives such as the Residential Clean Energy Credit could reduce the number of customers who choose to purchase our solar energy systems.

Additionally, potential investors must remain satisfied that the structures that we offer make the tax benefits associated with solar energy systems available to these investors, which depends on the investors’ assessment of the tax law, the absence of any unfavorable interpretations of that law and the continued application of existing tax law and interpretations to our funding structures. Changes in existing law or interpretations of existing law by the IRS and/or the courts could reduce the willingness of investors to invest in funds associated with these solar energy systems. Moreover, reductions to the corporate tax rate may reduce the appetite for tax benefits overall, which could reduce the pool of available funds. Accordingly, we cannot provide assurances that this type of financing will continue to be available to us. New investment fund structures or other financing mechanisms may become available, but if we are unable to take advantage of these fund structures and financing mechanisms, we may be at a competitive disadvantage. If, for any reason, we are unable to finance our solar service offerings through tax-advantaged structures or if we are unable to realize or monetize Commercial ITCs or other tax benefits, we may no longer be able to provide our solar service offerings to new customers on an economically viable basis, which would have a material adverse effect on our business, financial condition, and results of operations.

If the IRS makes determinations that the fair market value of our solar energy systems is materially lower than what we have claimed, we may have to pay significant amounts to our fund investors, and our business, financial condition, and prospects may be materially and adversely affected.

We and our fund investors claim the Commercial ITC in amounts based on the fair market value of our solar energy systems. We have obtained independent appraisals to determine the fair market values we report for claiming Commercial ITCs. With respect to Commercial ITCs, the IRS may review the fair market value on audit and determine that the tax credits previously claimed must be reduced. If the fair market value is determined in these circumstances to be less than what we or our tax equity investment funds reported, we may owe our fund investors an amount equal to this difference (including any interest and penalties), plus any costs and expenses associated with a challenge to that valuation. We could also be subject to tax liabilities, including interest and penalties. If the IRS further disagrees now or in the future with the amounts we or our tax equity investment funds reported regarding the fair market value of our solar energy systems, it could have a material adverse effect on our business, financial condition, and prospects.

We have purchased insurance policies insuring us and related parties for additional taxes owed in respect of lost Commercial ITCs, gross-up costs and expenses incurred in defending the types of claims described above. However, these policies only cover certain investment funds and have negotiated exclusions from, and limitations to, coverage and therefore may not cover us for all such lost Commercial ITCs, taxes, costs and expenses.

The IRS is auditing one of our investment funds covered by our 2018 insurance policy in an audit involving a review of the fair market value determination of our solar energy systems. If this audit results in an adverse final determination, we may be subject to an indemnity obligation to our investor, which may result in certain limited out-of-pocket costs and potential increased insurance premiums in the future.

Our business currently depends on the availability of utility rebates, tax credits and other benefits, tax exemptions and exclusions, and other financial incentives on the federal, state, and/or local levels. We may be adversely affected by changes in, and application of these laws or other incentives to us, and the expiration, elimination or reduction of these benefits could adversely impact our business.

Our business depends on government policies that promote and support solar energy and enhance the economic viability of owning solar energy systems. U.S. federal, state and local governmental bodies provide incentives to owners, distributors, installers and manufacturers of solar energy systems to promote solar energy. These incentives include Commercial ITCs and Residential Energy Efficient Property Credit, as discussed above, as well as other tax credits, rebates and solar renewable energy credits (“SRECs”) associated with solar energy generation. Some markets, such as New Jersey and Maryland, currently utilize SRECs. SRECs can be volatile and their value could decrease over time as the supply of SREC-producing solar energy systems installed in a particular
market increases. For example, in New Jersey, because of the substantial supply of solar energy systems installed, the state was on the cusp of reaching the solar carve-out under the state’s Renewable Portfolio Standard. In May 2018, legislation was enacted to expand New Jersey’s solar carve-out to 5.1% of kilowatt hours of electricity sold in the state. In December 2019, the state regulators adopted a transition program to follow the current SREC program that will be based on a fixed price SREC model and which is anticipated to be available to replace the current SREC program. We rely on these incentives to lower our cost of capital and to attract investors, all of which enable us to lower the price we charge customers for our solar service offerings. These incentives have had a significant impact on the development of solar energy but they could change at any time, especially in light of the recent change in administration, as further described below. These incentives may also expire on a particular date, and when the allocated funding is exhausted, or be reduced, terminated or repealed without notice. The financial value of certain incentives may also decrease over time.

In December 2017, significant federal tax legislation was enacted, including a change to the corporate tax rate (the “Tax Act”). As part of the Tax Act, the current corporate income tax rate was reduced, and there were other changes including limiting or eliminating various other deductions, credits and tax preferences. This reduction in the corporate income tax rate may have reduced appetite for the Commercial ITC and depreciation benefits available with respect to solar facilities. The IRA implemented a corporate alternative minimum tax of 15% of financial statement income (subject to certain adjustments) for companies that report over $1 billion in profits to shareholders; similar to existing law, business credits (including Commercial ITCs) are limited to 75% of income in excess of $25,000 (with no limit against the first $25,000). We cannot predict whether and to what extent the U.S. corporate income tax rate will change under the Biden administration. The U.S. Congress is constantly considering changes to the tax code. Further limitations on, or elimination of, the tax benefits that support the financing of solar energy under current U.S. law could significantly impact our ability to raise tax equity investment funds or impact the terms thereof, including the amount of cash distributable to our investors. Similarly, any unfavorable interpretations of tax law by the IRS and/or the courts with respect to our financing structures could reduce the willingness of investors to invest in our funds associated with any such structure.

Any effort to overturn federal and state laws, regulations or policies that are supportive of solar energy generation or that remove costs or other limitations on other types of energy generation that compete with solar energy projects could materially and adversely affect our business.

Our business model also relies on multiple tax exemptions offered at the state and local levels. For example, some states have property tax exemptions that exempt the value of solar energy systems in determining values for calculation of local and state real and personal property taxes. State and local tax exemptions can expire, can be changed by state legislatures, or their application to us can be challenged by regulators, tax administrators, or court rulings, and such changes could adversely impact our business and the profitability of our offerings in certain markets.

We may be subject to adverse California property tax consequences.

The State of California provides an exclusion (the “Solar Exclusion”) from the assessment of California property taxes for qualifying “active solar energy systems” installed as fixtures before January 1, 2027, provided such systems are locally rather than centrally assessed (“Eligible Property”). However, the Solar Exclusion is not a
permanent exclusion from the assessment of property tax. Once a change in ownership of the Eligible Property occurs, the Eligible Property may be subject to reassessment and California property taxes may become due.

Vivint Solar, through certain of its subsidiaries, owns solar energy systems that constitute Eligible Property (the “California PV Systems”). To the extent Vivint Solar or its subsidiaries are considered the tax owners of the California PV Systems for purposes of the California Revenue and Tax Code, our acquisition of Vivint Solar may constitute a change of control of the California PV Systems, triggering the loss of the Solar Exclusion and the imposition of California property taxes, which could adversely affect our business.

If we are unable to maintain effective disclosure controls and internal controls over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and, as a result, the value of our common stock may be materially and adversely affected.

We are required, pursuant to the Exchange Act, to furnish a report by management on, among other things, the effectiveness of our internal controls over financial reporting. This assessment includes disclosure of any material weaknesses, if any, identified by our management in our internal controls over financial reporting. We are continuing to develop and refine our disclosure controls and improve our internal controls over financial reporting. We have expended, and anticipate that we will continue to expend, significant resources in order to maintain and continuously look for ways to enhance existing effective disclosure controls and procedures and internal controls over financial reporting. Our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business, which presents additional complexities relating to the design and implementation of our disclosure controls and internal control over financial reporting. In addition, we or our independent accounting firm may identify weaknesses and deficiencies that we may not otherwise identify in a timely manner in the future. If we are not able to complete the work required under Section 404 of the Sarbanes-Oxley Act on a timely basis for future fiscal years, our annual report on Form 10-K may be delayed or deficient. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

We cannot guarantee that our internal controls over financial reporting will prevent or detect all errors and fraud. The risk of errors is increased in light of the complexity of our business and investment funds. For example, we must deal with significant complexity in accounting for our fund structures and the resulting allocation of net income (loss) between our stockholders and noncontrolling interests under the hypothetical liquidation at book value (“HLBV”) method as well as the income tax consequences of these fund structures. As we enter into additional investment funds, which may have contractual provisions different from those of our existing funds, the analysis as to whether we consolidate these funds, the calculation under the HLBV method, and the analysis of the tax impact could become increasingly complicated. This additional complexity could require us to hire additional resources and increase the chance that we experience errors in the future.

If we are unable to assert that our internal controls over financial reporting is effective, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our common stock to decline. In addition, we could become subject to investigations by Nasdaq, the SEC or other regulatory authorities, which could require additional management attention and which could adversely affect our business.

Our reported financial results may be affected, and comparability of our financial results with other companies in our industry may be impacted, by changes in the accounting principles generally accepted in the United States.

Generally accepted accounting principles in the United States are subject to change and interpretation by the Financial Accounting Standards Board (“FASB”), the SEC, and various bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results and on the financial results of other companies in our industry, and may even affect the reporting of transactions completed before the announcement or effectiveness of a change. Other companies in our industry may be affected differently by the adoption of new accounting standards, including timing of the adoption of new accounting standards, adversely affecting the comparability of financial statements.
Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2022, we had U.S. federal and state net operating loss carryforwards (“NOLs”) of approximately $720.7 million and $2.5 billion, respectively, which begin expiring in varying amounts in 2028 and 2024, respectively, if unused. Our U.S. federal and certain state NOLs generated in tax years beginning after December 31, 2017 total approximately $1.4 billion and $296.8 million, respectively, have indefinite carryover periods, and do not expire. Under Sections 382 and 383 of the Code, if a corporation undergoes an “ownership change,” the corporation’s ability to use its pre-change NOLs and other pre-change tax assets, such as tax credits, to offset its post change income and taxes may be limited. In general, an “ownership change” occurs if there is a cumulative change in our ownership by “5% stockholders” that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. Additionally, states may impose other limitations on the use of NOLs and tax credit carryforwards. For example, California has recently imposed other limitations on the use of NOLs and limited the use of certain tax credits for taxable years beginning in 2020 through 2022. Any such limitations on our ability to use our NOLs and other tax assets could adversely impact our business, financial condition, and results of operations. We have performed an analysis to determine whether an ownership change under Section 382 of the Code had occurred and determined no ownership changes were identified as of December 31, 2022. Vivint Solar, Inc. underwent an ownership change as of October 8, 2020.

We may be required to record an impairment expense on our goodwill or intangible assets.

We are required under generally accepted accounting principles to test goodwill for impairment at least annually or when events or changes in circumstances indicate that the carrying amount may be impaired, and to review our intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Factors that can lead to impairment of goodwill and intangible assets include significant adverse changes in the business climate and actual or projected operating results, declines in the financial condition of our business and sustained decrease in our stock price. Since our annual impairment test of goodwill for the fiscal year ended December 31, 2022, we have not identified any qualitative factors that would require a quantitative goodwill impairment analysis. However, if we identify any factors that could indicate an impairment, including a sustained decrease in our stock price, we may be required to record charges to earnings if our goodwill becomes impaired.

Risks Related to Ownership of Our Common Stock

Our executive officers, directors and principal stockholders continue to have substantial control over us, which will limit your ability to influence the outcome of important matters, including a change in control.

Our executive officers, directors and each of our stockholders who beneficially own 5% or more of our outstanding common stock and their affiliates, in the aggregate, beneficially own approximately 31.2% of the outstanding shares of our common stock, based on the number of shares outstanding as of December 31, 2022. As a result, these stockholders, if acting together, will be able to influence or control matters requiring approval by our stockholders, including the election of directors and the approval of mergers, acquisitions or other extraordinary transactions. They may also have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. This concentrated control may have the effect of delaying or preventing a change in control of our company, could deprive our stockholders of an opportunity to receive a premium for their capital stock and might ultimately affect the market price of our common stock.

The market price of our common stock has been and may continue to be volatile, and you could lose all or part of your investment in our common stock.

The trading price of our common stock has been volatile since our initial public offering, and is likely to continue to be volatile. Factors that could cause fluctuations in the market price of our common stock include the following:

- price and volume fluctuations in the overall stock market from time to time;
• volatility in the market prices and trading volumes of companies in our industry or companies that investors consider comparable;

• changes in operating performance and stock market valuations of other companies generally, or those in our industry in particular;

• sales of shares of our common stock by us or our stockholders;

• failure of securities analysts to maintain coverage of us, changes in financial estimates by securities analysts who follow us, or our failure to meet these estimates or the expectations of investors;

• the financial projections we may provide to the public, any changes in those projections or our failure to meet those projections;

• announcements by us or our competitors of new products or services;

• the public’s reaction to our press releases, other public announcements and filings with the SEC;

• rumors and market speculation involving us or other companies in our industry;

• actual or anticipated changes in our results of operations;

• the continued adverse impact of the COVID-19 pandemic;

• changes in tax and other incentives that we rely upon in order to raise tax equity investment funds;

• actual or perceived privacy or data security incidents;

• our ability to protect our intellectual property and other proprietary rights;

• changes in the regulatory environment and utility policies and pricing, including those that could reduce any savings we are able to offer to customers;

• actual or anticipated developments in our business, our competitors’ businesses or the competitive landscape generally;

• litigation involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;

• announced or completed acquisitions of businesses or technologies by us or our competitors;

• new laws or regulations or new interpretations of existing laws or regulations applicable to our business;

• changes in accounting standards, policies, guidelines, interpretations or principles;

• major catastrophic events or civil unrest;
negative publicity, including accurate or inaccurate commentary or reports regarding us, our products, our sales professionals or other personnel, or other third parties affiliated with us, on social media platforms, blogs, and other websites;

any significant change in our management; and

general economic conditions and slow or negative growth of our markets.

Further, the stock markets have experienced price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. In addition, the stock prices of many renewable energy companies have experienced fluctuations that have often been unrelated to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, government shutdowns, interest rate changes, or international currency fluctuations, has, and may continue to, cause the trading price of the notes and our common stock to decline. In the past, following periods of volatility in the overall market and the market price of a particular company’s securities, securities class action litigation has often been instituted against these companies. We are party to litigation that could result in substantial costs and a diversion of our management’s attention and resources.

Sales of a substantial number of shares of our common stock in the public market, including by our existing stockholders, could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market, or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that these sales and others may have on the prevailing market price of our common stock.

In addition, certain of our stockholders, including SK E&S Co., Ltd. and other affiliated companies as well as certain stockholders who received shares as a result of our acquisition of Vivint Solar, have registration rights that would require us to register shares of our capital stock owned by them for public sale in the United States. We have also filed a registration statement to register shares of our common stock reserved for future issuance under our equity compensation plans, including shares underlying equity awards assumed in connection with our acquisition of Vivint Solar. Subject to the satisfaction of applicable exercise periods and applicable volume and restrictions that apply to affiliates, the shares of our common stock issued upon exercise of outstanding options will become available for immediate resale in the public market upon issuance.

Future sales of our common stock may make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. These sales also could cause the market price of our common stock to decline and make it more difficult for you to sell shares of our common stock.

Anti-takeover provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

Our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law contain provisions that could have the effect of rendering more difficult, delaying, or preventing an acquisition deemed undesirable by our board of directors and therefore depress the trading price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws include provisions:

• creating a classified board of directors whose members serve staggered three-year terms;

• authorizing “blank check” preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock;
• limiting the liability of, and providing indemnification to, our directors and officers;

• limiting the ability of our stockholders to call and bring business before special meetings;

• requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our board of directors; and

• controlling the procedures for the conduct and scheduling of board of directors and stockholder meetings.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation law, which prevents certain stockholders holding more than 15% of our outstanding capital stock from engaging in certain business combinations without approval of the holders of at least two-thirds of our outstanding capital stock not held by such stockholder. Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying or preventing a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our common stock.

Provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws limit the ability of our stockholders to call special meetings and prohibit stockholder action by written consent.

Our amended and restated certificate of incorporation provides that our stockholders may not take action by written consent. Instead, any such actions must be taken at an annual or special meeting of our stockholders. As a result, our stockholders are not able to take any action without first holding a meeting of our stockholders called in accordance with the provisions of our amended and restated bylaws, including advance notice procedures set forth in our amended and restated bylaws. Our amended and restated bylaws further provide that special meetings of our stockholders may be called only by a majority of our board of directors, the chairman of our board of directors, our Chief Executive Officer or our President. As a result, our stockholders are not allowed to call a special meeting. These provisions may delay the ability of our stockholders to force consideration of a stockholder proposal, including a proposal to remove directors.

Provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws could preclude our stockholders from bringing matters before meetings of stockholders and delay changes in our board of directors.

Our amended and restated bylaws provide advance notice procedures for stockholders seeking to bring business before, or nominate candidates for election as directors at, our annual or special meetings of stockholders. In addition, our amended and restated certificate of incorporation provides that stockholders may remove directors only for cause. Any amendment of these provisions in our amended and restated bylaws or amended and restated certificate of incorporation would require approval by holders of at least 66 2/3% of our then outstanding capital stock. These provisions could preclude our stockholders from bringing matters before annual or special meetings of stockholders and delay changes in our board of directors.

Our amended and restated bylaws provide that a state or federal court located within the State of Delaware will be the sole and exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.
Our amended and restated bylaws provide that, unless we consent to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or other employees to us or to our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law or (iv) any action asserting a claim governed by the internal affairs doctrine shall be a state or federal court located within the state of Delaware, in all cases subject to the court's having personal jurisdiction over the indispensable parties names as defendants. The choice of forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. In addition, our amended and restated bylaws also provide that, unless we consent to the selection of an alternative forum, the fullest extent permitted by law, the federal district courts of the United States of America shall be the sole and exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. If a court were to find the choice of forum provisions contained in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, results of operations and financial condition.

If securities or industry analysts cease publishing research or reports about us, our business, our market or our competitors, or if they adversely change their recommendations regarding our common stock, the market price of our common stock and trading volume could decline.

The market for our common stock is influenced by the research and reports that securities or industry analysts publish about us, our business, our market or our competitors. If any of the analysts who cover us adversely change their recommendations regarding our common stock, or provide more favorable recommendations about our competitors, the market price of our common stock would likely decline. If any of the analysts who cover us cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the market price of our common stock and trading volume to decline.

We do not expect to declare any dividends in the foreseeable future, so investors may need to rely on sales of our common stock after price appreciation, which may never occur or only occur at certain times, as the only way to realize any future gains on their investment.

We do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. In addition, our credit agreements contain restrictions on payments of cash dividends. Consequently, investors may need to rely on sales of our common stock after price appreciation, which may never occur or only occur at certain times, as the only way to realize any future gains on their investment. Investors seeking cash dividends should not purchase shares of our common stock.

Additional issuances of our capital stock or equity-linked securities could result in dilution to our stockholders.

We may issue additional equity securities to raise capital, make acquisitions or for a variety of other purposes. For example, in connection with the acquisition of Vivint Solar, we issued 0.55 shares of our common stock for each share of Vivint Solar’s common stock owned prior to the acquisition, which resulted in dilution to our stockholders. Additional issuances of our capital stock may be made pursuant to the exercise or conversion of new or existing convertible debt securities (including the Notes), warrants, stock options or other equity incentive awards to new and existing service providers. Any such issuances will result in dilution to existing holders of our stock. We also rely on equity-based compensation as an important tool in recruiting and retaining employees. The amount of dilution due to equity-based compensation of our employees and other additional issuances of our common stock or securities convertible into or exchangeable or exercisable for our common stock could be substantial, and the market price of our common stock could decline.

The Capped Call transactions may negatively affect the value of our common stock.

In connection with the issuance of the Notes, we entered into the Capped Call transactions with the option counterparties. The capped call transactions are expected generally to reduce the potential dilution to our common stock.
stock upon any conversion of Notes and/or offset any cash payments we are required to make in excess of the principal amount of converted Notes, as the case may be, with such reduction and/or offset subject to a cap.

The option counterparties or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions prior to the maturity of the Notes (and are likely to do so during the observation period for conversions of Notes following November 1, 2025 or following any repurchase of Notes by us). This activity could also cause or avoid an increase or a decrease in the market price of our common stock.

The potential effect, if any, of these transactions and activities on the market price of our common stock will depend in part on market conditions and cannot be ascertained at this time.

Item 1B. Unresolved Staff Comments.

Not applicable.
Item 2. Properties.

Our corporate headquarters and executive offices are located in San Francisco, California, where we lease approximately 44,000 square feet of office space. We also maintain 104 other locations, consisting primarily of branch offices, warehouses, sales offices and design centers in 19 states.

We lease all of our facilities and we do not own any real property. We believe that our current facilities are adequate to meet our ongoing needs. If we require additional space, we believe that we will be able to obtain additional facilities on commercially reasonable terms.

Item 3. Legal Proceedings.

See Note 19, Commitments and Contingencies, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Item 4. Mine Safety Disclosures.

Not applicable.
PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information

Our common stock began trading on the Nasdaq Global Select Market under the symbol “RUN” on August 5, 2015.

Holders of Record

As of February 17, 2023, there were approximately 293 holders of record of common stock. Certain shares are held in “street” name and, accordingly, the number of beneficial owners of such shares is not known or included in the foregoing number.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not expect to pay any dividends on our capital stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions and other factors that our board of directors may deem relevant. In addition, our credit agreements contain restrictions on payments of cash dividends.

Unregistered Sales of Equity Securities

During the year ended December 31, 2021, we issued warrants exercisable for up to 846,943 shares of our common stock to certain strategic partners, calculated using the closing stock price for the respective stock grant’s quarter of issuance. The shares underlying the warrants will vest upon certain time- and performance-based criteria as set forth in the warrants. The exercise price of the warrants is $0.01 per share, and 346,269 and 69,309 warrants were exercised during the years ended December 31, 2022 and 2021, respectively.

The warrants were issued and sold pursuant to an exemption from the registration requirements of Section 5 of the Securities Act, as they did not involve a public offering under Section 4(a)(2) and were issued as restricted securities pursuant to Rule 144 of the Securities Act.

Stock Price Performance Graph

The following stock performance graph compares our total stock return with the total return for (i) the Nasdaq Composite Index and the (ii) the Invesco Solar ETF, which represents a peer group of solar companies, for the period from December 31, 2017 through December 31, 2022. The figures represented assume an investment of $100 in our common stock at the closing price of $5.90 on December 29, 2017 and in the Nasdaq Composite Index and the Invesco Solar ETF on December 31, 2017 including the reinvestment of dividends into shares of common stock. The comparisons in the table are required by the SEC, and are not intended to forecast or be indicative of possible future performance of our common stock. This graph shall not be deemed “soliciting material” or be deemed “filed” for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities under that section, and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.
Item 6. [Reserved].
Not applicable.
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such differences include those identified below and those discussed in the section titled “Risk Factors” included elsewhere in this Annual Report on Form 10-K.

We provide clean, solar energy to customers at a significant savings compared to traditional utility energy. We have been selling solar energy to residential customers through a variety of offerings since we were founded in 2007. We, either directly or through one of our solar partners, install a solar energy system on a customer’s home and either sell the system to the customer or, as is more often the case, sell the energy generated by the system to the customer pursuant to a lease or PPA with no or low upfront costs. We refer to these leases and PPAs as “Customer Agreements.” Following installation, a system is interconnected to the local utility grid. The home’s energy usage is provided by the solar energy system, with any additional energy needs provided by the local utility. Any excess solar energy, including amounts in excess of battery storage, that is not immediately used by the customers is exported to the utility grid using a bi-directional utility net meter, and the customer generally receives a credit for the excess energy from their utility to offset future usage of utility-generated energy.

We offer our solar service offerings both directly to the customer and through our solar partners, which include sales and installation partners, and strategic partners, which include retail partners. In addition, we sell solar energy systems directly to customers for cash. We also sell solar energy panels and other products (such as racking) to resellers. As of December 31, 2022, we provided our solar services to customers and sold solar energy panels and other products to resellers throughout the United States. More than 40% of our cumulative systems deployed are in California.

We compete mainly with traditional utilities. In the markets we serve, our strategy is to price the energy we sell below prevailing local retail electricity rates. As a result, the price our customers pay under our solar service offerings varies depending on the state where the customer lives, the local traditional utility that otherwise provides electricity to the customer, as well as the prices other solar energy companies charge in that region. Even within the same neighborhood, site-specific characteristics drive meaningful variability in the revenue and cost profiles of each home. Using our proprietary technology, we target homes with advantageous revenue and cost characteristics, which means we are often able to offer pricing that allows customers to save more on their energy bill while maintaining our ability to meet our targeted returns. For example, with the insights provided by our technology, we can offer competitive pricing to customers with homes that have favorable characteristics, such as roofs that allow for easy installation, high electricity consumption, or low shading, effectively passing through the cost savings we are able to achieve on these installations to the customer.

Our ability to offer Customer Agreements depends in part on our ability to finance the purchase and installation of the solar energy systems by monetizing the resulting customer cash flows and related commercial investment tax credits (“Commercial ITCs”), accelerated tax depreciation and other incentives from governments and local utilities. We monetize these incentives under tax equity investment funds, which are generally structured as non-recourse project financings. Since inception we have raised numerous tax equity investment funds to finance the installation of solar energy systems. From time to time, we may repurchase investors’ interests in our tax equity investment funds after the recapture period of the relevant tax incentives. We intend to establish additional investment funds and may also use debt, equity and other financing strategies to fund our growth.

In addition, completing the sale and installation of a solar energy system requires many different steps including a site audit, completion of designs, permitting, installation, electrical sign-off and interconnection. Customers may cancel their Customer Agreements with us, subject to certain conditions, during this process until commencement of installation. Customer cancellation rates can change over time and vary between markets.

The Opportunity of Home Electrification and Storage Solutions to Build a Clean, Resilient Grid

The United States is on the precipice of a once-in-a-generation transformation of our energy system. The decarbonization of the American economy will require powering our energy supply, including our homes, appliances and automobiles, with clean energy. Sunrun’s next goal and chapter of growth is to be the go-to company for clean
energy and storage solutions, and reliable home electrification, providing our customers with affordable renewable energy throughout their homes and our communities with a cleaner, more resilient grid. We believe Sunrun will be uniquely positioned as the leading national provider of solar and storage energy subscription offerings, making our clean energy services more accessible to even more communities.

We intend to pursue these opportunities on a variety of fronts. For instance, in May 2020, we announced a partnership with Ford Motor Company to be the preferred installer for Ford’s Charge Station Pro and Intelligent Backup Power System, debuting with the all-electric F-150 Lightning. Under the partnership, we co-developed Ford’s Home Integration System, including the bi-directional inverter, which enables the F-150 Lightning to serve as a reliable home backup energy source by powering the home during an outage event. Through this partnership, customers in participating markets have the opportunity to install a solar and battery system on their home, enabling them to power their household with clean, affordable energy and charge their truck with the power of the sun.

We also continue to pursue the development of our grid services business, creating virtual power plants that lead to a cleaner, more resilient grid. In collaboration with grid managers, we can deploy our battery systems where they will add the most value for utilities, the grid, and customers. We are actively delivering demand response and capacity services to meet operational needs in multiple geographies, and partnering with grid managers to build a more resilient electricity system that integrates the new energy technologies customers want.

We believe the electrification of U.S. households with renewable energy, and the accompanying development of an inter-connected, smart grid will provide a number of market opportunities beyond our traditional solar and battery storage offerings, including EV chargers, battery retrofits, re-powered or expanding systems, home energy management services, and other home electrification products. Additionally, we believe our omni-channel model and geographic reach provides us with the capabilities to execute on these opportunities in a variety of markets.

We also believe that energy storage offerings will play an increasingly important role and be a key part of the customer value proposition. Robust storage offerings will enable a variety of grid services and grid reliability benefits. They will also play a crucial role in markets like California where time-of-use and net-billing policies mean that optimizing when power is consumed during the day is key to providing the most customer value.

In sum, we believe the electrification of the U.S. economy with renewable energy presents an unprecedented economic opportunity, as well as our country’s best path to achieving net zero emissions by 2050. Through these electrification, storage, and grid services opportunities, we aim to be the consumer brand synonymous with repowering our customers’ homes with renewable energy and providing a pathway to a cleaner, healthier future.

Macroeconomic Environment

Our business and financial performance also depend on worldwide economic conditions. We face global macroeconomic challenges, particularly in light of increases and volatility in interest rates, uncertainty in markets, inflationary trends, navigating complex and evolving regulatory and tax frameworks, and the dynamics of the global trade environment. Throughout fiscal 2022, we observed market uncertainty, increasing inflationary pressures, supply constraints and the ongoing and rippling effects from the COVID-19 pandemic. These market dynamics, which we expect will continue into the foreseeable future, have and may continue to impact our business and financial results, including costs and revenues.

Investment Funds

Our Customer Agreements provide for recurring customer payments, typically over 20 or 25 years, and the related solar energy systems are generally eligible for Commercial ITCs, accelerated tax depreciation and other government or utility incentives. Our financing strategy is to monetize these benefits at a low weighted average cost of capital. This low cost of capital enables us to offer attractive pricing to our customers for the energy generated by the solar energy system on their homes. Historically, we have monetized a portion of the value created by our Customer Agreements and the related solar energy systems through investment funds. These assets are attractive to fund investors due to the long-term, recurring nature of the cash flows generated by our Customer Agreements, the high credit scores of our customers, the fact that energy is a non-discretionary good and our low loss rates. In addition, fund investors can receive attractive after-tax returns from our investment funds due to their ability to utilize
Commercial ITCs, accelerated depreciation and certain government or utility incentives associated with the funds’ ownership of solar energy systems.

As of December 31, 2022, we had 64 active investment funds, which are described below. We have established different types of investment funds to implement our asset monetization strategy. Depending on the nature of the investment fund, cash may be contributed to the investment fund by the investor upfront or in stages based on milestones associated with the design, construction or interconnection status of the solar energy systems. The cash contributed by the fund investor is used by the investment fund to purchase solar energy systems. The investment funds either own or enter into a master lease with a Sunrun subsidiary for the solar energy systems, Customer Agreements and associated incentives. We receive on-going cash distributions from the investment funds representing a portion of the monthly customer payments received. We use the upfront cash, as well as on-going distributions to cover our costs associated with designing, purchasing and installing the solar energy systems. In addition, we also use debt, equity and other financing strategies to fund our operations. The allocation of the economic benefits between us and the fund investor and the corresponding accounting treatment varies depending on the structure of the investment fund.

We currently utilize three legal structures in our investment funds, which we refer to as: (i) pass-through financing obligations, (ii) partnership flips and (iii) joint venture ("JV") inverted leases. We reflect pass-through financing obligations on our consolidated balance sheet as a pass-through financing obligation. We record the investor’s interest in partnership flips or JV inverted leases (which we define collectively as “consolidated joint ventures”) as noncontrolling interests or redeemable noncontrolling interests. These consolidated joint ventures are usually redeemable at our option and, in certain cases, at the investor’s option. If redemption is at our option or the consolidated joint ventures are not redeemable, we record the investor’s interest as a noncontrolling interest and account for the interest using the hypothetical liquidation at book value ("HLBV") method. If the investor has the option to put their interest to us, we record the investor’s interest as a redeemable noncontrolling interest at the greater of the HLBV and the redemption value.

The table below provides an overview of our current investment funds (dollars in millions):

<table>
<thead>
<tr>
<th>Consolidation</th>
<th>Pass-Through Financing Obligations</th>
<th>Partnership Flip</th>
<th>JV Inverted Lease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance sheet classification</td>
<td>Owner entity consolidated, tenant entity not consolidated</td>
<td>Single entity, consolidated</td>
<td>Owner and tenant entities consolidated</td>
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<tr>
<td>Revenue from Commercial ITCs</td>
<td>Recognized on the PTO date</td>
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<td>None</td>
</tr>
<tr>
<td>Method of calculating investor interest</td>
<td>Effective interest rate method</td>
<td>Greater of HLBV or redemption value</td>
<td>Greater of HLBV or redemption value</td>
</tr>
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<td>Liability balance as of December 31, 2022</td>
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<tr>
<td>Noncontrolling interest balance (redeemable or otherwise) as of December 31, 2022</td>
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<td>$5.5</td>
</tr>
</tbody>
</table>

For further information regarding our investment funds, including the associated risks, see Item 1A. Risk Factors—“Our ability to provide our solar service offerings to customers on an economically viable basis depends in part on our ability to finance these systems with fund investors who seek particular tax and other benefits.,” Note 13, Pass-Through Financing Obligations, Note 14, VIE Arrangements and Note 15, Redeemable Noncontrolling Interests to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K.
Pass-through Financing Obligations

Pass-through Financing Obligations. In this investment fund structure, we and the fund investor each utilize separate entities to facilitate the pass-through of the Commercial ITC or U.S. Treasury grants to the fund investors. We contribute solar energy systems to an “owner” entity in exchange for interests in the owner entity, and the fund investors contribute cash to a “tenant” entity in exchange for interests in the tenant entity.

Under our pass-through financing obligation structure, in accordance with the provisions of FASB, Accounting Standards Codification Topic 810 (“ASC 810”) Consolidation, we have determined that we are the primary beneficiary of the owner entity, and accordingly, we consolidate that entity. We have also determined that we are not the primary beneficiary of the tenant entity, and accordingly, we do not consolidate that entity.

In this investment fund structure, the investors make a series of large up-front payments as well as, in some instances, subsequent smaller quarterly lease payments through their respective tenant entity to the corresponding owner entity in exchange for the assignment of cash flows from Customer Agreements and certain other benefits associated with the Customer Agreements and related solar energy systems. We account for the payments from investors as borrowings by recording the proceeds received as financing obligations. The financing obligation is reduced over a period of approximately 22 years, or over 7 years in the case of one fund, by customer payments under the Customer Agreements; and proceeds from the contracted resale of SRECs as they are received by the investor. In addition, funds paid for the Commercial ITC value upfront are initially recorded as a refund liability and recognized as revenue as the associated solar system reaches permission to operate (“PTO”).

We account for these investment funds in our consolidated financial statements as if we have not assigned the Customer Agreement to the investor, and we record on our consolidated financial statements activities arising from the Customer Agreements and any related Commercial ITCs monetized as part of the upfront payments received from the investor and SREC sales. The interest charge on our pass-through financing obligations is imputed at the inception of the fund based on the effective interest rate in the arrangement giving rise to the obligation and is updated prospectively as appropriate.

In certain arrangements, we agree to defer a portion of the up-front payments by arranging a loan between one of our indirectly wholly owned subsidiaries to a subsidiary of the investor’s tenant entity.

Consolidated Joint Ventures

Partnership Flips. Under partnership flip structures, we and our fund investors contribute cash into a partnership entity. The partnership uses the cash to acquire solar energy systems developed by us with signed Customer Agreements. Each fund investor receives a rate of return, typically on an after-tax basis, which varies by investment fund. Prior to the fund investor receiving its contractual rate of return or for a time period specified in the contractual arrangements, the fund investor receives a significant portion of the value attributable to customer payments, a majority of the accelerated tax depreciation and substantially all of the Commercial ITCs. After the fund investor receives its contractual rate of return or after the specified time period, we receive substantially all of the value attributable to the remaining customer payments and SREC sales.

Included within the Partnership Flips is the project equity financing we entered into in December 2016. We pooled and transferred our interests in certain financing funds into a special purpose entity (“SPE”) with a new investor. We did not recognize a gain or loss on the transfer of its interests in the financing funds and continue to consolidate the financing funds. The SPE’s assets and cash flows are not available to our other creditors, and the investor has no recourse to our other assets.

Under our partnership flip structures, we have determined that we control the partnership entity which is a variable interest entity (“VIE”), and accordingly we consolidate the entity and record the investor’s interest as either noncontrolling interests or redeemable noncontrolling interests in our consolidated balance sheets.
**Inverted Leases.** Under our inverted lease structure, we and the fund investor set up a multi-tiered investment vehicle that is comprised of two partnership entities which facilitate the pass through of the tax benefits to the fund investors. In this structure we contribute solar energy systems to an "owner" partnership entity in exchange for interests in the owner partnership and the fund investors contribute cash to a "tenant" partnership in exchange for interests in the owner partnership. The owner partnership uses the cash contributions received from the tenant partnership to purchase systems from us and/or fund installation of such systems. Under our existing JV inverted lease structure, a substantial portion of the value generated by the solar energy systems is provided to the fund investor for a specified period of time, which is generally based upon the period of time corresponding to the expiry of the recapture period associated with the Commercial ITCs. After that point in time, we receive substantially all of the value attributable to the long-term recurring customer payments and the other incentives. Generally, under the terms of each agreement, the investors’ contributions include the value of Commercial ITCs earned or grants to be received by the fund investor. Any other proceeds are allocated on a pro rata basis to the fund investor and us in accordance with their ownership percentages. Since Sunrun has the power to control both the owner and tenant entities, both entities are included in our consolidated financial statements.

We also have one JV inverted lease fund whereby we have a pro rata interest in the entity and we account for the noncontrolling interest’s share of income on a pro rata basis. Accordingly, the noncontrolling interest of this fund is carried on our balance sheet at the cumulative amount of capital contributions, reduced by cumulative distributions paid to the investor, as well as the pro rata share of their income. Under our JV inverted lease structure, we have determined that we control each VIE, and accordingly we consolidate the entity and record investor’s interest as a noncontrolling interest or redeemable noncontrolling interest.

For all of our partnership flips and JV inverted leases, the redeemable noncontrolling interest is carried on our balance sheet at the greater of the redemption value or the amount calculated under the HLBV method. The HLBV method estimates the amount that, if the fund’s assets were hypothetically sold at their book value, the investor would be entitled to receive according to the liquidation waterfall in the partnership agreement.

**Key Operating Metrics**

The following operating metrics are used by management to evaluate the performance of the business. Management believes these metrics provide investors with helpful information to determine the economic performance of the business activities in a period that would otherwise not be observable from historic GAAP measures. We regularly review a number of metrics, including the following key operating metrics, to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. Some of our key operating metrics are estimates that are based on our management’s beliefs and assumptions and on information currently available to management. Although we believe that we have a reasonable basis for each of these estimates, we caution you that these estimates are based on a combination of assumptions that may prove to be inaccurate over time. Any inaccuracies could be material to our actual results when compared to our calculations. Please see the section titled “Risk Factors” in this Annual Report on Form 10-K for more information. Furthermore, other companies may calculate these metrics differently than we do now or in the future, which would reduce their usefulness as a comparative measure.

- **Networked Solar Energy Capacity** represents the aggregate megawatt production capacity of our solar energy systems, whether sold directly to customers or subject to executed Customer Agreements (i) for which we have confirmation that the systems are installed on the roof, subject to final inspection; (ii) in the case of certain system installations by our partners, for which we have accrued at least 80% of the expected project cost (inclusive of acquisitions of installed systems), or (iii) for multi-family and any other systems that have reached NTP, measured on the percentage of the project that has been completed based on expected project cost. Systems that have met these criteria are considered to be deployed. We believe it is helpful to investors to evaluate networked solar energy capacity added during the period in order to measure the growth of our business as a whole, whether sold directly to customers or subject to executed Customer Agreements.

- **Gross Earning Assets** is calculated as Gross Earning Assets Contracted Period plus Gross Earning Assets Renewal Period.
Gross Earning Assets Contracted Period represents the present value of the remaining net cash flows (discounted at 5%) during the initial term of our Customer Agreements as of the measurement date. It is calculated as the present value of cash flows (discounted at 5%) we expect to receive from Subscribers in future periods, after deducting expected operating and maintenance costs based on the service agreements underlying each fund, equipment replacements costs, distributions to tax equity partners in consolidated joint venture partnership flip structures, and distributions to project equity investors. We include cash flows we expect to receive in future periods from state incentive and rebate programs, contracted sales of solar renewable energy credits, and awarded net cash flows from grid service programs with utility or grid operators.

Gross Earning Assets Renewal Period is the forecasted net present value we would receive upon or following the expiration of the initial Customer Agreement term but before the 30th anniversary of the system’s activation (either in the form of cash payments during any applicable renewal period or a system purchase at the end of the initial term), for Subscribers as of the measurement date. We calculate the Gross Earning Assets Renewal Period amount at the expiration of the initial contract term assuming either a system purchase or a renewal, forecasting only a 30-year customer relationship (although the customer may renew for additional years, or purchase the system), at a contract rate equal to 90% of the customer’s contractual rate in effect at the end of the initial contract term. After the initial contract term, our Customer Agreements typically automatically renew annually or for five years and the rate is initially set at up to a 10% discount to then-prevailing utility power prices.

- Subscribers represent the cumulative number of Customer Agreements for systems that have been recognized as deployments through the measurement date.

- Customers represent the cumulative number of deployments, from our inception through the measurement date. We believe that it is helpful to investors to evaluate customers added during the period in order to measure the growth of our business as a whole.

Gross Earning Assets is forecasted as of a specific date. It is forward-looking, and we use judgment in developing the assumptions used to calculate it. Factors that could impact Gross Earning Assets include, but are not limited to, customer payment defaults, or declines in utility rates or early termination of a contract in certain circumstances, including prior to installation. We believe it is useful for investors to evaluate the future expected cash flows from all customers that have been deployed through the respective measurement date, less estimated costs to maintain such systems and estimated distributions to tax equity partners in consolidated joint venture partnership flip structures, and distributions to project equity investors. Various assumptions are made when calculating these metrics. Gross Earning Assets utilize a 5% unlevered discount rate (weighted average cost of capital or "WACC") to discount future cash flows to the present period. Furthermore, this metric assumes that customers renew after the initial contract period at a rate equal to 90% of the rate in effect at the end of the initial contract term. For Customer Agreements with 25-year initial contract terms, a 5-year renewal period is assumed. For a 20-year initial contract term, a 10-year renewal period is assumed. In all instances, we assume a 30-year customer relationship, although the customer may renew for additional years, or purchase the system. Estimated cost of servicing assets has been deducted and is estimated based on the service agreements underlying each fund.

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Networked Solar Energy Capacity (megawatts)</td>
<td>5,667</td>
<td>4,677</td>
</tr>
<tr>
<td>Customers</td>
<td>797,296</td>
<td>660,311</td>
</tr>
</tbody>
</table>

59
As of December 31,

<table>
<thead>
<tr>
<th></th>
<th>Gross Earning Assets Contracted Period</th>
<th>Gross Earning Assets Renewal Period</th>
<th>Gross Earning Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022 (in thousands)</td>
<td>2021 (in thousands)</td>
<td></td>
</tr>
<tr>
<td>$</td>
<td>8,878,718</td>
<td>6,638,838</td>
<td>$</td>
</tr>
<tr>
<td>3,546,821</td>
<td>3,033,150</td>
<td>$ 12,425,539</td>
<td>$ 9,671,988</td>
</tr>
</tbody>
</table>

The tables below provide a range of Gross Earning Asset amounts if different default, discount and purchase and renewal assumptions were used.

Gross Earning Assets Contracted Period:

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>3%</th>
<th>4%</th>
<th>5%</th>
<th>6%</th>
<th>7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>$ 10,356,292</td>
<td>$ 9,430,203</td>
<td>$ 8,626,733</td>
<td>$ 7,926,640</td>
<td>$ 7,314,052</td>
</tr>
<tr>
<td>0%</td>
<td>$ 10,875,913</td>
<td>$ 9,713,368</td>
<td>$ 8,878,718</td>
<td>$ 8,151,849</td>
<td>$ 7,516,175</td>
</tr>
</tbody>
</table>

Gross Earning Assets Renewal Period:

<table>
<thead>
<tr>
<th>Purchase or Renewal rate</th>
<th>3%</th>
<th>4%</th>
<th>5%</th>
<th>6%</th>
<th>7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%</td>
<td>$ 4,607,336</td>
<td>$ 3,760,531</td>
<td>$ 3,081,842</td>
<td>$ 2,535,745</td>
<td>$ 2,094,632</td>
</tr>
<tr>
<td>90%</td>
<td>$ 5,300,111</td>
<td>$ 4,326,955</td>
<td>$ 3,546,821</td>
<td>$ 2,918,950</td>
<td>$ 2,411,661</td>
</tr>
<tr>
<td>100%</td>
<td>$ 5,992,883</td>
<td>$ 4,893,377</td>
<td>$ 4,011,798</td>
<td>$ 3,302,153</td>
<td>$ 2,728,688</td>
</tr>
</tbody>
</table>

Total Gross Earning Assets:

<table>
<thead>
<tr>
<th>Purchase or Renewal rate</th>
<th>3%</th>
<th>4%</th>
<th>5%</th>
<th>6%</th>
<th>7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%</td>
<td>$ 15,283,250</td>
<td>$ 13,473,899</td>
<td>$ 11,960,560</td>
<td>$ 10,687,595</td>
<td>$ 9,610,806</td>
</tr>
<tr>
<td>90%</td>
<td>$ 15,976,025</td>
<td>$ 14,040,323</td>
<td>$ 12,425,539</td>
<td>$ 11,070,799</td>
<td>$ 9,927,835</td>
</tr>
<tr>
<td>100%</td>
<td>$ 16,668,797</td>
<td>$ 14,606,744</td>
<td>$ 12,890,516</td>
<td>$ 11,454,002</td>
<td>$ 10,244,863</td>
</tr>
</tbody>
</table>
Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP"). GAAP requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. In many instances, we could have reasonably used different accounting estimates, and in other instances, changes in the accounting estimates are reasonably likely to occur from period-to-period. Actual results could differ significantly from our estimates. Our future financial statements will be affected to the extent that our actual results materially differ from these estimates. For further information on all of our significant accounting policies, see Note 2, Summary of Significant Accounting Policies, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

We believe that policies associated with our principles of consolidation, revenue recognition, goodwill, impairment of long-lived assets, provision for income taxes, business combinations and calculation of noncontrolling interests and redeemable noncontrolling interests have the greatest impact on our consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates.

Principles of Consolidation

Our consolidated financial statements include our accounts and those of our subsidiaries in which we have a controlling financial interest. The typical condition for a controlling financial interest is holding a majority of the voting interests of an entity. However, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling financial interests. We consolidate any VIE of which we are the primary beneficiary, which is defined as the party that has (1) the power to direct the activities of a VIE that most significantly impact the VIE’s economic performance and (2) the obligation to absorb losses or receive benefits of the VIE that could potentially be significant to the VIE. We evaluate our relationships with our VIEs on an ongoing basis to determine whether we continue to be the primary beneficiary. Our financial statements reflect the assets and liabilities of VIEs that we consolidate. All intercompany transactions and balances have been eliminated in consolidation. For further information regarding consolidation of our investment funds, see "—Investment Funds" above.

Revenue Recognition

We recognize revenue when control of goods or services is transferred to customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those goods or services.

Customer Agreements and Incentives Revenue. Customer agreements and incentives revenue is primarily comprised of revenue from our Customer Agreements and sales of Commercial ITCs and SRECs to third parties.

We begin to recognize revenue from a Customer Agreement when PTO for the applicable solar energy system is given by the local utility company or on the date daily operation commences if utility approval is not required. For Customer Agreements that include a fixed fee per month which entitles the customer to any and all electricity generated by the system, we recognize revenue evenly over the time that we satisfy our performance obligations over the initial term of Customer Agreements. For Customer Agreements that charge a fixed price per kilowatt hour, revenue is recognized based on the actual amount of power generated at rates specified under the contracts. Customer Agreements typically have an initial term of 20 or 25 years. After the initial contract term, our Customer Agreements typically automatically renew annually or for five years.

We also apply for and receive SRECs associated with the energy generated by our solar energy systems and sell them to third parties in certain jurisdictions. SREC revenue is estimated net of any variable consideration related to possible liquidated damages if we were to deliver fewer SRECs than contractually committed, and is generally recognized upon delivery of the SRECs to the counterparty.

Certain upfront payments related to Customer Agreements and SRECs are deemed to have a financing component, and therefore increase both revenue and interest expense by the same amount over the term of the related agreement. The additional revenue is included in the total transaction price to be recorded over the term of the agreement and is recognized based on the timing of the delivery. The interest expense is recognized based upon an amortization schedule which typically decreases throughout the term of the related agreement.
For pass-through financing obligation funds, the value attributable to the Commercial ITCs is recognized in the period a solar system is granted PTO, at which point we have met our obligation to the investor. The Commercial ITCs are subject to recapture under the Internal Revenue Code ("Code") if the underlying solar energy system either ceases to be a qualifying property or undergoes a change in ownership within five years of its placed-in-service date. The recapture amount decreases on the anniversary of the PTO date. We have not historically incurred a material recapture of Commercial ITCs, and do not expect to experience a material recapture of Commercial ITCs in the future.

Consideration from customers is considered variable due to the performance guarantee under Customer Agreements and liquidated damage provisions under SREC contracts in the event minimum deliveries are not achieved. Customer Agreements with a performance guarantee provide a credit to the customer if the system’s cumulative production, as measured on various PTO anniversary dates, is below our guarantee of a specified minimum. Revenue is recognized to the extent it is probable that a significant reversal of such revenue will not occur. If our estimate of the future production shortfall amount for Customer Agreements with a performance guarantee was 10% higher, the additional reduction to revenue in the twelve months ended December 31, 2022 would have been less than $2.4 million. Our estimated production shortfall reduced revenue during the twelve months ended December 31, 2022 by less than $6.2 million more than the prior year’s period. We have historically estimated an immaterial amount of liquidated damages pursuant to SREC contracts, and actual damages have not been materially different from estimates, nor material in amount during the years ended December 31, 2022, 2021 and 2020.

**Solar Energy Systems and Product Sales.** Solar energy systems sales are comprised of revenue from the sale of solar energy systems directly to customers. We generally recognize revenue from solar energy systems sold to customers when the solar energy system passes inspection by the authority having jurisdiction, which inspection generally occurs after installation but prior to PTO, at which time we have met the performance obligation in the contract. For solar energy system sales that include delivery obligations up until interconnection to the local power grid with permission to operate, we recognize revenue at PTO. Certain solar energy systems sold to customers include fees for extended warranty and maintenance services. These fees are recognized over the life of the service agreement.

Product sales revenue consists of revenue from the sale of solar panels, inverters, racking systems, roof repair, and other solar energy products sold to resellers, as well as the sale of customer leads to third parties, including our partners and other solar providers. Product sales revenue is recognized when control is transferred, generally upon shipment, or as services are delivered. Customer lead revenue is recognized at the time the lead is delivered.

**Goodwill**

Goodwill represents the excess of the purchase price over the fair value of assets acquired and liabilities assumed. Goodwill is reviewed for impairment at least annually or whenever events or changes in circumstances indicate that the carrying amount may be impaired. We have determined that we operate as one reporting unit and our goodwill is tested for impairment at the enterprise level. We perform our annual impairment test of goodwill on October 1 of each fiscal year or whenever events or circumstances change or occur that would indicate that goodwill might be impaired. When assessing goodwill for impairment, we use qualitative and if necessary, quantitative methods in accordance with FASB ASC Topic 350, Goodwill. We also consider our enterprise value and if necessary, a discounted cash flow model, which involves assumptions and estimates, including our future financial performance, weighted average cost of capital and interpretation of currently enacted tax laws.

Circumstances that could indicate impairment and require us to perform a quantitative impairment test include a significant decline in our financial results, a significant decline in our enterprise value relative to our net book value, a sustained decline in our stock price, or an unanticipated change in competition or our market share and a significant change in our strategic plans. A sustained decrease in the price of our common stock is one of the qualitative factors to be considered as part of an impairment test when evaluating whether events or changes in circumstances may indicate that it is more likely than not that a potential goodwill impairment exists. As of October 1, 2022, we concluded that our fair value exceeded our carrying value. We will continue monitoring the analysis of the qualitative and quantitative factors used as a basis for the goodwill impairment test during fiscal year 2023.

In performing the assessment, we performed a qualitative assessment and determined there were no indicators of impairment. To corroborate this conclusion, we compared the carrying value of our one reporting unit to our market capitalization and concluded that there was no goodwill impairment during the years ended December 31, 2022, 2021 and 2020.
Impairment of Long-Lived Assets

The carrying amounts of our long-lived assets, including solar energy systems and definite-lived intangible assets, are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful life is shorter than originally estimated. Factors that we consider in deciding when to perform an impairment review would include significant negative industry or economic trends, and significant changes or planned changes in our use of the assets. Recoverability of these assets is measured by comparison of the carrying amount of each asset group to the future undiscounted cash flows the asset is expected to generate over its remaining life. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. If the useful life is shorter than originally estimated, we amortize the remaining carrying value over the new shorter useful life. During the years ended December 31, 2022, 2021 and 2020, there were no indicators of impairment and therefore no cash flow analysis was performed.

Provision for Income Taxes

We account for income taxes under an asset and liability approach. Deferred income taxes reflect the impact of temporary differences between assets and liabilities recognized for financial reporting purposes and the amounts recognized for income tax reporting purposes, net operating loss carryforwards and other tax credits measured by applying currently enacted tax laws. A valuation allowance is provided when necessary to reduce deferred tax assets to an amount that is more likely than not to be realized. We consider all available evidence, both positive and negative, including historical levels of income, estimates of future taxable income, reversing taxable temporary differences, and ongoing tax planning strategies in assessing the need for a valuation allowance. We recognize the effect of tax rate and law changes on deferred taxes in the reporting period in which the legislation is enacted.

We sell solar energy systems to the investment funds. As the investment funds are consolidated by us, the gain on the sale of the solar energy systems is not recognized in the consolidated financial statements. However, this gain is recognized for tax reporting purposes. We account for the income tax consequences of these intra-entity transfers, both current and deferred, as a component of income tax expense and deferred tax liability, net during the period in which the transfers occur.

We account for investment tax credits as a reduction of income tax expense in the year in which the credits arise.

We determine whether a tax position is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. We use a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained upon tax authority examination, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement.

Our policy is to include interest and penalties related to unrecognized tax benefits, if any, within the provision for taxes in the consolidated statements of operations.

Business Combinations

We allocate the fair value of purchase price to the tangible assets acquired, liabilities assumed and intangible assets acquired based on their estimated fair values. Any residual purchase price is recorded as goodwill. The allocation of the purchase price requires management to make significant estimates in determining the fair values of assets acquired and liabilities assumed, especially with respect to the solar energy systems acquired as part of our acquisition of Vivint Solar.

Significant estimates in valuing certain tangible and intangible assets include but are not limited to discount rates. These estimates are inherently uncertain and unpredictable.

See Note 3, Acquisition to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.
Noncontrolling Interests and Redeemable Noncontrolling Interests

Our noncontrolling interests and redeemable noncontrolling interests represent fund investors' interests in the net assets of certain investment funds, which we consolidate, that we have entered into in order to finance the costs of solar energy facilities under Customer Agreements. We have determined that the provisions in the contractual arrangements of the investment funds represent substantive profit-sharing arrangements, which gives rise to the noncontrolling interests and redeemable noncontrolling interests. We have further determined that for all but two of these arrangements, the appropriate methodology for attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests each period is a balance sheet approach using the HLBV method.

Attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests under the HLBV method requires the use of various inputs to calculate the amounts that fund investors would receive upon a hypothetical liquidation. Changes in these inputs, including change in tax rates, can have a significant impact on the amount that fund investors would receive upon a hypothetical liquidation.

We classify certain noncontrolling interests with redemption features that are not solely within our control outside of permanent equity on our consolidated balance sheets. Redeemable noncontrolling interests are reported using the greater of their carrying value at each reporting date as determined by the HLBV method or their estimated redemption value in each reporting period. Estimating the redemption value of the redeemable noncontrolling interests requires the use of significant assumptions and estimates such as projected future cash flows at the time the redemption feature can be exercised.

We determine the net income (loss) attributable to common stockholders by deducting from net loss, the net loss attributable to noncontrolling interests and redeemable noncontrolling interests in these funds. The net loss attributable to noncontrolling interests and redeemable noncontrolling interests represents the fund investors’ allocable share in the results of operations of these investment funds. For these funds, we have determined that the provisions in the contractual arrangements represent substantive profit-sharing arrangements, where the allocations to the partners sometimes differ from the stated ownership percentages. We have further determined that, for these arrangements, the appropriate methodology for attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests each period is a balance sheet approach using the HLBV method. Under the HLBV method, the amounts of income and loss attributed to the noncontrolling interests and redeemable noncontrolling interests in the consolidated statements of operations reflect changes in the amounts the fund investors would hypothetically receive at each balance sheet date under the liquidation provisions of the contractual provisions of these funds, assuming the net assets of the respective investment funds were liquidated at the carrying value determined in accordance with GAAP. The fund investors’ interest in the results of operations of these investment funds is initially determined by calculating the difference in the noncontrolling interests and redeemable noncontrolling interests’ claim under the HLBV method at the start and end of each reporting period, after taking into account any contributions and distributions between the fund and the fund investors and subject to the redemption provisions in certain funds.

The calculation of HLBV does not require estimates since each HLBV calculation is based upon the liquidation provisions of each fund’s contractual agreement. The calculation of the redeemable noncontrolling interest balance involves estimates such as a discount rate used in net present value calculations, and customer default rates. If the assumptions used for each of these were 10% higher, the impact to the aggregate redeemable noncontrolling interest balance as of December 31, 2022 would be a reduction of $13.3 million.

Results of Operations

The results of operations presented below should be reviewed in conjunction with the consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K. Our Annual Report on Form 10-K for the year ended December 31, 2021 includes a discussion and analysis of our financial condition and results of operations for the year ended December 31, 2020 in Item 7 of Part II, “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”
### Year Ended December 31, 2022 and 2021

#### Revenue:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Customer agreements and incentives</td>
<td>983,047</td>
<td>826,564</td>
<td>156,483 (19%)</td>
</tr>
<tr>
<td>Solar energy systems and product sales</td>
<td>1,338,375</td>
<td>783,390</td>
<td>554,985 (71%)</td>
</tr>
<tr>
<td>Total revenue</td>
<td>2,321,422</td>
<td>1,609,954</td>
<td>711,468 (44%)</td>
</tr>
</tbody>
</table>

#### Operating expenses:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of customer agreements and incentives</td>
<td>844,162</td>
<td>699,102</td>
<td>145,060 (20%)</td>
</tr>
<tr>
<td>Cost of solar energy systems and product sales</td>
<td>1,178,548</td>
<td>666,370</td>
<td>512,178 (77%)</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>2,983,614</td>
<td>2,276,141</td>
<td>707,473 (31%)</td>
</tr>
</tbody>
</table>

#### Loss from operations:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>(662,192)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Interest expense, net:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>(445,819)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Other income, net:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>260,657</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Net income (loss) per share attributable to common stockholders:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>$ 0.82</td>
<td>$ (0.39)</td>
<td></td>
</tr>
<tr>
<td>Diluted</td>
<td>$ 0.80</td>
<td>$ (0.39)</td>
<td></td>
</tr>
</tbody>
</table>

#### Weighted average shares used to compute net income (loss) per share attributable to common stockholders:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>211,347</td>
<td>205,132</td>
<td></td>
</tr>
<tr>
<td>Diluted</td>
<td>219,157</td>
<td>205,132</td>
<td></td>
</tr>
</tbody>
</table>

---

### Comparison of the Years Ended December 31, 2022 and 2021

#### Revenue

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Customer agreements</td>
<td>872,298</td>
<td>725,220</td>
<td>147,078 (20%)</td>
</tr>
<tr>
<td>Incentives</td>
<td>110,749</td>
<td>101,344</td>
<td>9,405 (9%)</td>
</tr>
<tr>
<td>Customer agreements and incentives</td>
<td>983,047</td>
<td>826,564</td>
<td>156,483 (19%)</td>
</tr>
<tr>
<td>Solar energy systems</td>
<td>913,904</td>
<td>471,283</td>
<td>442,621 (94%)</td>
</tr>
<tr>
<td>Products</td>
<td>424,471</td>
<td>312,107</td>
<td>112,364 (36%)</td>
</tr>
<tr>
<td>Solar energy systems and product sales</td>
<td>1,338,375</td>
<td>783,390</td>
<td>554,985 (71%)</td>
</tr>
<tr>
<td>Total revenue</td>
<td>2,321,422</td>
<td>1,609,954</td>
<td>711,468 (44%)</td>
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</tbody>
</table>
Customer Agreements and Incentives. The $147.1 million increase in Revenue from Customer Agreements was primarily due to new systems placed in service in 2022 and a full year of revenue recognized in 2022 for systems placed in service in 2021 versus only a partial amount of such revenue related to the period in which the assets were in service in 2021. Revenue from incentives, which primarily consisted of the sale of SRECs, increased by $9.4 million when compared to the prior year related to the timing and volume of SREC sales which were responsive to market conditions.

Solar Energy Systems and Product Sales. Revenue from solar energy systems sales increased by $442.6 million compared to the prior year primarily due to an overall increased demand for solar energy systems in the marketplace, particularly through retail partners. Additionally, the average price of system sales increased 12% from the prior year period. Product sales increased by $112.4 million compared to the prior year primarily due to an overall increased demand for solar energy related products and services in the marketplace, and to a lesser extent, price increases on various solar products sold to resellers.

Operating Expenses

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
<th>Change</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022 (in thousands)</td>
<td>2021</td>
<td>$</td>
</tr>
<tr>
<td>Cost of customer agreements and incentives</td>
<td>$ 844,162</td>
<td>$ 699,102</td>
<td>$ 145,060</td>
</tr>
<tr>
<td>Cost of solar energy systems and product sales</td>
<td>1,178,548</td>
<td>666,370</td>
<td>512,178</td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>745,386</td>
<td>622,961</td>
<td>122,425</td>
</tr>
<tr>
<td>Research and development</td>
<td>20,907</td>
<td>23,165</td>
<td>(2,258)</td>
</tr>
<tr>
<td>General and administrative expense</td>
<td>189,247</td>
<td>259,173</td>
<td>(69,926)</td>
</tr>
<tr>
<td>Amortization of intangible assets</td>
<td>5,364</td>
<td>5,370</td>
<td>(6)</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>$ 2,983,614</td>
<td>$ 2,276,141</td>
<td>$ 707,473</td>
</tr>
</tbody>
</table>

Cost of Customer Agreements and Incentives. The $145.1 million increase in Cost of customer agreements and incentives was primarily due to the new systems placed in service in 2022, plus a full year of costs recognized in 2022 for systems placed in service in 2021 versus only a partial amount of such expenses related to the period in which the assets were in service in 2021.

The Cost of customer agreements and incentives remained relatively consistent at 86% of customer agreements and incentives revenue during 2022, when compared with 85% in the prior year period.

Cost of Solar Energy Systems and Product Sales. There was a $512.2 million increase in Cost of solar energy systems and product sales which was primarily due to the corresponding net increase in the solar energy systems and product sales discussed above.

The Cost of solar energy systems and product sales increased to 88% of solar energy systems and product sales revenue during 2022, when compared with 85% in the prior year period, primarily as a result of increased demand for solar energy related products and services in the marketplace.

Sales and Marketing Expense. The $122.4 million increase in Sales and marketing expense was primarily attributable to increases in headcount driving higher employee compensation and costs to acquire customers through our sales lead generating partners. Additionally, there was an increase of $4.4 million in severance related costs incurred during 2022. Included in sales and marketing expense were $38.7 million and $23.3 million of amortization of costs to obtain Customer Agreements for 2022 and 2021, respectively.

Research and Development Expense. The $2.3 million decrease in Research and development expense was primarily attributable to a decrease in headcount driving lower employee compensation costs.

General and Administrative Expense. The $69.9 million decrease in General and administrative expenses was primarily attributable to a decrease in stock-based compensation expense. This decrease in stock-based compensation was primarily attributable to $36.4 million of expense related to Vivint Solar recognized during 2021.
which was based on the fair value at the time of the acquisition and the underlying awards have since fully vested. Additionally, there were decreases related to consulting costs of $3.1 million and $18.0 million in severance-related integration costs, when compared to 2021.

Non-Operating Expenses

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(in thousands)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Interest expense, net</strong></td>
<td>$ (445,819)</td>
</tr>
<tr>
<td><strong>Other income, net</strong></td>
<td>260,657</td>
</tr>
<tr>
<td><strong>Total interest and other income, net</strong></td>
<td>$ (185,162)</td>
</tr>
</tbody>
</table>

**Interest expense, net.** The increase in Interest expense, net of $118.1 million is primarily related to additional non-recourse debt entered into in 2022. Included in net interest expense is $28.3 million and $26.3 million of non-cash interest recognized under Customer Agreements that have a significant financing component for 2022 and 2021, respectively.

**Other income, net.** The increase in other income, net of $238.0 million relates primarily to an increase of $168.3 million in gains on derivatives recognized in 2022, as well as a $47.3 million gain on an equity investment, with no such comparable activity in 2021.

Income Tax Expense

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(in thousands)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Income tax expense</strong></td>
<td>2,291</td>
</tr>
</tbody>
</table>

The decrease in Income tax expense of $7.0 million primarily relates to a decrease in valuation allowance on certain federal and state tax credits and net operating losses, which was offset by a decrease in tax benefit related to a higher pre-tax loss and an increase in noncontrolling interest and redeemable noncontrolling interests.

Given our net operating loss carryforwards as of December 31, 2022, we do not expect to pay income tax, including in connection with our 2022 income tax provision, until our net operating losses are fully utilized. As of December 31, 2022, we had net operating loss carryforwards for federal and state income tax purposes of approximately $720.7 million and $2.5 billion, respectively, which will begin to expire in 2028 for federal purposes and in 2024 for state purposes. In addition, federal and certain state net operating loss carryforwards generated in tax years beginning after December 31, 2017 total $1.4 billion and $296.8 million, respectively, and have indefinite carryover periods and do not expire.

Net Loss Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(in thousands)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Net loss attributable to noncontrolling interests and redeemable noncontrolling interests</strong></td>
<td>$ (1,023,022)</td>
</tr>
</tbody>
</table>

Net loss attributable to noncontrolling interests and redeemable noncontrolling interests was primarily the result of an addition of six new investment funds since December 31, 2021, for which the HLBV method was used in
determining the amount of net loss attributable to noncontrolling interests. Investment funds generally allocate more loss to the noncontrolling interest in the first several years after fund formation.

**Liquidity and Capital Resources**

As of December 31, 2022, we had cash of $740.5 million, which consisted of cash held in checking and savings accounts with financial institutions. We finance our operations mainly through a variety of financing fund arrangements that we have formed with fund investors, cash generated from our sources of revenue and borrowings from secured credit facilities arrangements with syndicates of banks and from secured, long-term non-recourse loan arrangements. In 2022, we received $1.2 billion of new commitments on secured credit facilities arrangements with syndicates of banks and $1.2 billion of commitments from secured, long-term non-recourse loan arrangements. Our principal uses of cash are funding our business, including the costs of acquisition and installation of solar energy systems, satisfaction of our obligations under our debt instruments and other working capital requirements. As of December 31, 2022, we had outstanding borrowings of $506.2 million on our $600.0 million credit facility maturing in January 2025. Additionally, we have purchase commitments, which have the ability to be canceled without significant penalties, with multiple suppliers to purchase $360.1 million of photovoltaic modules, inverters and batteries by the end of 2022. In January 2021, we issued $400.0 million of convertible senior notes with a maturity date of February 1, 2026, for net proceeds of approximately $389.0 million. Our business model requires substantial outside financing arrangements to grow the business and facilitate the deployment of additional solar energy systems. The solar energy systems that are operational are expected to generate a positive return rate over the term of the Customer Agreement, typically 20 or 25 years. However, in order to grow, we will continue to be dependent on financing from outside parties. If financing is not available to us on acceptable terms if and when needed, we may be required to reduce planned spending, which could have a material adverse effect on our operations. While there can be no assurances, we anticipate raising additional required capital from new and existing investors. We believe our cash, investment fund commitments and available borrowings as further described below will be sufficient to meet our anticipated cash needs for at least the next 12 months. We believe we will meet longer-term expected future cash requirements and obligations through a combination of cash flows from operating activities, available cash balances, and available credit via our credit facilities. The following table summarizes our cash flows for the periods indicated:

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in thousands)</td>
<td></td>
</tr>
<tr>
<td>Net cash provided by financing activities</td>
<td>3,037,451</td>
<td>2,645,594</td>
</tr>
<tr>
<td>Net cash used in operating activities</td>
<td>(848,793)</td>
<td>(817,186)</td>
</tr>
<tr>
<td>Net cash used in investing activities</td>
<td>(2,086,066)</td>
<td>(1,686,185)</td>
</tr>
<tr>
<td>Net increase in cash</td>
<td>102,592</td>
<td>142,223</td>
</tr>
</tbody>
</table>

**Consolidated cash flow data:**

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investing Activities</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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<tr>
<td>Investing Activities</td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Operating Activities**

During 2022, we used $848.8 million in net cash from operating activities. The driver of our operating cash outflow consists of the costs of our revenue, as well as sales, marketing and general and administrative costs. During 2022, our operating cash outflows were $438.1 million from our net loss excluding non-cash and non-operating items. Changes in working capital resulted in a net cash outflow of $410.8 million.

During 2021, we used $817.2 million in net cash from operating activities. The driver of our operating cash outflow consists of the costs of our revenue, as well as sales, marketing and general and administrative costs. During 2021, our operating cash outflows were $332.2 million from our net loss excluding non-cash and non-operating items. Changes in working capital resulted in a net cash outflow of $485.1 million.

**Investing Activities**

During 2022, we used $2.1 billion in cash in investing activities. The majority was used to design, acquire and install solar energy systems and components under our long-term Customer Agreements. Included within cash used
in investing activities during 2022, was a $75.0 million contribution we made as an additional investment in our home electrification venture with SK E&S Co., Ltd.

During 2021, we used $1.7 billion in cash in investing activities. The majority was used to design, acquire and install solar energy systems and components under our long-term Customer Agreements.

**Financing Activities**

During 2022, we generated $3.0 billion from financing activities. This was primarily driven by $1.2 billion in net proceeds from fund investors, $1.9 billion in net proceeds from debt, $32.9 million in net proceeds from stock-based awards activity, offset by $42.6 million in acquisition of noncontrolling interests and $14.1 million in repayments under finance lease obligations.

During 2021, we generated $2.6 billion from financing activities. This was primarily driven by $1.0 billion in net proceeds from fund investors, $1.6 billion in net proceeds from debt, $36.1 million in net proceeds from stock-based awards activity, offset by $42.0 million in acquisition of noncontrolling interests and $12.4 million in repayments under finance lease obligations.

**Debt, Equity, and Financing Fund Commitments**

**Debt Instruments**

For a discussion of the terms and conditions of debt instruments and changes thereof in the period, refer to Note 11, *Indebtedness*, to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

**Investment Fund Commitments**

As of December 31, 2022, we had committed and available capital of approximately $607.4 million that may only be used to purchase and install solar energy systems. We intend to establish new investment funds in the future, and we may also use debt, equity or other financing strategies to finance our business.
Recent Accounting Pronouncements

See Note 2, *Summary of Significant Accounting Policies*, to our consolidated financial statement included elsewhere in this Annual Report on Form 10-K.
Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to certain market risks in the ordinary course of our business. Our primary exposure includes changes in interest rates because certain borrowings bear interest at floating rates based on LIBOR or SOFR, as applicable, plus a specified margin. We sometimes manage our interest rate exposure on floating-rate debt by entering into derivative instruments to hedge all or a portion of our interest rate exposure in certain debt facilities. We do not enter into any derivative instruments for trading or speculative purposes. Changes in economic conditions could result in higher interest rates, thereby increasing our interest expense and operating expenses and reducing funds available for capital investments, operations and other purposes. A hypothetical 10% increase in our interest rates on our variable rate debt facilities would have increased our interest expense by $6.0 million and $3.2 million for the year ended December 31, 2022 and 2021, respectively.
### Item 8. Financial Statements and Supplementary Data.

#### INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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<td>Consolidated Balance Sheets</td>
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<td>Consolidated Statements of Operations</td>
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<tr>
<td>Consolidated Statements of Comprehensive (Loss) Income</td>
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</tr>
<tr>
<td>Consolidated Statements of Redeemable Noncontrolling Interests and Stockholders' Equity</td>
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</tr>
<tr>
<td>Consolidated Statements of Cash Flows</td>
<td>81</td>
</tr>
<tr>
<td>Notes to Consolidated Financial Statements</td>
<td>82</td>
</tr>
</tbody>
</table>
Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Sunrun Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Sunrun Inc. (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive income (loss), redeemable noncontrolling interests and stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 22, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.
Noncontrolling Interests and Redeemable Noncontrolling Interests

Description of matter

At December 31, 2022, noncontrolling interests were $861.2 million and redeemable noncontrolling interests were $609.7 million. As explained in Note 2 to the consolidated financial statements, noncontrolling interests and redeemable noncontrolling interests represent investors’ interests in the net assets of the tax equity funds that the Company has created to finance the cost of its solar energy systems subject to the Company’s Customer Agreements. The Company has determined that the contractual provisions in the funding arrangements represent substantive profit sharing arrangements. The Company has further determined that the appropriate methodology for attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests each period is a balance sheet approach referred to as the hypothetical liquidation at book value ("HLBV") method.

Auditing the noncontrolling interests and redeemable noncontrolling interests is complex due to the volume of tax equity funds and the allocation of the net income or loss to the equity holders. Each HLBV calculation is based upon the liquidation provisions of each fund’s contractual agreement used to calculate the amount of income or loss to be attributed to the noncontrolling member.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of internal controls that address the risks of material misstatement relating to the noncontrolling interests and redeemable noncontrolling interests. This included evaluating controls over establishing each HLBV model and management’s review of each significant input into the HLBV models for compliance with the contractual provisions of such funding arrangements, the completeness and accuracy of underlying data, the calculation of tax capital accounts, and the mathematical accuracy of the HLBV models.

To test the noncontrolling interests and redeemable noncontrolling interests, our audit procedures included, among others, examining the HLBV models for compliance with contractual provisions in the funding arrangements. We tested the completeness and accuracy of the underlying data used in the HLBV models. We involved tax professionals to assist in evaluating the calculation of the tax capital accounts in accordance with the tax code, as well as compliance with contractual provisions in the funding arrangements. We also tested the mathematical accuracy of management’s HLBV models.

/s/ Ernst & Young LLP

We have served as the Company’s auditor since 2010.

San Francisco, California
February 22, 2023
Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Sunrun Inc.

Opinion on Internal Control over Financial Reporting

We have audited Sunrun Inc.’s internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Sunrun Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2022 consolidated financial statements of the Company and our report dated February 22, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/\s/ Ernst & Young LLP

San Francisco, California
February 22, 2023
Sunrun Inc.
Consolidated Balance Sheets
(In Thousands, Except Share Par Values)

<table>
<thead>
<tr>
<th>Assets</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$740,508</td>
<td>$617,634</td>
</tr>
<tr>
<td>Restricted cash</td>
<td>212,367</td>
<td>232,649</td>
</tr>
<tr>
<td>Accounts receivable (net of allowances for credit losses of $13,381 and $11,035 as of December 31, 2022 and 2021, respectively)</td>
<td>214,255</td>
<td>146,037</td>
</tr>
<tr>
<td>Inventories</td>
<td>783,904</td>
<td>506,819</td>
</tr>
<tr>
<td>Prepaid expenses and other current assets</td>
<td>146,609</td>
<td>44,580</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>$2,097,643</td>
<td>$1,547,719</td>
</tr>
<tr>
<td><strong>Restricted cash</strong></td>
<td>148</td>
<td>148</td>
</tr>
<tr>
<td><strong>Solar energy systems, net</strong></td>
<td>10,988,361</td>
<td>9,459,696</td>
</tr>
<tr>
<td><strong>Property and equipment, net</strong></td>
<td>67,439</td>
<td>56,886</td>
</tr>
<tr>
<td><strong>Intangible assets, net</strong></td>
<td>7,527</td>
<td>12,891</td>
</tr>
<tr>
<td><strong>Goodwill</strong></td>
<td>4,280,169</td>
<td>4,280,169</td>
</tr>
<tr>
<td><strong>Other assets</strong></td>
<td>1,827,518</td>
<td>1,125,743</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$19,268,805</td>
<td>$16,483,252</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities and total equity</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current liabilities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$339,166</td>
<td>$288,108</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>1,155,451</td>
<td>1,012,120</td>
</tr>
<tr>
<td>Deferred revenue, net of current portion</td>
<td>912,254</td>
<td>761,872</td>
</tr>
<tr>
<td>Deferred grants, net of current portion</td>
<td>201,094</td>
<td>206,615</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>11,089,788</td>
<td>8,910,665</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Redeemable noncontrolling interests</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred stock, $0.0001 par value—authorized, 200,000 shares as of December 31, 2022 and 2021; no shares issued and outstanding as of December 31, 2022 and 2021</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Common stock, $0.0001 par value—authorized, 2,000,000 shares as of December 31, 2022 and 2021; issued and outstanding, 214,164 and 208,176 shares as of December 31, 2022 and 2021, respectively</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>6,470,194</td>
<td>6,330,344</td>
</tr>
<tr>
<td><strong>Total stockholders’ equity</strong></td>
<td>6,706,122</td>
<td>6,254,736</td>
</tr>
<tr>
<td><strong>Total liabilities, redeemable noncontrolling interests and total equity</strong></td>
<td>$19,268,805</td>
<td>$16,483,252</td>
</tr>
</tbody>
</table>
The Company’s consolidated assets as of December 31, 2022 and 2021 include $10,031,506 and $8,381,220, respectively, in assets of variable interest entities, or “VIEs”, that can only be used to settle obligations of the VIEs. Solar energy systems, net, as of December 31, 2022 and 2021 were $8,968,835 and $7,605,769, respectively; cash as of December 31, 2022 and 2021 were $457,005 and $377,044, respectively; restricted cash as of December 31, 2022 and 2021 were $86,847 and $55,714, respectively; inventories as of December 31, 2022 and 2021 were $287,771 and $177,224, respectively. The Company’s consolidated liabilities as of December 31, 2022 and 2021 include $2,227,002 and $2,152,492, respectively, in liabilities of VIEs whose creditors have no recourse to the Company. These liabilities include accounts payable as of December 31, 2022 and 2021 of $36,315 and $26,042, respectively; distributions payable to noncontrolling interests and redeemable noncontrolling interests as of December 31, 2022 and 2021 of $32,051 and $31,582, respectively; accrued expenses and other liabilities as of December 31, 2022 and 2021 of $32,512 and $31,036, respectively; deferred revenue as of December 31, 2022 and 2021 of $621,457 and $530,385, respectively; deferred grants as of December 31, 2022 and 2021 of $0 and $25,634, respectively; non-recourse debt as of December 31, 2022 and 2021 of $1,489,407 and $1,482,608, respectively; and other liabilities as of December 31, 2022 and 2021 of 15,260 and $25,205, respectively.

The accompanying notes are an integral part of these consolidated financial statements.
<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer agreements and incentives</td>
<td>$983,047</td>
<td>$826,564</td>
<td>$484,160</td>
</tr>
<tr>
<td>Solar energy systems and product sales</td>
<td>1,338,375</td>
<td>783,390</td>
<td>438,031</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td>2,321,422</td>
<td>1,609,954</td>
<td>922,191</td>
</tr>
<tr>
<td><strong>Operating expenses:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of customer agreements and incentives</td>
<td>844,162</td>
<td>699,102</td>
<td>385,650</td>
</tr>
<tr>
<td>Cost of solar energy systems and product sales</td>
<td>1,178,548</td>
<td>666,370</td>
<td>357,876</td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>745,386</td>
<td>622,961</td>
<td>352,299</td>
</tr>
<tr>
<td>Research and development</td>
<td>20,907</td>
<td>23,165</td>
<td>19,548</td>
</tr>
<tr>
<td>General and administrative</td>
<td>189,247</td>
<td>259,173</td>
<td>266,746</td>
</tr>
<tr>
<td>Amortization of intangible assets</td>
<td>5,364</td>
<td>5,370</td>
<td>5,180</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>2,983,614</td>
<td>2,276,141</td>
<td>1,387,299</td>
</tr>
<tr>
<td><strong>Loss from operations</strong></td>
<td>(662,192)</td>
<td>(465,108)</td>
<td>(465,108)</td>
</tr>
<tr>
<td>Interest expense, net</td>
<td>(445,819)</td>
<td>(230,601)</td>
<td>(230,601)</td>
</tr>
<tr>
<td>Other income (expense), net</td>
<td>260,657</td>
<td>22,628</td>
<td>8,188</td>
</tr>
<tr>
<td><strong>Loss before income taxes</strong></td>
<td>(847,354)</td>
<td>(687,521)</td>
<td>(687,521)</td>
</tr>
<tr>
<td>Income tax expense (benefit)</td>
<td>2,291</td>
<td>9,271</td>
<td>(60,573)</td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>(849,645)</td>
<td>(901,530)</td>
<td>(626,948)</td>
</tr>
</tbody>
</table>

Net loss attributable to noncontrolling interests and redeemable noncontrolling interests | (1,023,022) | (901,107) | (453,554) |

Net income (loss) attributable to common stockholders | $173,377 | $79,423 | $(173,394) |

Net income (loss) per share attributable to common stockholders

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>$0.82</td>
<td>$(0.39)</td>
<td>$(1.24)</td>
</tr>
<tr>
<td>Diluted</td>
<td>$0.80</td>
<td>$(0.39)</td>
<td>$(1.24)</td>
</tr>
</tbody>
</table>

Weighted average shares used to compute net income (loss) per share attributable to common stockholders

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>211,347</td>
<td>205,132</td>
<td>139,606</td>
</tr>
<tr>
<td>Diluted</td>
<td>219,157</td>
<td>205,132</td>
<td>139,606</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of these consolidated financial statements.
### Sunrun Inc.
#### Consolidated Statements of Comprehensive Income (Loss)
*(In Thousands)*

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net income (loss) attributable to common stockholders</td>
<td>$173,377</td>
<td>$(79,423)</td>
<td>$(173,394)</td>
</tr>
<tr>
<td>Unrealized gain (loss) on derivatives, net of income taxes</td>
<td>140,805</td>
<td>18,496</td>
<td>(63,445)</td>
</tr>
<tr>
<td>Adjustment for net (gain) loss on derivatives recognized into earnings, net of income taxes</td>
<td>(646)</td>
<td>15,209</td>
<td>9,443</td>
</tr>
<tr>
<td>Other comprehensive income (loss)</td>
<td>140,159</td>
<td>33,705</td>
<td>(54,002)</td>
</tr>
<tr>
<td><strong>Comprehensive income (loss)</strong></td>
<td><strong>$313,536</strong></td>
<td><strong>$45,718</strong></td>
<td><strong>$(227,396)</strong></td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of these consolidated financial statements.
Sunrun Inc.
Consolidated Statements of Redeemable Noncontrolling Interests and Stockholders’ Equity
(In Thousands)

<table>
<thead>
<tr>
<th>Redeemable Noncontrolling Interests</th>
<th>Common Stock</th>
<th>Additional Paid-in Capital</th>
<th>Accumulated Other Comprehensive Income (Loss)</th>
<th>Retained Earnings (Accumulated Deficit)</th>
<th>Total Stockholders’ Equity</th>
<th>Noncontrolling Interests</th>
<th>Total Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance - December 31, 2019</td>
<td>$ 306,565</td>
<td>$ 118,451</td>
<td>$ 769,005</td>
<td>$ (92,753)</td>
<td>$ 251,466</td>
<td>$ 964,751</td>
<td>$ 368,701</td>
</tr>
<tr>
<td>Cumulative effect of adoption of new ASU (No. 2018-02)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Exercise of stock options</td>
<td>—</td>
<td>6,609</td>
<td>41,840</td>
<td>—</td>
<td>41,840</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Issuance of restricted stock units, net of tax withholdings</td>
<td>—</td>
<td>4,124</td>
<td>1 (1,026)</td>
<td>—</td>
<td>—</td>
<td>41,945</td>
<td>—</td>
</tr>
<tr>
<td>Shares issued in connection with the Employee Stock Purchase Plan</td>
<td>—</td>
<td>675</td>
<td>—</td>
<td>7,842</td>
<td>—</td>
<td>—</td>
<td>7,842</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>—</td>
<td>—</td>
<td>177,082</td>
<td>—</td>
<td>177,082</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Distributions from redeemable noncontrolling interests and noncontrolling interests</td>
<td>484,091</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>333,970</td>
</tr>
<tr>
<td>Contributions from redeemable noncontrolling interests and noncontrolling interests</td>
<td>37,453</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>89,060</td>
</tr>
<tr>
<td>Net loss</td>
<td>(243,542)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Shares issued in connection with a subscription agreement</td>
<td>2,075</td>
<td>—</td>
<td>—</td>
<td>75,000</td>
<td>—</td>
<td>—</td>
<td>75,000</td>
</tr>
<tr>
<td>Acquisition of Vivint Solar</td>
<td>53,300</td>
<td>69,472</td>
<td>5,037,516</td>
<td>—</td>
<td>5,037,516</td>
<td>229,400</td>
<td>5,266,912</td>
</tr>
<tr>
<td>Acquisition of noncontrolling interest</td>
<td>(7,500)</td>
<td>—</td>
<td>3,542</td>
<td>—</td>
<td>—</td>
<td>3,542</td>
<td>—</td>
</tr>
<tr>
<td>Other comprehensive loss, net of taxes</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(54,002)</td>
<td>—</td>
<td>(54,002)</td>
</tr>
<tr>
<td>Balance - December 31, 2020</td>
<td>560,461</td>
<td>214,184</td>
<td>6,101,302</td>
<td>(106,795)</td>
<td>76,844</td>
<td>6,017,911</td>
<td>650,999</td>
</tr>
<tr>
<td>Exercise of stock options</td>
<td>—</td>
<td>2,046</td>
<td>19,326</td>
<td>—</td>
<td>19,326</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Issuance of restricted stock units, net of tax withholdings</td>
<td>—</td>
<td>3,749</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1</td>
</tr>
<tr>
<td>Shares issued in connection with the Employee Stock Purchase Plan</td>
<td>—</td>
<td>975</td>
<td>—</td>
<td>16,812</td>
<td>—</td>
<td>—</td>
<td>16,812</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>—</td>
<td>—</td>
<td>221,857</td>
<td>—</td>
<td>221,857</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Contributions from redeemable noncontrolling interests and noncontrolling interests</td>
<td>157,127</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1,081,605</td>
</tr>
<tr>
<td>Distributions to redeemable noncontrolling interests and noncontrolling interests</td>
<td>(83,280)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(136,141)</td>
</tr>
<tr>
<td>Net loss</td>
<td>(35,908)</td>
<td>—</td>
<td>—</td>
<td>(79,423)</td>
<td>(79,423)</td>
<td>(865,199)</td>
<td>(944,622)</td>
</tr>
<tr>
<td>Capped call transaction</td>
<td>—</td>
<td>—</td>
<td>(28,000)</td>
<td>—</td>
<td>—</td>
<td>(28,000)</td>
<td>—</td>
</tr>
<tr>
<td>Acquisition of noncontrolling interest</td>
<td>(7,437)</td>
<td>—</td>
<td>—</td>
<td>(7,437)</td>
<td>—</td>
<td>—</td>
<td>(7,437)</td>
</tr>
<tr>
<td>Other comprehensive income, net of taxes</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>30,705</td>
<td>—</td>
<td>30,705</td>
<td>—</td>
</tr>
<tr>
<td>Balance - December 31, 2021</td>
<td>594,973</td>
<td>208,176</td>
<td>6,330,344</td>
<td>(73,050)</td>
<td>(2,579)</td>
<td>6,254,736</td>
<td>722,878</td>
</tr>
<tr>
<td>Exercise of stock options</td>
<td>—</td>
<td>1,942</td>
<td>13,772</td>
<td>—</td>
<td>13,772</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Issuance of restricted stock units, net of tax withholdings</td>
<td>—</td>
<td>2,968</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Shares issued in connection with the Employee Stock Purchase Plan</td>
<td>—</td>
<td>1,196</td>
<td>—</td>
<td>19,091</td>
<td>—</td>
<td>—</td>
<td>19,091</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>—</td>
<td>—</td>
<td>123,050</td>
<td>—</td>
<td>123,050</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Contributions from redeemable noncontrolling interests and noncontrolling interests</td>
<td>89,088</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>1,325,705</td>
</tr>
<tr>
<td>Distributions to redeemable noncontrolling interests and noncontrolling interests</td>
<td>(67,732)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(150,369)</td>
</tr>
<tr>
<td>Net loss</td>
<td>(5,558)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>(1,017,464)</td>
<td>(844,087)</td>
</tr>
<tr>
<td>Capped call transaction</td>
<td>—</td>
<td>—</td>
<td>(16,063)</td>
<td>—</td>
<td>—</td>
<td>(16,063)</td>
<td>(19,326)</td>
</tr>
<tr>
<td>Acquisition of noncontrolling interest</td>
<td>(1,069)</td>
<td>—</td>
<td>—</td>
<td>(1,069)</td>
<td>—</td>
<td>—</td>
<td>(1,069)</td>
</tr>
<tr>
<td>Other comprehensive income, net of taxes</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>140,159</td>
<td>—</td>
<td>140,159</td>
<td>—</td>
</tr>
<tr>
<td>Balance - December 31, 2022</td>
<td>609,702</td>
<td>214,184</td>
<td>6,470,194</td>
<td>170,798</td>
<td>6,708,122</td>
<td>881,193</td>
<td>7,589,315</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of these consolidated financial statements

80
Sunrun Inc.
Consolidated Statements of Cash Flows
(In Thousands)

<table>
<thead>
<tr>
<th>Operating activities:</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net loss</td>
<td>$(849,645)</td>
<td>$(980,530)</td>
<td>$(626,948)</td>
</tr>
<tr>
<td>Adjustments to reconcile net loss to net cash used in operating activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization, net of amortization of deferred grants</td>
<td>451,046</td>
<td>388,956</td>
<td>242,942</td>
</tr>
<tr>
<td>Deferred income taxes</td>
<td>2,291</td>
<td>9,107</td>
<td>60,573</td>
</tr>
<tr>
<td>Stock-based compensation expense</td>
<td>110,633</td>
<td>211,000</td>
<td>170,587</td>
</tr>
<tr>
<td>Interest on pass-through financing obligations</td>
<td>20,076</td>
<td>21,431</td>
<td>23,166</td>
</tr>
<tr>
<td>Reduction in pass-through financing obligations</td>
<td>(41,164)</td>
<td>(42,959)</td>
<td>(39,188)</td>
</tr>
<tr>
<td>Unrealized gain on derivatives</td>
<td>(184,904)</td>
<td>(21,885)</td>
<td>(453)</td>
</tr>
<tr>
<td>Other noncash items</td>
<td>53,651</td>
<td>82,286</td>
<td>51,040</td>
</tr>
<tr>
<td>Changes in operating assets and liabilities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>$(86,762)</td>
<td>$(62,124)</td>
<td>4,988</td>
</tr>
<tr>
<td>Inventories</td>
<td>(277,085)</td>
<td>(223,774)</td>
<td>47,554</td>
</tr>
<tr>
<td>Prepaid and other assets</td>
<td>(378,807)</td>
<td>(377,505)</td>
<td>(117,033)</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>40,458</td>
<td>66,932</td>
<td>(45,718)</td>
</tr>
<tr>
<td>Accrued expenses and other liabilities</td>
<td>64,122</td>
<td>33,195</td>
<td>(9,853)</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>227,297</td>
<td>78,195</td>
<td>41,517</td>
</tr>
<tr>
<td>Net cash used in operating activities</td>
<td>$(848,793)</td>
<td>$(817,186)</td>
<td>$(317,972)</td>
</tr>
</tbody>
</table>

| Investing activities: | | |
| Payments for the costs of solar energy systems | (1,992,863) | (1,677,609) | (866,580) |
| Business combination, net of cash acquired | | | 537,242 |
| Purchase of equity investment | (75,000) | | (65,356) |
| Purchases of property and equipment, net | (18,203) | (6,976) | (3,096) |
| Net cash used in investing activities | (2,086,066) | (1,684,185) | (857,799) |

| Financing activities: | | |
| Proceeds from state tax credits, net of recapture | | | 5,683 |
| Proceeds from line of credit | 1,165,267 | 738,046 | 182,700 |
| Repayment of line of credit | (871,175) | (727,806) | (191,525) |
| Proceeds from issuance of convertible senior notes, net of capped call transaction | | 372,000 | |
| Proceeds from issuance of non-recourse debt | 3,428,830 | 2,186,990 | 751,493 |
| Repayment of non-recourse debt | (1,759,428) | (856,091) | (389,459) |
| Payment of debt fees | (62,994) | (53,793) | (14,083) |
| Proceeds from pass-through financing and other obligations, net | 3,645 | 10,332 | 8,701 |
| Repayment of pass-through financing obligation | | | |
| Payment of finance lease obligations | (14,146) | (12,352) | (10,578) |
| Contributions received from noncontrolling interests and redeemable noncontrolling interests | 1,414,793 | 1,238,732 | 818,061 |
| Distributions paid to noncontrolling interests and redeemable noncontrolling interests | (217,633) | (196,466) | (111,223) |
| Acquisition of noncontrolling interest | (42,571) | (41,955) | (2,694) |
| Net proceeds related to stock-based award activities | 32,863 | 36,144 | 48,664 |
| Proceeds from shares issued in connection with a subscription agreement | | | 75,000 |
| Net cash provided by financing activities | 3,037,451 | 2,645,594 | 1,160,749 |
| Net change in cash and restricted cash | 102,592 | 142,223 | 344,979 |
| Cash and restricted cash, beginning of period | 850,431 | 708,208 | 363,229 |
| Cash and restricted cash, end of period | $953,023 | $850,431 | $708,208 |

| Supplemental disclosures of cash flow information | | |
| Cash paid for interest | $306,116 | $225,250 | $119,620 |
| Cash paid for income taxes | | | |

| Supplemental disclosures of noncash investing and financing activities | | |
| Purchases of solar energy systems and property and equipment included in accounts payable and accrued expenses | $61,327 | $50,386 | $66,433 |
| Right-of-use assets obtained in exchange for new finance lease liabilities | $21,030 | $11,055 | $4,265 |
| Portion of solar energy systems financed with seller financing, included within non-recourse debt | | | |

The accompanying notes are an integral part of these consolidated financial statements.

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Note 1. Organization

Sunrun Inc. ("Sunrun" or the "Company") was formed in 2007 and is engaged in the design, development, installation, sale, ownership and maintenance of residential solar energy systems ("Projects") in the United States.

Sunrun acquires customers directly and through relationships with various solar and strategic partners ("Partners"). The Projects are constructed either by Sunrun or by Sunrun’s Partners and are owned by the Company. Sunrun’s customers enter into an agreement to utilize the solar energy system ("Customer Agreement") which typically has an initial term of 20 or 25 years. Sunrun monitors, maintains and insures the Projects. The Company also sells solar energy systems and products, such as panels and racking and solar leads generated to customers.

The Company has formed various subsidiaries ("Funds") to finance the development of Projects. These Funds, structured as limited liability companies, obtain financing from outside investors and purchase or lease Projects from Sunrun under master purchase or master lease agreements. The Company currently utilizes three legal structures in its investment Funds, which are referred to as: (i) pass-through financing obligations, (ii) partnership-flips and (iii) joint venture ("JV") inverted leases.

Note 2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and reflect the accounts and operations of the Company and those of its subsidiaries, including Funds, in which the Company has a controlling financial interest. Beginning October 8, 2020, the Company’s consolidated subsidiaries also included Vivint Solar, Inc. ("Vivint Solar"). The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity. However, a controlling financial interest may also exist in entities, such as variable interest entities ("VIEs"), through arrangements that do not involve controlling voting interests. In accordance with the provisions of Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 810 ("ASC 810") Consolidation, the Company consolidates any VIE of which it is the primary beneficiary. The primary beneficiary, as defined in ASC 810, is the party that has (1) the power to direct the activities of a VIE that most significantly impact the VIE’s economic performance and (2) the obligation to absorb the losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. The Company evaluates its relationships with its VIEs on an ongoing basis to determine whether it continues to be the primary beneficiary. The consolidated financial statements reflect the assets and liabilities of VIEs that are consolidated. All intercompany transactions and balances have been eliminated in consolidation.

Reclassifications

Certain prior period amounts have been reclassified to conform to current period presentation.

Use of Estimates

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. The Company regularly makes estimates and assumptions, including, but not limited to, revenue recognition constraints that result in variable consideration, the discount rate used to adjust the promised amount of consideration for the effects of a significant financing component, the estimates that affect the collectability of accounts receivable, the valuation of inventories, the useful lives of solar energy systems, the useful lives of property and equipment, the valuation and useful lives of intangible assets, the effective interest rate used to amortize pass-through financing obligations, the discount rate used for operating and financing leases, the valuation of stock-based compensation, the determination of valuation allowances associated with deferred tax assets, the fair value of debt instruments disclosed and the redemption value of redeemable noncontrolling interests. The Company bases its estimates on historical experience and on various other assumptions believed to be reasonable. Actual results may differ from such estimates.
Segment Information

The Company has one operating segment with one business activity, providing solar energy services and products to customers. The Company’s chief operating decision maker (“CODM”) is its Chief Executive Officer, who manages operations on a consolidated basis for purposes of allocating resources. When evaluating performance and allocating resources, the CODM reviews financial information presented on a consolidated basis.

Revenue from external customers (including, but not limited to homeowners) for each group of similar products and services is as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
</tr>
<tr>
<td>Customer agreements</td>
<td>$872,298</td>
</tr>
<tr>
<td>Incentives</td>
<td>110,749</td>
</tr>
<tr>
<td><strong>Customer agreements and incentives</strong></td>
<td><strong>983,047</strong></td>
</tr>
<tr>
<td>Solar energy systems</td>
<td>913,904</td>
</tr>
<tr>
<td>Products</td>
<td>424,471</td>
</tr>
<tr>
<td><strong>Solar energy systems and product sales</strong></td>
<td><strong>1,338,375</strong></td>
</tr>
<tr>
<td>Total revenue</td>
<td>$2,321,422</td>
</tr>
</tbody>
</table>

Revenue from Customer Agreements includes payments by customers for the use of the system as well as utility and other rebates assigned by the customer to the Company in the Customer Agreement. Revenue from incentives includes revenue from the sale of commercial investment tax credits (“Commercial ITCs”) and solar renewable energy credits (“SRECs”).

Cash and Restricted Cash

Cash consists of bank deposits held in checking and savings accounts. The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The Company has exposure to credit risk to the extent cash balances exceed amounts covered by federal deposit insurance. The Company believes that its credit risk is not significant.

Restricted cash represents amounts related to obligations under certain financing transactions and future replacement of solar energy system components.

The following table provides a reconciliation of cash and restricted cash reported within the consolidated balance sheets that sum to the total of the same such amounts shown in the consolidated statement of cash flows. Cash and restricted cash consists of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
</tr>
<tr>
<td>Cash</td>
<td>$740,508</td>
</tr>
<tr>
<td>Restricted cash, current and long-term</td>
<td>212,515</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$953,023</strong></td>
</tr>
</tbody>
</table>

Accounts Receivable

Accounts receivable consist of amounts due from customers as well as state and utility rebates due from government agencies and utility companies. Under Customer Agreements, the customers typically assign incentive rebates to the Company.

Accounts receivable are recorded at net realizable value. The Company maintains allowances for the applicable portion of receivables using the expected credit loss model. The Company estimates expected credit losses from doubtful accounts based upon the expected collectability of all accounts receivables, which takes into account the number of days past due, collection history, identification of specific customer exposure, current
economic trends, and management’s expectation of future economic conditions. Once a receivable is deemed to be uncollectible, it is written off. In 2022, 2021 and 2020, the Company recorded provisions for credit losses of $17.0 million, $11.7 million and $7.2 million, respectively, and wrote-off uncollectible receivables of $10.3 million, $5.6 million and $5.4 million, respectively.

Accounts receivable, net consists of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer receivables</td>
<td>$218,712</td>
<td>$147,371</td>
</tr>
<tr>
<td>Other receivables</td>
<td>8,924</td>
<td>9,701</td>
</tr>
<tr>
<td>Allowance for credit losses</td>
<td>(13,381)</td>
<td>(11,035)</td>
</tr>
<tr>
<td>Total</td>
<td>$214,255</td>
<td>$146,037</td>
</tr>
</tbody>
</table>

Inventories

Inventories are stated at the lower of cost or net realizable value on a first-in, first-out basis. Inventories consist of raw materials such as photovoltaic panels, inverters and mounting hardware as well as miscellaneous electrical components that are sold as-is by the distribution operations and used in installations and work-in-process. Work-in-process primarily relates to solar energy systems that will be sold to customers, which are partially installed and have yet to meet the criteria for revenue recognition. For solar energy systems where the Company performs the installation, the Company commences transferring component parts from inventories to construction-in-progress, a component of solar energy systems, once a lease contract with a lease customer has been executed and the component parts have been assigned to a specific project. Additional costs incurred including labor and overhead are recorded within construction in progress.

The Company periodically reviews inventories for unusable and obsolete items based on assumptions about future demand and market conditions. Based on this evaluation, provisions are made to write inventories down to their market value.

Solar Energy Systems, net

The Company records solar energy systems subject to signed Customer Agreements and solar energy systems that are under installation as solar energy systems, net on its consolidated balance sheet. Solar energy systems, net is comprised of system equipment costs related to solar energy systems, less accumulated depreciation and amortization. Depreciation on solar energy systems is calculated on a straight-line basis over the estimated useful lives of the systems of 35 years. The Company periodically reviews its estimated useful life and recognizes changes in estimates by prospectively adjusting depreciation expense. Inverters and batteries are depreciated over their estimated useful life of 10 to 13 years.

Solar energy systems under construction will be depreciated as solar energy systems subject to signed Customer Agreements when the respective systems are completed and interconnected.

Property and Equipment, net

Property and equipment, net consists of leasehold improvements, furniture, computer hardware and software, machinery and equipment and automobiles. All property and equipment are stated at historical cost net of accumulated depreciation. Repairs and maintenance are expensed as incurred.
Property and equipment is depreciated on a straight-line basis over the following periods:

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Depreciation Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leasehold improvements</td>
<td>Lesser of 6 years or lease term</td>
</tr>
<tr>
<td>Furniture</td>
<td>5 years</td>
</tr>
<tr>
<td>Computer hardware and software</td>
<td>3 years</td>
</tr>
<tr>
<td>Machinery and equipment</td>
<td>5 years or lease term</td>
</tr>
<tr>
<td>Automobiles</td>
<td>Lease term</td>
</tr>
</tbody>
</table>

**Capitalization of Software Costs**

For costs incurred in the development of internal use software, the Company capitalizes costs incurred during the application development stage. Costs related to preliminary project activities and post implementation activities are expensed as incurred. Internal use software is amortized on a straight-line basis over its estimated useful life of 3 years. Costs of $10.0 million, $6.2 million and $2.0 million were capitalized in 2022, 2021 and 2020, respectively.

**Intangible Assets, net**

Finite-lived intangible assets are initially recorded at fair value and are subsequently presented net of accumulated amortization. Intangible assets are amortized on a straight-line basis over their estimated useful lives as follows:

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Amortization Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer relationships</td>
<td>5 - 10 years</td>
</tr>
<tr>
<td>Trade names</td>
<td>5 - 8 years</td>
</tr>
</tbody>
</table>

**Impairment of Long-Lived Assets**

The carrying amounts of the Company’s long-lived assets, including solar energy systems and intangible assets subject to depreciation and amortization, are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful life is shorter than originally estimated. Factors that are considered in deciding when to perform an impairment review would include significant negative industry or economic trends and significant changes or planned changes in the use of the assets. Recoverability of these assets is measured by comparison of the carrying amount of each asset group to the future undiscounted cash flows the asset group is expected to generate over its remaining life. If the asset group is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset group. If the useful life is shorter than originally estimated, the Company amortizes the remaining carrying value over the new shorter useful life. The Company has recognized no material impairments of its long-lived assets in any of the periods presented.

**Goodwill**

Goodwill represents the excess of the purchase price over the fair value of assets acquired and liabilities assumed. Goodwill is reviewed for impairment at least annually or whenever events or changes in circumstances indicate that the carrying value of goodwill may be impaired. The Company has determined that it operates as one reporting unit and the Company’s goodwill is recorded at the enterprise level. The Company performs its annual impairment test of goodwill on October 1 of each fiscal year or whenever events or circumstances change or occur that would indicate that goodwill might be impaired. When assessing goodwill for impairment, the Company uses qualitative and if necessary, quantitative methods in accordance with FASB ASC Topic 350, Goodwill. The Company also considers its enterprise value and if necessary, discounted cash flow model, which involves assumptions and estimates, including the Company’s future financial performance, weighted average cost of capital and interpretation of currently enacted tax laws.
Circumstances that could indicate impairment and require the Company to perform a quantitative impairment test include significant declines in the Company’s financial results or enterprise value relative to its net book value or a sustained decline in the Company’s stock price below its book value, coupled with declines in valuations for comparable public companies or acquisition premiums. As of October 1, 2022, the Company concluded that the fair value of the Company exceeded its carrying value. Since December 31, 2021, the trading price of the Company’s common stock has generally declined. A sustained decrease in the Company’s stock price is one of the qualitative factors to be considered as part of an impairment test when evaluating whether events or changes in circumstances may indicate that it is more likely than not that a potential goodwill impairment exists. The Company will continue monitoring the analysis of the qualitative and quantitative factors used as a basis for the goodwill impairment test during fiscal year 2023.

Deferred Revenue

When the Company receives consideration, or when such consideration is unconditionally due, from a customer prior to delivering goods or services to the customer under the terms of a Customer Agreement, the Company records deferred revenue. Such deferred revenue consists of amounts for which the criteria for revenue recognition have not yet been met and includes amounts that are collected or assigned from customers, including upfront deposits and prepayments, and rebates. Deferred revenue relating to financing components represents the cumulative excess of interest expense recorded on financing component elements over the related revenue recognized to date and will eventually net to zero by the end of the initial term. Amounts received related to the sales of SRECs which have not yet been delivered to the counterparty are recorded as deferred revenue.

The opening balance of deferred revenue was $799.3 million as of December 31, 2020. Deferred revenue consists of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Under Customer Agreements:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments received, net</td>
<td>$840,771</td>
<td>$645,439</td>
</tr>
<tr>
<td>Financing component balance</td>
<td>65,326</td>
<td>58,517</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$906,097</td>
<td>$703,956</td>
</tr>
<tr>
<td><strong>Under SREC contracts:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments received, net</td>
<td>179,416</td>
<td>161,575</td>
</tr>
<tr>
<td>Financing component balance</td>
<td>10,460</td>
<td>8,080</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$189,876</td>
<td>$169,655</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$1,095,973</td>
<td>$873,611</td>
</tr>
</tbody>
</table>

During the years ended December 31, 2022, 2021 and 2020, the Company recognized revenue of $99.0 million, $86.3 million and $80.3 million, respectively, from amounts included in deferred revenue at the beginning of the respective periods. Revenue allocated to remaining performance obligations represents contracted revenue that has not yet been recognized and includes deferred revenue as well as amounts that will be invoiced and recognized as revenue in future periods. Contracted but not yet recognized revenue was approximately $19.1 billion as of December 31, 2022, of which the Company expects to recognize approximately 5% over the next 12 months. The annual recognition is not expected to vary significantly over the next 10 years as the vast majority of existing Customer Agreements have at least 10 years remaining, given that the average age of the Company’s fleet of residential solar energy systems under Customer Agreements is less than five years due to the Company being formed in 2007 and having experienced significant growth in the last few years. The annual recognition on these existing contracts will gradually decline over the midpoint of the Customer Agreements over the following 10 years as the typical 20- or 25-year initial term expires on individual Customer Agreements.
Deferred Grants
Deferred grants consist of U.S. Treasury grants and state tax credits. The Company applied for a renewable energy technologies income tax credit offered by one of the states in the form of a cash payment and deferred the tax credit as a grant on the consolidated balance sheets. The Company records the grants as deferred grants and recognizes the benefit on a straight-line basis over the estimated depreciable life of the associated assets as a reduction in Cost of customer agreements and incentives.

Warranty Accrual
The Company accrues warranty costs when revenue is recognized for solar energy systems sales, based on the estimated future costs of meeting its warranty obligations. Warranty costs primarily consist of replacement costs for supplies and labor costs for service personnel since warranties for equipment and materials are covered by the original manufacturer’s warranty (other than a small deductible in certain cases). As such, the warranty reserve is immaterial in all periods presented. The Company makes and revises these estimates based on the number of solar energy systems under warranty, the Company’s historical experience with warranty claims, assumptions on warranty claims to occur over a systems’ warranty period and the Company’s estimated replacement costs. A warranty is provided for solar systems sold and leased. However, for the solar energy systems under Customer Agreements, the Company does not accrue a warranty liability because those systems are owned by consolidated subsidiaries of the Company. Instead, any repair costs on those solar energy systems are expensed when they are incurred as a component of customer agreements and incentives costs of revenue.

Solar Energy Performance Guarantees
The Company guarantees to customers certain specified minimum solar energy production output for solar facilities over the initial term of the Customer Agreements. The Company monitors the solar energy systems to determine whether these specified minimum outputs are being achieved. Annually or every two years, depending on the terms of the Customer Agreement, the Company will refund a portion of electricity payments to a customer if his or her solar energy production output was less than the performance guarantee. The Company considers this a variable component that offsets the transaction price.

Derivative Financial Instruments
The Company recognizes all derivative instruments on the balance sheet at their fair value. Changes in the fair value of derivatives are recorded each period in current earnings or other comprehensive income if a derivative is designated as part of a hedge transaction. The ineffective portion of the hedge, if any, is immediately recognized in earnings and are included in other income (expenses), net in the consolidated statements of operations.

The Company uses derivative financial instruments, primarily interest rate swaps, to manage its exposure to interest rate risks on its syndicated term loans, which are recognized on the balance sheet at their fair values. On the date that the Company enters into a derivative contract, the Company formally documents all relationships between the hedging instruments and the hedged items, as well as its risk management objective and strategy for undertaking each hedge transaction. Derivative instruments designated in a hedge relationship to mitigate exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Cash flow hedges are accounted for by recording the fair value of the derivative instrument on the balance sheet as either a freestanding asset or liability. Changes in the fair value of a derivative that is designated and qualifies as an effective cash flow hedge are recorded in accumulated other comprehensive loss, net of tax, until earnings are affected by the variability of cash flows of the hedged item. Any derivative gains and losses that are not effective in hedging the variability of expected cash flows of the hedged item or that do not qualify for hedge accounting treatment are recognized directly into income. At the hedge’s inception and at least quarterly thereafter, a formal assessment is performed to determine whether changes in cash flows of the derivative instrument have been highly effective in offsetting changes in the cash flows of the hedged item and whether they are expected to be highly effective in the future. The Company discontinues hedge accounting prospectively when (i) it determines that the derivative is no longer effective in offsetting changes in the cash flows of a hedged item; (ii) the derivative expires or is sold, terminated, or exercised; or (iii) management determines that designating the derivative as a hedging instrument is no longer appropriate. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the derivative instrument is carried at its fair market value on the balance sheet with the changes in fair value recognized in current period earnings. The remaining balance in accumulated other
comprehensive income associated with the derivative that has been discontinued is not recognized in the income statement unless it is probable that the forecasted transaction will not occur. Such amounts are recognized in earnings when earnings are affected by the hedged transaction.

**Fair Value of Financial Instruments**

The Company defines fair value as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Company uses valuation approaches to measure fair value that maximize the use of observable inputs and minimize the use of unobservable inputs. The FASB establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

- **Level 1**—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;
- **Level 2**—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and
- **Level 3**—Inputs that are unobservable, significant to the measurement of the fair value of the assets or liabilities and are supported by little or no market data.

The Company's financial instruments include cash, receivables, accounts payable, accrued expenses, distributions payable to noncontrolling interests, derivatives, contingent consideration, and recourse and non-recourse debt.

**Revenue Recognition**

The Company recognizes revenue when control of goods or services is transferred to its customers, in an amount that reflects the consideration it expects to be entitled to in exchange for those goods or services.

**Customer agreements and incentives**

Customer agreements and incentives revenue is primarily comprised of revenue from Customer Agreements in which the Company provides continuous access to a functioning solar energy system and revenue from the sales of SRECs generated by the Company’s solar energy systems to third parties.

The Company begins to recognize revenue on Customer Agreements when permission to operate ("PTO") is given by the local utility company or on the date daily operation commences if utility approval is not required. Revenue recognition does not necessarily follow the receipt of cash. For Customer Agreements that include a fixed fee per month which entitles the customer to any and all electricity generated by the system, and for which the Company’s obligation is to provide continuous access to a functioning solar energy system, the Company recognizes revenue evenly over the time that it satisfies its performance obligations, which is over the initial term of the Customer Agreements. For Customer Agreements that charge a fixed price per kilowatt hour, and for which the Company’s obligation is the provision of electricity from a solar energy system, revenue is recognized based on the actual amount of power generated at rates specified under the contracts. Customer Agreements typically have an initial term of 20 or 25 years. After the initial contract term, Customer Agreements typically automatically renew annually or for five years.

SREC revenue arises from the sale of environmental credits generated by solar energy systems and is generally recognized upon delivery of the SRECs to the counterparty or upon reporting of the electricity generation. For pass-through financing obligation Funds, the value attributable to the monetization of Commercial ITCs are recognized in the period a solar energy system is granted PTO - see Note 13, *Pass-through Financing Obligations*.

In determining the transaction price, the Company adjusts the promised amount of consideration for the effects of the time value of money when the timing of payments provides it with a significant benefit of financing the transfer of goods or services to the customer. In those circumstances, the contract contains a significant financing component. When adjusting the promised amount of consideration for a significant financing component, the
Company uses the discount rate that would be reflected in a separate financing transaction between the entity and its customer at contract inception and recognizes the revenue amount on a straight-line basis over the term of the Customer Agreement, and interest expense using the effective interest rate method.

Consideration from customers is considered variable due to the performance guarantee under Customer Agreements and liquidating damage provisions under SREC contracts in the event minimum deliveries are not achieved. Performance guarantees provide a credit to the customer if the system's cumulative production, as measured on various PTO anniversary dates, is below the Company’s guarantee of a specified minimum. Revenue is recognized to the extent it is probable that a significant reversal of such revenue will not occur.

The Company capitalizes incremental costs incurred to obtain a contract in Other Assets in the consolidated balance sheets. These amounts are amortized on a straight-line basis over the term of the Customer Agreements, and are included in Sales and marketing in the consolidated statements of operations.

**Solar energy systems and product sales**

For solar energy systems sold to customers, revenue is recognized when the solar energy system passes inspection by the authority having jurisdiction, which inspection generally occurs after installation but prior to PTO, at which time the Company has met the performance obligation in the contract. For solar energy system sales that include delivery obligations up until interconnection to the local power grid with permission to operate, the Company recognizes revenue at PTO. Certain solar energy systems sold to customers include fees for extended warranty and maintenance services. These fees are recognized over the life of the service agreement. The Company’s installation Projects are typically completed in less than twelve months.

Product sales consist of solar panels, racking systems, inverters, other solar energy products sold to resellers, roofing repair, and customer leads. Product sales revenue is recognized at the time when control is transferred, upon shipment, or as services are delivered. Customer lead revenue, included in product sales, is recognized at the time the lead is delivered.

Taxes assessed by government authorities that are directly imposed on revenue producing transactions are excluded from solar energy systems and product sales.

**Cost of Revenue**

**Customer agreements and incentives**

Cost of revenue for customer agreements and incentives is primarily comprised of (1) the depreciation of the cost of the solar energy systems, as reduced by amortization of deferred grants, (2) solar energy system operations, monitoring and maintenance costs including associated personnel costs, and (3) allocated corporate overhead costs.

**Solar energy systems and product sales**

Cost of revenue for solar energy systems and non-lead generation product sales consist of direct and indirect material and labor costs for solar energy systems installations and product sales. Also included are engineering and design costs, estimated warranty costs, freight costs, allocated corporate overhead costs, vehicle depreciation costs and personnel costs associated with supply chain, logistics, operations management, safety and quality control. Cost of revenue for lead generations consists of costs related to direct-response advertising activities associated with generating customer leads.

**Research and Development Expense**

Research and development expenses include personnel costs, allocated overhead costs, and other costs related to the development of the Company’s proprietary technology.
Stock-Based Compensation

The Company grants stock options and restricted stock units ("RSUs") for its equity incentive plan and employee stock purchase plan. Stock-based compensation to employees is measured based on the grant date fair value of the awards and recognized over the period during which the employee is required to perform services in exchange for the award (generally the vesting period of the award). When determining the grant date fair value of stock-based compensation, the Company utilizes the observable closing share price of its stock on the grant date. The Company considers whether any adjustments are needed to the share price to reflect fair value, including in instances where the observable market price does not reflect certain material non-public information known to the Company, but unavailable to marketplace participants at the time the market price is observed. No such adjustments were made during the years ended December 31, 2022, 2021, and 2020. The Company estimates the fair value of stock options and employee stock purchase plans awards granted using the Black-Scholes option-valuation model. Upon completion of the acquisition of Vivint Solar, all outstanding equity awards under Vivint Solar’s equity incentive plans were automatically converted to Sunrun equity awards with the number of shares underlying such awards (and, in the case of stock options, the applicable exercise price) adjusted based on the exchange ratio of \[ \frac{0.55}{1} \] shares of Sunrun common stock per share of Vivint Solar common stock and the fair value was also updated in accordance with ASC 718, Stock Compensation. Compensation cost is recognized over the vesting period of the applicable award using the straight-line method for those options expected to vest. For performance-based equity compensation awards, the Company generally recognizes compensation expense for each vesting tranche over the related performance period.

The Company also grants RSUs to non-employees that vest upon the satisfaction of both performance and service conditions. For RSUs granted to non-employees that vest upon the satisfaction of a performance condition, the Company starts recognizing expense on the RSUs when the performance condition is met.

Net Income (Loss) Per Share

Basic net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted-average number of common shares outstanding during the period adjusted to include the effect of potentially dilutive securities. Potentially dilutive securities are excluded from the computation of dilutive EPS in periods in which the effect would be antidilutive.

Noncontrolling Interests and Redeemable Noncontrolling Interests

Noncontrolling interests represent investors’ interests in the net assets of the Funds that the Company has created to finance the cost of its solar energy systems subject to the Company’s Customer Agreements. The Company has determined that the contractual provisions in the funding arrangements represent substantive profit sharing arrangements. The Company has further determined that the appropriate methodology for attributing income and loss to the noncontrolling interests and redeemable noncontrolling interests each period is a balance sheet approach referred to as the hypothetical liquidation at book value ("HLBV") method.

Under the HLBV method, the amounts of income and loss attributed to the noncontrolling interests and redeemable noncontrolling interests in the consolidated statements of operations reflect changes in the amounts the investors would hypothetically receive at each balance sheet date under the liquidation provisions of the contractual agreements of these arrangements, which are based on the investors’ tax capital accounts, assuming the net assets of these funding structures were liquidated at recorded amounts. The Company’s initial calculation of the investor’s noncontrolling interest in the results of operations of these funding arrangements is determined as the difference in the noncontrolling interests’ claim under the HLBV method at the start and end of each reporting period, after taking into account any capital transactions, such as contributions or distributions, between the Fund and the investors.

The Company classifies certain noncontrolling interests with redemption features that are not solely within the control of the Company outside of permanent equity on its consolidated balance sheets. Redeemable noncontrolling interests are reported using the greater of their carrying value as determined by the HLBV method or their estimated redemption value at each reporting date.
Income Taxes

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements and tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are provided against deferred tax assets to the extent that it is more likely than not that the deferred tax asset will not be realized. The Company is subject to the provisions of ASC 740, Income Taxes, which establishes consistent thresholds as it relates to accounting for income taxes. It defines the threshold for recognizing the benefits of tax return positions in the financial statements as “more likely than not” to be sustained by the taxing authority and requires measurement of a tax position meeting the more-likely-than-not criterion, based on the largest benefit that is more than 50% likely to be realized. Management has analyzed the Company’s inventory of tax positions with respect to all applicable income tax issues for all open tax years (in each respective jurisdiction).

The Company sells solar energy systems to the Funds. As the Funds are consolidated by the Company, the gain on the sale of the solar energy systems is not recognized in the consolidated financial statements. However, this gain is recognized for tax reporting purposes. The Company accounts for the income tax consequences of these intra-entity transfers, both current and deferred, as a component of income tax expense and deferred tax liability, net during the period in which the transfers occur.

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal, state and local jurisdictions, where applicable. The statute of limitations for the tax returns varies by jurisdiction.

Concentrations of Risk

Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of cash and accounts receivable, which includes rebates receivable. The associated risk of concentration for cash is mitigated by banking with institutions with high credit ratings. At certain times, amounts on deposit exceed Federal Deposit Insurance Corporation insurance limits. The Company does not require collateral or other security to support accounts receivable. To reduce credit risk, management performs periodic credit evaluations and ongoing evaluations of its customers’ financial condition. Rebates receivable are due from various states and local governments as well as various utility companies. The Company considers the collectability risk of such amounts to be low. The Company is not dependent on any single customer. The Company’s customers under Customer Agreements are primarily located in California, Arizona, New Jersey, New York, Maryland and Massachusetts. The loss of a customer would not adversely impact the Company’s operating results or financial position. The Company depends on a limited number of suppliers of solar panels and other system components. During the years ended December 31, 2022 and 2021, the solar materials purchases from the top five suppliers were approximately $747.1 million and $627.7 million, respectively.

Recently Issued and Adopted Accounting Standards

Accounting standards adopted January 1, 2020:

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, which replaces the current incurred loss impairment methodology with a current expected credit losses model. The amendment applies to entities that hold financial assets and net investment in leases that are not accounted for at fair value through net income as well as loans, debt securities, trade receivables, net investments in leases, off-balance sheet credit exposures, reinsurance receivables and any other financial assets not excluded from the scope that have the contractual right to receive cash. The Company adopted ASU No. 2016-13 effective January 1, 2020, using a modified retrospective transition method, which resulted in a cumulative-effect adjustment of $1.2 million for the establishment of a credit loss allowance for unbilled receivables related to Customer Agreements, as reflected in its consolidated statement of redeemable noncontrolling interests and stockholders’ equity.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement, which modifies the disclosure
requirements on fair value measurements as part of its disclosure framework project. Under this amendment, entities will no longer be required to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy. However, for Level 3 fair value measurements, disclosures around the range and weighted average used to develop significant unobservable inputs will be required. The Company adopted ASU No. 2018-13 effective January 1, 2020, and there was no impact to its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract, which requires a customer in a cloud computing arrangement that is a service contract to follow the internal-use software guidance in Topic 350, Intangibles—Goodwill and Other, to determine which implementation costs to capitalize as assets or expense as incurred. This ASU is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019, and can be applied either prospectively to implementation costs incurred after the date of adoption or retrospectively to all arrangements. The Company prospectively adopted ASU No. 2018-15 effective January 1, 2020, and there was no adoption date impact to its consolidated financial statements.

In October 2018, the FASB issued ASU No. 2018-17, Consolidation (Topic 810), Targeted Improvements to Related Party Guidance for Variable Interest Entities, which aligns the evaluation of decision-making fees under the variable interest entity guidance. Under this new guidance, in order to determine whether decision-making fees represent a variable interest, an entity considers indirect interests held through related parties under common control on a proportionate basis. This ASU is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019, and must be applied retrospectively with a cumulative-effect adjustment to retained earnings at the beginning of the earliest period presented. The Company adopted ASU No. 2018-17 effective January 1, 2020, and there was no impact to its consolidated financial statements.

Accounting standards adopted January 1, 2021:

In January 2021, the FASB issued ASU No. 2021-01, Reference Rate Reform (Topic 848): Scope, which permits entities to elect certain optional expedients and exceptions when accounting for derivative contracts and certain hedging relationships affected by reference rate reform. This ASU is effective upon issuance and can generally be applied through December 31, 2022. The Company adopted ASU 2019-12 effective January 1, 2021, and there was no impact to its consolidated financial statements.

In November 2019, the FASB issued ASU No. 2019-12, Income Taxes (Topic 740), which simplifies the accounting for income taxes, primarily by eliminating certain exceptions to the guidance in ASC 740. The Company adopted ASU 2019-12 effective January 1, 2021, and there was no impact to its consolidated financial statements.

In August 2020, the FASB issued ASU No. 2020-06, Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity’s Own Equity (Subtopic 815-40), simplifies the accounting for convertible instruments and the application of the derivatives scope exception for contracts in an entity’s own equity. This ASU is effective for fiscal periods beginning after December 15, 2021. The Company adopted ASU 2020-06 effective January 1, 2021, and applied this guidance to the convertible senior notes issued in January 2021, see Note 8 Indebtedness, which allowed the Company to account for the notes and their underlying conversion feature as a liability. There was no other impact to the Company’s consolidated financial statements as a result of this adoption.

In March 2020, the FASB issued ASU No. 2020-04, Reference Rate Reform (Topic 848), Facilitation of the Effects of Reference Rate Reform on Financial Reporting, which provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The amendments apply only to contracts, hedging relationships, and other transactions that reference LIBOR or other reference rates that are expected to be discontinued because of reference rate reform. This ASU is available for adoption as of the beginning of the interim period that includes March 12, 2020 through December 31, 2022, as contract modifications or hedging relationships entered into or evaluated after December 31, 2022 are excluded unless an entity has elected certain optional expedients for and that are retained through the end of the hedging relationship. In December 2022, the FASB issued ASU 2022-06, Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848, which defers the sunset date from December 31, 2022 to December 31, 2024, after which entities will no longer be permitted to apply the relief in Topic 848. For the Company’s cash flow hedges in which the designated hedged risk is LIBOR or another rate that is expected to be discontinued, the
Company adopted upon issuance of ASU 2020-04 the portion of the guidance that allows it to assert that it remains probable that the hedged forecasted transaction will occur. The Company adopted the remainder of this guidance effective January 1, 2021, and there was no impact to its consolidated financial statements.

Accounting standards adopted January 1, 2022:

In October 2021, the FASB issued ASU No. 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, which requires contract assets and contract liabilities acquired in a business combination to be recognized and measured in accordance with ASC Topic 606, Revenue from Contracts with Customers. This ASU is effective for interim and annual periods beginning after December 15, 2022 on a prospective basis, with early adoption permitted. Effective January 1, 2022, the Company early adopted ASU 2021-08 on a prospective basis. There was no impact to its consolidated financial statements.

In May 2021, the FASB issued ASU No. 2021-04, Earnings Per Share (Topic 260), Debt— Modifications and Extinguishments (Subtopic 470-50), Compensation—Stock Compensation (Topic 718), and Derivatives and Hedging— Contracts in Entity’s Own Equity (Subtopic 815-40), which requires issuers to account for modifications or exchanges of freestanding equity-classified written call options that remain equity classified after the modification or exchange based on the economic substance of the modification or exchange. The Company adopted ASU 2021-04 effective January 1, 2022, and there was no impact to its consolidated financial statements.

Accounting standards to be adopted:

In October 2022, the FASB issued ASU No. 2022-04, Liabilities — Supplier Finance Programs (Subtopic 405-50): Disclosure of Supplier Finance Program Obligations, which requires entities to disclose the key terms of supplier finance programs they use in connection with the purchase of goods and services along with information about their obligations under these programs, including a rollforward of those obligations. This ASU is effective for fiscal periods beginning after December 15, 2022, with early adoption permitted. The Company is currently evaluating this guidance and the impact it may have on its financial statement disclosures.

Note 3. Acquisitions

Vivint Solar, Inc.

On October 8, 2020, the Company acquired Vivint Solar, a leading full-service residential solar provider in the United States, at an estimated purchase price of $5.0 billion, pursuant to an Agreement and Plan of Merger, dated as of July 6, 2020, by and among the Company, Vivint Solar and Viking Merger Sub, Inc., a Delaware corporation and direct wholly owned subsidiary of the Company ("Merger Sub"), pursuant to which Merger Sub merged with and into Vivint Solar, with Vivint Solar continuing as the surviving corporation (the "Merger"). As a result of the Merger, Vivint Solar became a direct wholly owned subsidiary of the Company.

The calculation of the purchase price is as follows (in thousands, except for share, per share and ratio amounts):

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vivint Solar outstanding common stock at October 8, 2020</td>
<td>126,313,816</td>
</tr>
<tr>
<td>Exchange ratio</td>
<td>0.55</td>
</tr>
<tr>
<td>Number of Sunrun shares issued</td>
<td>69,472,599</td>
</tr>
<tr>
<td>Per share price of Sunrun common stock at October 8, 2020</td>
<td>$70.54</td>
</tr>
<tr>
<td>Fair value of Vivint Solar common stock issued</td>
<td>4,900,597</td>
</tr>
<tr>
<td>Fair value of replacement Sunrun stock options and restricted stock units</td>
<td>136,919</td>
</tr>
<tr>
<td>Purchase price</td>
<td>$5,037,516</td>
</tr>
</tbody>
</table>

Transaction costs of $25.5 million were expensed as incurred in general and administrative expense in the Company’s consolidated statements of operations.
The results of Vivint Solar have been included in the Company's consolidated financial statements since the acquisition date. For the year ended December 31, 2020, the revenue and net loss from Vivint Solar recognized in the Company's consolidated statement of operations were $81.3 million and $167.7 million, respectively.

Fair values assigned to assets acquired and liabilities assumed are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. The judgments used to determine the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives and the expected future cash flows and related discount rates, can materially impact the Company's results of operations. Specifically, the Company used discounted cash flow models to value the solar energy systems and the noncontrolling interests in subsidiaries. Inputs used for the models were Level 3 inputs and included the amount of cash flows, the expected period of the cash flows and the discount rates. The fair value of the assumed debt instruments was based on rates offered for debt with similar maturities and terms on October 8, 2020 and its fair value fell under the Level 2 hierarchy.
The fair value of the assets acquired and liabilities assumed was finalized during 2021 and resulted in no additional adjustments. The following table sets forth the purchase accounting for Vivint Solar’s identifiable tangible and intangible assets acquired and liabilities assumed, with the excess recorded as goodwill (in thousands):

### Assets acquired:

<table>
<thead>
<tr>
<th>Asset Category</th>
<th>Amount (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$433,217</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>29,207</td>
</tr>
<tr>
<td>Inventories</td>
<td>70,028</td>
</tr>
<tr>
<td>Solar energy systems</td>
<td>$2,979,304</td>
</tr>
<tr>
<td>Property and equipment</td>
<td>19,308</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>3,900</td>
</tr>
<tr>
<td>Restricted cash, current and non-current</td>
<td>104,025</td>
</tr>
<tr>
<td>Prepaid expenses and other assets, current and non-current</td>
<td>110,402</td>
</tr>
<tr>
<td><strong>Total assets acquired</strong></td>
<td><strong>3,749,391</strong></td>
</tr>
</tbody>
</table>

### Liabilities assumed:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Amount (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued liabilities, accounts payable and distributions payable</td>
<td>177,092</td>
</tr>
<tr>
<td>Finance lease obligations, current and non-current</td>
<td>8,408</td>
</tr>
<tr>
<td>Deferred revenue, current and long-term</td>
<td>32,604</td>
</tr>
<tr>
<td>Debt, current and long-term</td>
<td>$2,191,831</td>
</tr>
<tr>
<td>Pass-through financing obligation, current and non-current</td>
<td>4,759</td>
</tr>
<tr>
<td>Long-term deferred tax liability</td>
<td>92,792</td>
</tr>
<tr>
<td>Other long-term liabilities</td>
<td>101,764</td>
</tr>
<tr>
<td><strong>Total liabilities assumed</strong></td>
<td><strong>2,609,250</strong></td>
</tr>
<tr>
<td><strong>Net assets acquired, excluding goodwill</strong></td>
<td><strong>1,140,141</strong></td>
</tr>
</tbody>
</table>

| Redeemable non-controlling interests in subsidiaries | 58,300                 |
| Non-controlling interests in subsidiaries           | 229,400                |
| **Total other**                                     | **287,700**            |
| **Total purchase price**                            | **5,037,516**          |
| **Goodwill**                                        | **$4,185,075**         |

Goodwill represents a significant portion of the purchase price for Vivint Solar and is primarily attributable to the acquired assembled workforce and expected synergies from combining operations. Goodwill is not expected to be deductible for tax purposes.

The following table shows selected unaudited pro forma condensed combined total revenue and earnings of the Company after giving effect to the Merger. The selected unaudited pro forma condensed combined total revenue and earnings for the twelve months ended December 31, 2020 and 2019 give effect to the Merger if it occurred on January 1, 2019, the first day of the Company’s 2019 fiscal year (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>$1,234,352</td>
<td>$1,198,759</td>
</tr>
<tr>
<td>Net loss</td>
<td>$(971,554)</td>
<td>$886,774</td>
</tr>
</tbody>
</table>
The unaudited pro forma financial information includes adjustments to give effect to pro forma events that are directly attributable to the acquisition. The pro forma financial information includes adjustments to amortization and depreciation for solar energy systems, share based compensation, the effect of acquisition on deferred costs and revenues and noncontrolling interests, and transaction costs related to the acquisition. The unaudited pro forma financial information is presented for illustrative purposes only and is not necessarily indicative of the results of operations of future periods. The unaudited pro forma financial information does not give effect to the potential impact of current financial conditions, regulatory matters, or any anticipated synergies, operating efficiencies, or cost savings that may be associated with the acquisition.

Note 4. Fair Value Measurement

At December 31, 2022 and 2021, the carrying value of receivables, accounts payable, accrued expenses and distributions payable to noncontrolling interests approximates fair value due to their short-term nature and falls under the Level 2 hierarchy. The carrying values and fair values of debt instruments are as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Carrying Value</td>
<td>Fair Value</td>
</tr>
<tr>
<td>Recourse debt</td>
<td>$898,040</td>
<td>$787,340</td>
</tr>
<tr>
<td>Senior debt</td>
<td>3,238,633</td>
<td>3,176,774</td>
</tr>
<tr>
<td>Subordinated debt</td>
<td>1,743,048</td>
<td>1,625,258</td>
</tr>
<tr>
<td>Securitization debt</td>
<td>2,519,428</td>
<td>2,169,247</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$8,399,149</strong></td>
<td><strong>$7,758,619</strong></td>
</tr>
</tbody>
</table>

At December 31, 2022 and 2021, the fair value of certain recourse debt and certain senior, subordinated and securitization loans approximate their carrying values because their interest rates are variable rates that approximate rates currently available to the Company. At December 31, 2022 and 2021, the fair value of the Company’s other debt instruments are based on rates currently offered for debt with similar maturities and terms. The Company’s fair value of the debt instruments fell under the Level 2 hierarchy. These valuation approaches involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market.

At December 31, 2022 and 2021, financial instruments measured at fair value on a recurring basis, based upon the fair value hierarchy are as follows (in thousands):

### Derivative assets:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate swaps</td>
<td>$177,827</td>
<td>$26,673</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$177,827</strong></td>
<td><strong>$26,673</strong></td>
</tr>
</tbody>
</table>

### Derivative liabilities:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate swaps</td>
<td>$8,247</td>
<td>$83,873</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$8,247</strong></td>
<td><strong>$83,873</strong></td>
</tr>
</tbody>
</table>

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The above balances are recorded in other assets and other liabilities, respectively, in the consolidated balance sheets, except for $55.0 million and nil as of December 31, 2022 and 2021, respectively, which is recorded in prepaid and other current assets and nil and $23.0 million as of December 31, 2022 and 2021, respectively, which is recorded in accrued expenses and other liabilities.

The Company determines the fair value of its interest rate swaps using a discounted cash flow model that incorporates an assessment of the risk of non-performance by the interest rate swap counterparty and an evaluation of the Company's credit risk in valuing derivative instruments. The valuation model uses various inputs including contractual terms, interest rate curves, credit spreads and measures of volatility.

**Note 5. Inventories**

Inventories consist of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
</tr>
<tr>
<td>Raw materials</td>
<td>$671,880</td>
</tr>
<tr>
<td>Work-in-process</td>
<td>$112,024</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$783,904</strong></td>
</tr>
</tbody>
</table>

**Note 6. Solar Energy Systems, net**

Solar energy systems, net consists of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
</tr>
<tr>
<td>Solar energy system equipment costs</td>
<td>$10,529,852</td>
</tr>
<tr>
<td>Inverters and batteries</td>
<td>1,384,776</td>
</tr>
<tr>
<td><strong>Total solar energy systems</strong></td>
<td>11,914,628</td>
</tr>
<tr>
<td>Less: accumulated depreciation and amortization</td>
<td>(1,682,296)</td>
</tr>
<tr>
<td><strong>Add: construction-in-progress</strong></td>
<td>756,029</td>
</tr>
<tr>
<td><strong>Total solar energy systems, net</strong></td>
<td>$10,988,361</td>
</tr>
</tbody>
</table>

All solar energy systems, including construction-in-progress, have been leased to or are subject to signed Customer Agreements with customers. The Company recorded depreciation expense related to solar energy systems of $426.7 million, $368.0 million and $225.9 million for the years ended December 31, 2022, 2021 and 2020, respectively. The depreciation expense was reduced by the amortization of deferred grants of $8.3 million, $8.3 million and $8.2 million for the years ended December 31, 2022, 2021 and 2020, respectively.
### Note 7. Property and Equipment, net

Property and equipment, net consists of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery and equipment</td>
<td>$11,742</td>
<td>$10,339</td>
</tr>
<tr>
<td>Leasehold improvements, furniture, and computer hardware</td>
<td>$44,547</td>
<td>$41,209</td>
</tr>
<tr>
<td>Vehicles</td>
<td>$94,821</td>
<td>$76,487</td>
</tr>
<tr>
<td>Computer software</td>
<td>$53,314</td>
<td>$43,552</td>
</tr>
<tr>
<td><strong>Total property and equipment</strong></td>
<td><strong>204,424</strong></td>
<td><strong>171,587</strong></td>
</tr>
<tr>
<td>Less: Accumulated depreciation and amortization</td>
<td>$(136,985)</td>
<td>$(114,701)</td>
</tr>
<tr>
<td><strong>Total property and equipment, net</strong></td>
<td><strong>$67,439</strong></td>
<td><strong>$56,886</strong></td>
</tr>
</tbody>
</table>

Depreciation and amortization expense was $27.2 million, $23.0 million and $20.0 million for the years ended December 31, 2022, 2021 and 2020, respectively.

### Note 8. Goodwill and Intangible Assets, net

The goodwill and intangible assets were acquired as part of the acquisition of Mainstream Energy Corporation, which included AEE Solar and its racking business SnapNrack; Clean Energy Experts, LLC; Omni Energy, LLC; and Vivint Solar.

The Company has determined that it has one reporting unit and performs its annual impairment test of goodwill on October 1 of each fiscal year or whenever events or circumstances change or occur that would indicate that goodwill might be impaired. As of October 1, 2022, the Company conducted its annual goodwill impairment test, based on a qualitative assessment. The test concluded that no impairment had occurred.

There was no impairment of goodwill during the years ended December 31, 2022, 2021 and 2020.

Intangible assets, net as of December 31, 2022 consist of the following (in thousands, except weighted average remaining life):

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Accumulated amortization</th>
<th>Carrying value</th>
<th>Weighted average remaining life (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer relationships</td>
<td>$32,770</td>
<td>$(25,336)</td>
<td>$7,434</td>
<td>1.8</td>
</tr>
<tr>
<td>Trade names</td>
<td>6,990</td>
<td>(6,897)</td>
<td>93</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$39,760</td>
<td>$(32,233)</td>
<td>$7,527</td>
<td></td>
</tr>
</tbody>
</table>

Intangible assets, net as of December 31, 2021 consist of the following (in thousands, except weighted average remaining life):

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Accumulated amortization</th>
<th>Carrying value</th>
<th>Weighted average remaining life (in years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer relationships</td>
<td>$32,770</td>
<td>$(20,346)</td>
<td>$12,424</td>
<td>2.7</td>
</tr>
<tr>
<td>Trade names</td>
<td>6,990</td>
<td>(6,523)</td>
<td>467</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$39,760</td>
<td>$(26,869)</td>
<td>$12,891</td>
<td></td>
</tr>
</tbody>
</table>
The Company recorded amortization of intangible assets expense of $5.4 million, $5.4 million and $5.2 million for the years ended December 31, 2022, 2021 and 2020, respectively. As of December 31, 2022, expected amortization of intangible assets for each of the five succeeding fiscal years and thereafter is as follows (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>$4,673</td>
</tr>
<tr>
<td>2024</td>
<td>$2,269</td>
</tr>
<tr>
<td>2025</td>
<td>$585</td>
</tr>
<tr>
<td>2026</td>
<td>—</td>
</tr>
<tr>
<td>2027</td>
<td>—</td>
</tr>
<tr>
<td>Thereafter</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$7,527</td>
</tr>
</tbody>
</table>

Note 9. Other Assets

Other assets consist of the following (in thousands):

<table>
<thead>
<tr>
<th>December 31,</th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs to obtain contracts - customer agreements</td>
<td>$1,096,346</td>
<td>$703,080</td>
</tr>
<tr>
<td>Costs to obtain contracts - incentives</td>
<td>2,481</td>
<td>2,481</td>
</tr>
<tr>
<td>Accumulated amortization of costs to obtain contracts</td>
<td>(112,968)</td>
<td>(74,529)</td>
</tr>
<tr>
<td>Unbilled receivables</td>
<td>324,385</td>
<td>212,727</td>
</tr>
<tr>
<td>Allowance for credit loss on unbilled receivables</td>
<td>(3,322)</td>
<td>(2,411)</td>
</tr>
<tr>
<td>Operating lease right-of-use assets</td>
<td>104,759</td>
<td>92,707</td>
</tr>
<tr>
<td>Equity investment</td>
<td>186,197</td>
<td>63,826</td>
</tr>
<tr>
<td>Other assets</td>
<td>229,640</td>
<td>127,862</td>
</tr>
<tr>
<td>Total</td>
<td>$1,827,518</td>
<td>$1,125,743</td>
</tr>
</tbody>
</table>

The Company recorded amortization of costs to obtain contracts of $38.7 million and $23.3 million for the years ended December 31, 2022 and 2021, respectively, in the sales and marketing expense.

The majority of unbilled receivables arise from fixed price escalators included in the Company's long-term Customer Agreements. The escator is included in calculating the total estimated transaction value for an individual Customer Agreement. The total estimated transaction value is then recognized over the term of the Customer Agreement. The amount of unbilled receivables increases while billings for an individual Customer Agreement are less than the revenue recognized for that Customer Agreement. Conversely, the amount of unbilled receivables decreases once the billings become higher than the amount of revenue recognized in the period. At the end of the initial term of a Customer Agreement, the cumulative amounts recognized as revenue and billed to date are the same, therefore the unbilled receivable balance for an individual Customer Agreement will be zero. The Company applies an estimated loss-rate in order to determine the current expected credit loss for unbilled receivables. The estimated loss-rate is determined by analyzing historical credit losses, residential first and second mortgage foreclosures and consumers' utility default rates, as well as current economic conditions. The Company reviews individual customer collection status of electricity billings to determine whether the unbilled receivables for an individual customer should be written off, including the possibility of a service transfer to a potential new homeowner.
## Note 10. Accrued Expenses and Other Liabilities

Accrued expenses and other liabilities consist of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accrued employee compensation</td>
<td>$101,621</td>
<td>$100,357</td>
</tr>
<tr>
<td>Operating lease obligations</td>
<td>31,307</td>
<td>24,780</td>
</tr>
<tr>
<td>Accrued interest</td>
<td>63,595</td>
<td>38,665</td>
</tr>
<tr>
<td>Other accrued expenses</td>
<td>209,943</td>
<td>200,334</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$406,466</strong></td>
<td><strong>$364,136</strong></td>
</tr>
</tbody>
</table>

## Note 11. Indebtedness

As of December 31, 2022 and 2021, respectively, debt consisted of the following (in thousands, except percentages):

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
<th>Unused Borrowing Capacity</th>
<th>Weighted Average Interest Rate at December 31, 2022</th>
<th>Weighted Average Interest Rate at December 31, 2021</th>
<th>Contractual Interest Rate</th>
<th>Contractual Maturity Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recourse debt</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank line of credit (1)</td>
<td>$505,158</td>
<td>$211,066</td>
<td>$40,000</td>
<td>6.01%</td>
<td>3.40%</td>
<td>SOFR +3.25%</td>
<td>January 2025</td>
</tr>
<tr>
<td>0% Convertible Senior Notes (2)</td>
<td>$400,000</td>
<td>$400,000</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>February 2026</td>
</tr>
<tr>
<td><strong>Total recourse debt</strong></td>
<td>$905,158</td>
<td>$611,066</td>
<td>$40,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unamortized debt discount</td>
<td>(7,118)</td>
<td>(9,382)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total recourses debt, net</strong></td>
<td>$898,040</td>
<td>$601,684</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-recourse debt (3)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior revolving and delayed draw loans (4)</td>
<td>$1,560,002</td>
<td>$1,301,600</td>
<td>85,000</td>
<td>6.49%</td>
<td>2.33%</td>
<td>LIBOR +2.00% - 3.00%; SOFR +1.88% - 3.10%</td>
<td>April 2025 - December 2029</td>
</tr>
<tr>
<td>Senior non-revolving loans</td>
<td>$1,680,444</td>
<td>$921,038</td>
<td>—</td>
<td>6.00%</td>
<td>3.66%</td>
<td>4.66% - 4.70%; LIBOR +1.75% - 2.50%; SOFR +1.85% - 1.90%</td>
<td>April 2024 - November 2040</td>
</tr>
<tr>
<td>Subordinated revolving and delayed draw loans (1)</td>
<td>$333,800</td>
<td>$221,464</td>
<td>22,200</td>
<td>9.58%</td>
<td>9.06%</td>
<td>8.75%; LIBOR +9.00%; SOFR +3.50% - 9.10%</td>
<td>April 2024 - December 2030</td>
</tr>
<tr>
<td>Subordinated loans</td>
<td>$1,442,336</td>
<td>$959,852</td>
<td>—</td>
<td>8.76%</td>
<td>8.46%</td>
<td>7.00% - 10.50%; LIBOR November 2025 - January 2042</td>
<td></td>
</tr>
<tr>
<td>Securitized loans</td>
<td>$2,531,465</td>
<td>$2,466,389</td>
<td>—</td>
<td>3.87%</td>
<td>3.59%</td>
<td>2.27% - 5.31%</td>
<td>July 2024 - July 2057</td>
</tr>
<tr>
<td><strong>Total non-recourse debt</strong></td>
<td>$7,548,047</td>
<td>$5,870,343</td>
<td>107,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unamortized debt (discount) premium, net</td>
<td>(46,938)</td>
<td>30,863</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total non-recourse debt, net</strong></td>
<td>$7,501,109</td>
<td>$5,901,206</td>
<td>107,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total debt, net</strong></td>
<td>$8,399,149</td>
<td>$6,502,890</td>
<td>$147,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) Represents the additional amount the Company could borrow, if any, based on the state of its existing assets as of December 31, 2022.
(2) Reflects weighted average contractual, unhedged rates. See Note 12, Derivatives for hedge rates.
(3) Ranges shown reflect fixed interest rate and rates using LIBOR or SOFR, as applicable.
(4) The former working capital facility was terminated in January 2022 and was replaced by this syndicated working capital facility with banks has a total commitment up to $600.0 million and is secured by substantially all of the unencumbered assets of the Company, as well as ownership interests in certain subsidiaries of the Company. Borrowings under the Facility may be designated as Base Rate Loans or Term SOFR Loans.
subject to certain terms and conditions under the Credit Agreement. Base Rate Loans accrue interest at a rate per year equal to 2.25% plus the highest of (a) the federal funds rate plus 0.50%, (b) the interest rate determined from time to time by the Administrative Agent as its prime rate and notified to the Company, (c) the Adjusted Term SOFR Rate (defined below) for a one-month interest period in effect on such day (or if such day is not a business day, the immediately preceding business day) plus 1.00% and (d) 0.00%. Term SOFR Loans accrue interest at a rate per annum equal to (a) 3.25% plus (b) the greater of (i) 0.00% and (ii) the sum of (x) the forward-looking term rate for a period comparable to the applicable available tenor based on SOFR that is published by CME Group Benchmark Administration Ltd or a successor for the applicable interest period and (y) (1) if the applicable interest period is one month, 0.11448%, (2) if the applicable interest period is three months, 0.26161% or (c) if the applicable interest period is six months, 0.42826% (the rate pursuant to clause (b), the “Adjusted Term SOFR Rate”). This facility is subject to various restrictive covenants, such as the completion and presentation of audited consolidated financial statements, maintaining a minimum modified interest coverage ratio, a minimum modified current ratio, a maximum modified leverage ratio, and a minimum unencumbered cash balance, in each case, tested quarterly. The Company was in compliance with all debt covenants as of December 31, 2022.

(5) These convertible senior notes ("Notes") will not bear regular interest, and the principal amount of the notes will not accrete. The Notes may bear special interest under specified circumstances relating to the Company’s failure to comply with its reporting obligations under the Indenture or if the Notes are not freely tradeable as required by the Indenture. The Notes will mature on February 1, 2026, unless earlier repurchased by the Company, redeemed by the Company or converted pursuant to their terms. The initial conversion rate of the Notes is 8.4807 shares of the Company’s common stock, par value $0.0001 per share, per $1,000 principal amount of Notes, which is equivalent to an initial conversion price of approximately $117.91 per share. The conversion rate will be subject to adjustment upon the occurrence of certain specified events but will not be adjusted for any accrued and unpaid special interest. In addition, upon the occurrence of a make-whole fundamental change or an issuance of a notice of redemption, the Company will, in certain circumstances, increase the conversion rate by a number of additional shares for a holder that elects to convert its Notes in connection with such make-whole fundamental change or notice of redemption. The debt discount recorded on the Notes is being amortized to interest expense at an effective interest rate of 0.57%. As of December 31, 2022, $4.3 million of the debt discount was amortized to interest expense inception to date. In connection with the offering of the Notes, the Company entered into privately negotiated capped call transactions ("Capped Calls") with certain of the initial purchasers and/or their respective affiliates at a cost of approximately $28.0 million. The Capped Calls are classified as equity and were recorded to additional paid-in-capital within stockholders’ equity as of March 31, 2021. The Capped Calls each have an initial strike price of approximately $117.91 per share, subject to certain adjustments, which corresponds to the initial conversion price of the Notes. The Capped Calls have initial cap prices of $157.22 per share. The Capped Calls cover, subject to anti-dilution adjustments, approximately 3.4 million shares of Common Stock. The Capped Calls are expected generally to reduce the potential dilution to the Common Stock upon any conversion of Notes and/or offset any cash payments the Company is required to make in excess of the principal amount of the Notes, as the case may be, in the event the market price per share of Common Stock, as measured under the Capped Calls, is greater than the strike price of the Capped Call, with such offset subject to a cap. If, however, the market price per share of the Common Stock, as measured under the Capped Calls, exceeds the cap price of the Capped Calls, there would be dilution and/or there would not be an offset of such potential cash payments, in each case, to the extent that the then-market price per share of the Common Stock exceeds the cap price. The final components of the Capped Calls are scheduled to expire on January 29, 2026. None of the conversion criteria has been met as of December 31, 2022.

(6) Certain loans under this category are part of project equity transactions.

(7) Pursuant to the terms of the aggregation facilities within this category the Company may draw up to an aggregate principal amount of $2.2 billion in revolver borrowings depending on the available borrowing base at the time.

(8) A loan under this category with an outstanding balance of $131.3 million as of December 31, 2022 contains a put option that can be exercised beginning in 2036 that would require the Company to pay off the entire loan on November 30, 2037.
Senior and Subordinated Debt Facilities

Each of the Company’s senior and subordinated debt facilities contain customary covenants including the requirement to maintain certain financial measurements and provide lender reporting. Each of the senior and subordinated debt facilities also contain certain provisions in the event of default that entitle lenders to take certain actions including acceleration of amounts due under the facilities and acquisition of membership interests and assets that are pledged to the lenders under the terms of the senior and subordinated debt facilities. The facilities are non-recourse to the Company and are secured by net cash flows from Customer Agreements or inventories less certain operating, maintenance and other expenses that are available to the borrower after distributions to tax equity investors, where applicable. Under the terms of these facilities, the Company's subsidiaries pay interest and principal from the net cash flows available to the subsidiaries. The Company was in compliance with all debt covenants as of December 31, 2022.

Securitization Loans

Each of the Company’s securitized loans contains customary covenants including the requirement to provide reporting to the indenture trustee and ratings agencies. Each of the securitized loans also contain certain provisions in the event of default which entitle the indenture trustee to take certain actions including acceleration of amounts due under the facilities and acquisition of membership interests and assets that are pledged to the lenders under the terms of the securitized loans. The facilities are non-recourse to the Company and are secured by net cash flows from Customer Agreements less certain operating, maintenance and other expenses which are available to the borrower after distributions to tax equity investors, where applicable. Under the terms of these loans, the Company's subsidiaries pay interest and principal from the net cash flows available to the subsidiaries. The Company was in compliance with all debt covenants as of December 31, 2022.

Maturities of Indebtedness

The aggregate future principal payments for debt as of December 31, 2022 are as follows (in thousands):

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>$163,794</td>
</tr>
<tr>
<td>2024</td>
<td>$719,231</td>
</tr>
<tr>
<td>2025</td>
<td>$1,640,421</td>
</tr>
<tr>
<td>2026</td>
<td>$1,238,875</td>
</tr>
<tr>
<td>2027</td>
<td>$1,156,718</td>
</tr>
<tr>
<td>Thereafter</td>
<td>3,534,166</td>
</tr>
<tr>
<td>Subtotal</td>
<td>6,453,205</td>
</tr>
</tbody>
</table>

Debt discount, net (54,056)

Total $8,399,149

Note 12. Derivatives

Interest Rate Swaps

The Company uses interest rate swaps to hedge variable interest payments due on certain of its term loans and aggregation facility. These swaps allow the Company to incur fixed interest rates on these loans and receive payments based on variable interest rates with the swap counterparty based on the three month LIBOR or SOFR (daily, one month, three month) on the notional amounts over the life of the swaps.
The interest rate swaps have been designated as cash flow hedges. The credit risk adjustment associated with these swaps is the risk of non-performance by the counterparties to the contracts. In the quarter ended December 31, 2022, the hedge relationships on the Company’s interest rate swaps have been assessed as highly effective as the quarterly assessment performed determined changes in cash flows of the derivative instruments have been highly effective in offsetting the changes in the cash flows of the hedged items, are expected to be highly effective in the future and the critical terms of the interest rate swaps match the critical terms of the underlying forecasted hedged transactions. Accordingly, changes in the fair value of these derivatives are recorded as a component of accumulated other comprehensive income, net of income taxes. Changes in the fair value of these derivatives are subsequently reclassified into earnings, and are included in interest expense, net in the Company’s statements of operations, in the period that the hedged forecasted transactions affect earnings. To the extent that the hedge relationships are not effective, changes in the fair value of these derivatives are recorded in other expenses, net in the Company’s statements of operations on a prospective basis.

The Company’s master netting and other similar arrangements allow net settlements under certain conditions. When those conditions are met, the Company presents derivatives at net fair value. As of December 31, 2022, the information related to these offsetting arrangements were as follows (in thousands):

<table>
<thead>
<tr>
<th>Instrument Description</th>
<th>Gross Amounts of Recognized Assets / Liabilities</th>
<th>Gross Amounts Offset in the Consolidated Balance Sheet</th>
<th>Net Amounts of Assets / Liabilities Included in the Consolidated Balance Sheet</th>
<th>Notional Amount (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derivatives designated as hedging instruments</td>
<td>$133,168</td>
<td>$</td>
<td>$133,168</td>
<td>$2,122,222</td>
</tr>
<tr>
<td>Derivatives not designated as hedging instruments</td>
<td>44,659</td>
<td>(4,523)</td>
<td>40,136</td>
<td>1,095,820</td>
</tr>
<tr>
<td>Total derivative assets</td>
<td>177,827</td>
<td>(4,523)</td>
<td>173,304</td>
<td>3,218,042</td>
</tr>
<tr>
<td>Liabilities:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derivatives designated as hedging instruments</td>
<td>(3,724)</td>
<td>—</td>
<td>(3,724)</td>
<td>—</td>
</tr>
<tr>
<td>Derivatives not designated as hedging instruments</td>
<td>(4,523)</td>
<td>4,523</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total derivative liabilities</td>
<td>(8,247)</td>
<td>4,523</td>
<td>(3,724)</td>
<td>—</td>
</tr>
<tr>
<td>Total derivative assets &amp; liabilities</td>
<td>$169,580</td>
<td>$</td>
<td>$169,580</td>
<td>$3,218,042</td>
</tr>
</tbody>
</table>

(1) Comprised of 72 interest rate swaps which effectively fix the LIBOR or SOFR portion of interest rates on outstanding balances of certain loans under the senior and securitized sections of the debt footnote table (see Note 11, Indebtedness) at 0.57% to 4.11% per annum. These swaps mature from April 30, 2024 to January 31, 2043.

As of December 31, 2021, the information related to these offsetting arrangements were as follows (in thousands):
## Instrument Description

<table>
<thead>
<tr>
<th>Gross Amounts of Recognized Assets / Liabilities</th>
<th>Gross Amounts Offset in the Consolidated Balance Sheet</th>
<th>Net Amounts of Assets / Liabilities Included in the Consolidated Balance Sheet</th>
<th>Notional Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Derivatives designated as hedging instruments</td>
<td>$17,475</td>
<td>(1,815)</td>
<td>$15,660</td>
</tr>
<tr>
<td>Derivatives not designated as hedging instruments</td>
<td>9,198</td>
<td>—</td>
<td>9,198</td>
</tr>
<tr>
<td>Total derivative assets</td>
<td>26,673</td>
<td>(1,815)</td>
<td>24,858</td>
</tr>
</tbody>
</table>

| Liabilities:                                    |                                                      |                                                                          |                 |
| Derivatives designated as hedging instruments   | (54,017)                                             | 1,815                                                                    | (52,202)        | 1,110,729|
| Derivatives not designated as hedging instruments | (29,856)                                            | —                                                                        | (29,856)        | 621,884  |
| Total derivative liabilities                    | (83,873)                                             | 1,815                                                                    | (82,058)        | 1,732,613|
| Total derivative assets & liabilities            | $57,200                                              | —                                                                        | $57,200         | 2,499,152|

The gains on derivatives designated as cash flow hedges recognized into OCI, before tax effect, consisted of the following (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022</td>
</tr>
</tbody>
</table>

### Derivatives designated as cash flow hedges:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate swaps</td>
<td>$(177,451)</td>
<td>$(25,117)</td>
<td>$86,367</td>
</tr>
</tbody>
</table>

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The losses (gains) on derivatives financial instruments recognized into the consolidated statements of operations, before tax effect, consisted of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest expense, net</td>
<td>(2,407)</td>
<td>—</td>
<td>21,517</td>
</tr>
<tr>
<td>Other expense, net</td>
<td>—</td>
<td>(189,710)</td>
<td>—</td>
</tr>
<tr>
<td>Interest expense, net</td>
<td>—</td>
<td>(21,387)</td>
<td>—</td>
</tr>
<tr>
<td>Other expense, net</td>
<td>—</td>
<td>—</td>
<td>12,971</td>
</tr>
<tr>
<td>Interest expense, net</td>
<td>—</td>
<td>—</td>
<td>(2,911)</td>
</tr>
<tr>
<td>Other expense, net</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Derivatives designated as cash flow hedges:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate swaps</td>
<td>(2,407)</td>
<td>—</td>
<td>21,517</td>
</tr>
<tr>
<td>(Gains) losses reclassified from AOCI into income</td>
<td>—</td>
<td>(189,710)</td>
<td>—</td>
</tr>
<tr>
<td>Derivatives not designated as cash flow hedges:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>—</td>
<td>(189,710)</td>
<td>(21,387)</td>
</tr>
<tr>
<td>Gains recognized into income</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total (gains) losses</td>
<td>(2,407)</td>
<td>(189,710)</td>
<td>(21,387)</td>
</tr>
<tr>
<td></td>
<td>12,971</td>
<td>—</td>
<td>(2,911)</td>
</tr>
</tbody>
</table>

All amounts in Accumulated other comprehensive income (loss) ("AOCI") in the consolidated statements of redeemable noncontrolling interests and equity relate to derivatives, refer to the consolidated statements of comprehensive loss. The net gains (losses) on derivatives includes the tax effect of $34.9 million, $12.9 million and $19.4 million for the twelve months ended December 31, 2022, 2021 and 2020, respectively.

During the next 12 months, the Company expects to reclassify $32.4 million of net gains on derivative instruments from accumulated other comprehensive income to earnings. There were seventeen undesignated derivative instruments recorded by the Company as of December 31, 2022.

Note 13. Pass-Through Financing Obligations

The Company's pass-through financing obligations ("financing obligations") arise when the Company leases solar energy systems to Fund investors who are considered commercial customers under a master lease agreement, and these investors in turn are assigned the Customer Agreements with customers. The Company receives all of the value attributable to the accelerated tax depreciation and some or all of the value attributable to the other incentives. Given the assignment of operating cash flows, these arrangements are accounted for as financing obligations. The Company also sells the rights and related value attributable to the Commercial ITC to these investors.

Under these financing obligation arrangements, wholly owned subsidiaries of the Company finance the cost of solar energy systems with investors for an initial term of 22 years, and one fund for 7 years. The solar energy systems are subject to Customer Agreements with an initial term of typically 20 or 25 years that automatically renew annually or for five years. These solar energy systems are reported under the line item solar energy systems, net in the consolidated balance sheets. As of December 31, 2022 and 2021, the cost of the solar energy systems placed in service under the financing obligation arrangements was $699.5 million and $705.4 million, respectively. The accumulated depreciation related to these assets as of December 31, 2022 and 2021 was $167.9 million and $143.2 million, respectively. During the year ended December 31, 2021, the Company retired one of its financing obligations and terminated the associated lease for $18.1 million, which resulted in a debt extinguishment expense of $6.3 million.

The investors make a series of large up-front payments and, in certain cases, subsequent smaller quarterly payments (lease payments) to the subsidiaries of the Company. The Company accounts for the payments received from the investors under the financing obligation arrangements as borrowings by recording the proceeds received as financing obligations on its consolidated balance sheets, and cash provided by financing activities in its consolidated statement of cash flows. These financing obligations are reduced over a period of approximately 22 years, or over 7 years in the case of one fund, by customer payments under the Customer Agreements, and proceeds from the contracted resale of SRECs as they are received by the investor. In addition, funds paid for the Commercial ITC value upfront are initially recorded as a refund liability and recognized as revenue as the associated solar energy system reaches PTO. The Commercial ITC value is reflected in cash provided by
operations on the consolidated statement of cash flows. The Company accounts for the Customer Agreements, as well as the resale of SRECs consistent with
the Company’s revenue recognition accounting policies as described in Note 2, Summary of Significant Accounting Policies.

Interest is calculated on the financing obligations using the effective interest rate method. The effective interest rate, which is adjusted on a prospective
basis, is the interest rate that equates the present value of the estimated cash amounts to be received by the investor over the lease term with the present
value of the cash amounts paid by the investor to the Company, adjusted for amounts received by the investor. The financing obligations are nonrecourse once
the associated assets have been placed in service and all the contractual arrangements have been assigned to the investor.

Under the majority of the financing obligations, the investor has a right to extend its right to receive cash flows from the customers beyond the initial term
in certain circumstances. Depending on the arrangement, the Company has the option to settle the outstanding financing obligation on the ninth or eleventh
anniversary of the Fund inception at a price equal to the higher of (a) the fair value of future remaining cash flows or (b) the amount that would result in the
investor earning their targeted return. In several of these financing obligations, the investor has an option to require repayment of the entire outstanding balance
on the tenth anniversary of the Fund inception at a price equal to the fair value of the future remaining cash flows.

Under the majority of the financing obligations, the Company is responsible for services such as warranty support, accounting, lease servicing and
performance reporting to customers. As part of the warranty and performance guarantee with the customers in applicable funds, the Company guarantees
certain specified minimum annual solar energy production output for the solar energy systems leased to the customers, which the Company accounts for as
disclosed in Note 2, Summary of Significant Accounting Policies.
### Note 14. VIE Arrangements

The Company consolidated various VIEs at December 31, 2022 and 2021. The carrying amounts and classification of the VIEs’ assets and liabilities included in the consolidated balance sheets are as follows (in thousands):

<table>
<thead>
<tr>
<th>Assets</th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
</tr>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$457,005</td>
</tr>
<tr>
<td>Restricted cash</td>
<td>44,514</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>66,847</td>
</tr>
<tr>
<td>Inventories</td>
<td>193,836</td>
</tr>
<tr>
<td>Prepaid expenses and other current assets</td>
<td>12,698</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>$774,900</td>
</tr>
<tr>
<td>Solar energy systems, net</td>
<td>8,968,835</td>
</tr>
<tr>
<td>Other assets</td>
<td>287,771</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$10,031,506</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$36,315</td>
</tr>
<tr>
<td>Distributions payable to noncontrolling interests and redeemable noncontrolling interests</td>
<td>32,051</td>
</tr>
<tr>
<td>Accrued expenses and other liabilities</td>
<td>32,512</td>
</tr>
<tr>
<td>Deferred revenue, current portion</td>
<td>49,037</td>
</tr>
<tr>
<td>Deferred grants, current portion</td>
<td>—</td>
</tr>
<tr>
<td>Non-recourse debt, current portion</td>
<td>39,894</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td>$189,809</td>
</tr>
<tr>
<td>Deferred revenue, net of current portion</td>
<td>572,420</td>
</tr>
<tr>
<td>Deferred grants, net of current portion</td>
<td>—</td>
</tr>
<tr>
<td>Non-recourse debt, net of current portion</td>
<td>1,449,513</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>15,260</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>$2,227,002</td>
</tr>
</tbody>
</table>

The Company holds certain variable interests in nonconsolidated VIEs established as a result of six pass-through Fund arrangements as further explained in Note 13, *Pass-Through Financing Obligations*. The Company does not have material exposure to losses as a result of its involvement with the VIEs in excess of the amount of the pass-through financing obligation recorded in the Company’s consolidated financial statements. The Company is not considered the primary beneficiary of these VIEs.

### Note 15. Redeemable Noncontrolling Interests

During certain specified periods of time (the “Early Exit Periods”), noncontrolling interests in certain funding arrangements have the right to put all of their membership interests to the Company (the “Put Provisions”). During a specific period of time (the “Call Periods”), the Company has the right to call all membership units of the related redeemable noncontrolling interests.

### Note 16. Stockholders’ Equity

**Convertible Preferred Stock**
The Company did not have any convertible preferred stock issued and outstanding as of December 31, 2022 and 2021.

The Company did not declare or pay any dividends in 2022, 2021 or 2020.

Common Stock

The Company has reserved sufficient shares of common stock for issuance upon the exercise of stock options and the exercise of warrants. Common stockholders are entitled to dividends if and when declared by the board of directors, subject to the prior rights of the preferred stockholders. As of December 31, 2022, no common stock dividends had been declared by the board of directors.

The Company has reserved shares of common stock for issuance as follows (in thousands):

<table>
<thead>
<tr>
<th>Stock plans</th>
<th>December 31, 2022</th>
<th>December 31, 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares available for grant</td>
<td>9,534</td>
<td>11,084</td>
</tr>
<tr>
<td>Sunrun-VSI 2014 Equity Incentive Plan</td>
<td>20,534</td>
<td>22,371</td>
</tr>
<tr>
<td>2015 Equity Incentive Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015 Employee Stock Purchase Plan</td>
<td>10,071</td>
<td>11,270</td>
</tr>
<tr>
<td>Options outstanding</td>
<td>5,217</td>
<td>6,257</td>
</tr>
<tr>
<td>Restricted stock units outstanding</td>
<td>4,542</td>
<td>4,485</td>
</tr>
<tr>
<td>Total</td>
<td>49,898</td>
<td>55,467</td>
</tr>
</tbody>
</table>

Note 17. Stock-Based Compensation

2013 Equity Incentive Plan

In July 2013, the Board of Directors approved the 2013 Equity Incentive Plan (“2013 Plan”). In March 2015, the Board of Directors authorized an additional 3,000,000 shares reserved for issuance under the 2013 Plan. An aggregate of 4,500,000 shares of common stock are reserved for issuance under the 2013 Plan plus (i) any shares that were reserved but not issued under the plan that was previously in place, and (ii) any shares subject to stock options or similar awards granted under the plan that was previously in place that expire or otherwise terminate without having been exercised in full and shares issued that are forfeited to or repurchased by the Company, with the maximum number of shares to be added to the 2013 Plan pursuant to clauses (i) and (ii) equal to 8,044,829 shares. Stock options granted to employees generally have a maximum term of ten-years and vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. The options may include provisions permitting exercise of the option prior to full vesting. Any unvested shares shall be subject to repurchase by the Company at the original exercise price of the option in the event of a termination of an optionee’s employment prior to vesting. All the remaining shares that were available for future grants under the 2013 Plan were transferred to the 2015 Equity Incentive Plan (“2015 Plan”) at the inception of the 2015 Plan. As of December 31, 2022, the Company had not granted restricted stock or other equity awards (other than options) under the 2013 Plan.

Sunrun-VSI 2014 Equity Incentive Plan

Upon completion of the Merger, the Company may grant equity awards through the Sunrun-VSI 2014 Equity Incentive Plan (“Sunrun-VSI 2014 Plan”), which was previously called the Vivint Solar 2014 Equity Incentive Plan. Under the Sunrun-VSI 2014 Plan, the Company may grant stock options, restricted stock, restricted stock units (“RSUs”), stock appreciation rights, performance stock units, performance shares and performance awards to its employees, directors and consultants, and its parent and subsidiary corporations’ employees and consultants.

As of December 31, 2022, a total of 9.5 million shares of common stock were available for grant under the Sunrun-VSI 2014 Plan, subject to adjustment in the case of certain events. In addition, any shares that otherwise would be returned to the Omnibus Plan (as defined below) as the result of the expiration or termination of stock options.
options may be added to the Sunrun-VSI 2014 Plan. The number of shares available to grant under the Sunrun-VSI 2014 Plan is subject to an annual increase on the first day of each year.

**Long-term Incentive Plan**

In July 2013, Vivint Solar’s board of directors approved shares of common stock for six Long-term Incentive Plan Pools ("LTIP Pools") that comprise the 2013 Long-term Incentive Plan (the "LTIP"). Participants in the LTIP are allocated a portion of the LTIP Pools relative to the performance of other participants on a measurement date that is determined once performance conditions are met. The Merger Agreement provided that the LTIP awards outstanding immediately prior to the Closing Date were canceled and terminated and that subsequent to the Closing Date, each holder of a canceled LTIP award would be granted an RSU award to be settled in shares of Sunrun common stock, with the number of shares underlying such award calculated as if the LTIP performance hurdles were achieved, with the Closing Date as the determination date. As a result, approximately 1.5 million shares of the Company common stock were awarded as RSUs to LTIP participants with a grant date equal to the Closing Date. These RSUs vest in three equal installments, subject to the grantee’s continued provision of services to the Company. One-third vested 30 days after the Closing Date, one-third vested nine months after the Closing Date, and one-third vested 18 months after the Closing Date. As of December 31, 2022, there are no remaining shares available for grant under the LTIP.

**2015 Equity Incentive Plan**

In July 2015, the Sunrun Board approved the 2015 Plan. An aggregate of 11,400,000 shares of common stock are reserved for issuance under the 2015 Plan plus (i) any shares that were reserved but not issued under the 2013 Plan at the inception of the 2015 Plan, and (ii) any shares subject to stock options or similar awards granted under the 2008 Plan, 2013 Plan and 2014 Plan that expire or otherwise terminate without having been exercised in full and shares issued that are forfeited to or repurchased by the Company, with the maximum number of shares to be added to the 2015 Plan pursuant to clauses (i) and (ii) equal to 15,439,334 shares. The 2015 Plan provides for annual automatic increases on January 1 to the shares reserved for issuance. The automatic increase of the number of shares available for issuance under the 2015 Plan is equal to the least of 10 million shares, 4% of the outstanding shares of common stock as of the last day of the Company’s immediately preceding fiscal year or such other amount as the Board of Directors may determine. In 2022 and 2021, an additional nil and 8,056,251 shares, respectively, were reserved for issuance under the 2015 Plan pursuant to the automatic increase provision. Stock options granted to employees generally have a maximum term of ten-years and vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. The options may include provisions permitting exercise of the option prior to full vesting. Any unvested shares shall be subject to repurchase by the Company at the original exercise price of the option in the event of a termination of an optionee’s employment prior to vesting. RSUs granted to employees generally vest over a four-year period from the date of grant; 25% vest at the end of one year, and 75% vest quarterly over the remaining three years.
Stock Options

The following table summarizes the activity for all stock options under all of the Company's equity incentive plans for the years ended December 31, 2022 and 2021 (shares and aggregate intrinsic value in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Number of Options</th>
<th>Weighted Average Exercise Price</th>
<th>Weighted Average Remaining Contractual Life</th>
<th>Aggregate Intrinsic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding at December 31, 2020</td>
<td>8,019</td>
<td>$10.35</td>
<td>6.87</td>
<td>$473,371</td>
</tr>
<tr>
<td>Granted</td>
<td>641</td>
<td>47.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercised</td>
<td>(1,977)</td>
<td>8.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canceled</td>
<td>(426)</td>
<td>24.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding at December 31, 2021</td>
<td>6,257</td>
<td>13.60</td>
<td>6.19</td>
<td>140,326</td>
</tr>
<tr>
<td>Granted</td>
<td>942</td>
<td>28.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercised</td>
<td>(1,401)</td>
<td>8.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canceled</td>
<td>(581)</td>
<td>28.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding at December 31, 2022</td>
<td>5,217</td>
<td>$16.08</td>
<td>5.68</td>
<td>$58,784</td>
</tr>
<tr>
<td>Options vested and exercisable at December 31, 2022</td>
<td>3,820</td>
<td>$11.36</td>
<td>4.58</td>
<td>$55,466</td>
</tr>
<tr>
<td>Options vested and expected to vest at December 31, 2022</td>
<td>5,217</td>
<td>$16.08</td>
<td>5.68</td>
<td>$58,784</td>
</tr>
</tbody>
</table>

The weighted-average grant-date fair value of stock options granted during the year ended December 31, 2022, 2021 and 2020 were $17.21, $27.72 and $9.33 per share, respectively. The total intrinsic value of the options exercised during the year ended December 31, 2022, 2021 and 2020 was $30.8 million, $106.1 million and $251.7 million, respectively. The aggregate intrinsic value is the difference of the current fair value of the stock and the exercise price for in-the-money stock options. The total fair value of options vested during the year ended December 31, 2022, 2021 and 2020 was $16.7 million, $36.4 million and $104.8 million, respectively.

The Company estimates the fair value of stock-based awards on their grant date using the Black-Scholes option-pricing model. The Company estimates the fair value using a single-option approach and amortizes the fair value on a straight-line basis for options expected to vest. All options are amortized over the requisite service periods of the awards, which are generally the vesting periods.

The Company estimated the fair value of stock options with the following assumptions:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk-free interest rate</td>
<td>1.60 - 3.80%</td>
<td>0.90 - 1.30%</td>
<td>0.30 % - 1.50 %</td>
</tr>
<tr>
<td>Volatility</td>
<td>65.60% - 69.40%</td>
<td>63.00% - 67.80%</td>
<td>54.40 % - 59.70 %</td>
</tr>
<tr>
<td>Expected term (in years)</td>
<td>6.10</td>
<td>6.00 - 6.10</td>
<td>5.30 - 6.10</td>
</tr>
<tr>
<td>Expected dividend yield</td>
<td>—%</td>
<td>—%</td>
<td>—%</td>
</tr>
</tbody>
</table>

The expected term assumptions were determined based on the average vesting terms and contractual lives of the options. The risk-free interest rate is based on the rate for a U.S. Treasury zero-coupon issue with a term that approximates the expected life of the option grant. For stock options granted in the year ended December 31, 2022, the expected volatility was calculated based on the Company's average historical volatilities and for the stock options granted in the year ended December 31, 2021 and 2020, the Company considered the volatility data of a group of publicly traded peer companies in its industry. The Company accounts for forfeitures as they occur and, as such, reverses compensation cost previously recognized in the period the award is forfeited, for an award that is forfeited before completion of the requisite service period.

Restricted Stock Units
The following table summarizes the activity for all RSUs under all of the Company's equity incentive plans for the years ended December 31, 2022 and 2021 (shares in thousands):

<table>
<thead>
<tr>
<th>Shares</th>
<th>Weighted Average Grant Date Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unvested balance at December 31, 2020</td>
<td>7,103</td>
</tr>
<tr>
<td>Granted</td>
<td>1,992</td>
</tr>
<tr>
<td>Issued</td>
<td>(3,755)</td>
</tr>
<tr>
<td>Canceled / forfeited</td>
<td>(855)</td>
</tr>
<tr>
<td>Unvested balance at December 31, 2021</td>
<td>4,485</td>
</tr>
<tr>
<td>Granted</td>
<td>4,500</td>
</tr>
<tr>
<td>Issued</td>
<td>(2,968)</td>
</tr>
<tr>
<td>Canceled / forfeited</td>
<td>(1,475)</td>
</tr>
<tr>
<td>Unvested balance at December 31, 2022</td>
<td>4,542</td>
</tr>
</tbody>
</table>

Warrants for Strategic Partners

The Company has issued warrants for up to 846,943 shares of its common stock to certain strategic partners (calculated using the respective quarter of grant's closing stock price). The exercise price of each warrant is $0.01 per share, and 346,269 and 69,309 warrants were exercised during the years ended December 31, 2022 and 2021, respectively. During the years ended December 31, 2022 and 2021, the Company recognized stock-based compensation expense of $4.3 million and $10.7 million, respectively, under time-based warrants.

Employee Stock Purchase Plan

Under the Company's 2015 Employee Stock Purchase Plan ("ESPP") (as amended in May 2017), eligible employees are offered shares bi-annually through a 24-month offering period which encompasses four six-month purchase periods. Each purchase period begins on the first trading day on or after May 15 and November 15 of each year. Employees may purchase a limited number of shares of the Company's common stock via regular payroll deductions at a discount of 15% of the lower of the fair market value of the Company's common stock on the first trading date of each offering period or on the exercise date. Employees may deduct up to 15% of payroll, with a cap of $25,000 of fair market value of shares in any calendar year and 10,000 shares per employee per purchase period. Under the ESPP, 1,000,000 shares of the Company's common stock have been reserved for issuance to eligible employees. The ESPP provides for an automatic increase of the number of shares available for issuance under the ESPP on the first day of each fiscal year beginning on January 1, 2016, equal to the least of 5 million shares, 2% of the outstanding shares of the Company’s common stock on the last day of the immediately preceding fiscal year, or such other amount as may be determined by the Board of Directors. In 2022 and 2021, the Board of Directors authorized an additional nil and 4,028,125 shares, respectively, reserved for issuance under the ESPP.

Stock-Based Compensation Expense

The Company recognized stock-based compensation expense, including ESPP expenses, in the consolidated statements of operations as follows (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of customer agreements and incentives</td>
<td>$9,181</td>
<td>$11,469</td>
<td>$4,315</td>
</tr>
<tr>
<td>Cost of solar energy systems and product sales</td>
<td>9,274</td>
<td>5,775</td>
<td>1,582</td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>56,857</td>
<td>104,087</td>
<td>53,366</td>
</tr>
<tr>
<td>Research and development</td>
<td>2,667</td>
<td>3,806</td>
<td>2,518</td>
</tr>
<tr>
<td>General and administration</td>
<td>32,654</td>
<td>85,863</td>
<td>108,806</td>
</tr>
<tr>
<td>Total</td>
<td>$110,633</td>
<td>$211,000</td>
<td>$170,587</td>
</tr>
</tbody>
</table>
During the years ended December 31, 2022 and 2021, stock-based compensation expense capitalized to the Company’s consolidated balance sheet was $12.4 million and $10.9 million, respectively. As of December 31, 2022 and 2021, total unrecognized compensation cost related to outstanding stock options and RSUs was $142.3 million and $175.8 million, respectively, which are expected to be recognized over a weighted-average period of 2.7 years. Total unrecognized compensation cost includes the assumed unvested Vivint Solar awards to be recognized as stock-based compensation expense over the remaining requisite service period. Per ASC 805, the replacement of stock options or other share-based payment awards in conjunction with a business combination represents a modification of share-based payment awards that must be accounted for in accordance with ASC 718, Stock Compensation. As a result of the Company’s issuance of replacement awards, a portion of the fair-value-based measure of the replacement awards is included in the purchase consideration. To determine the portion of the replacement awards that is part of the purchase consideration, the Company measured the fair value of both the replacement awards and the historical awards as of the Acquisition Date. The fair value of the replacement awards, whether vested or unvested, was included in the purchase consideration to the extent that pre-acquisition services were rendered. In the year ended December 31, 2022, the Company recognized compensation cost of $4.6 million for modifications due to accelerated vesting of unvested outstanding shares for 30 grantees.

401(k) Plans
The Sunrun 401(k) Plan and the Vivint Solar 401(k) Plan are deferred salary arrangements under Section 401(k) of the Internal Revenue Code. Under both the Sunrun and Vivint Solar 401(k) Plans, participating U.S. employees may defer a portion of their pre-tax earnings, up to the IRS annual contribution limit ($19,500 for calendar year 2022). Under the Sunrun 401(k) Plan, the Company matches 100% of the first 1% and 50% of the next 5% of each employee’s contributions. Under the Vivint Solar 401(k) Plan, the Company matches 33% of each employee’s contributions up to a maximum of 6% of the employee’s eligible earnings. The Company recognized expense of $21.5 million, $14.7 million and $9.6 million in the years ended December 31, 2022, 2021 and 2020, respectively.

Note 18. Income Taxes
The following table presents the loss (income) before income taxes for the periods presented (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>For the Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
</tr>
<tr>
<td>Loss (income) attributable to common stockholders</td>
<td>$(175,668)</td>
</tr>
<tr>
<td>Loss attributable to noncontrolling interest and redeemable noncontrolling interests</td>
<td>1,023,022</td>
</tr>
<tr>
<td>Loss before income taxes</td>
<td>$847,354</td>
</tr>
</tbody>
</table>

The income tax provision (benefit) consists of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>For the Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
</tr>
<tr>
<td>Current Federal</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td></td>
</tr>
<tr>
<td>Foreign</td>
<td></td>
</tr>
<tr>
<td>Total current (benefit) expense</td>
<td></td>
</tr>
<tr>
<td>Deferred Federal</td>
<td>1,460</td>
</tr>
<tr>
<td>State</td>
<td>831</td>
</tr>
<tr>
<td>Foreign</td>
<td></td>
</tr>
<tr>
<td>Total deferred (benefit) provision</td>
<td>2,291</td>
</tr>
<tr>
<td>Total</td>
<td>$2,291</td>
</tr>
</tbody>
</table>
The following table represents a reconciliation of the statutory federal rate and the Company’s effective tax rate for the periods presented:

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax provision (benefit) at federal statutory rate</td>
<td>(21.00)%</td>
<td>(21.00)%</td>
<td>(21.00)%</td>
</tr>
<tr>
<td>State income taxes, net of federal benefit</td>
<td>3.42%</td>
<td>(2.30)%</td>
<td>(1.69)%</td>
</tr>
<tr>
<td>Effect of noncontrolling and redeemable noncontrolling interests</td>
<td>25.35%</td>
<td>19.48%</td>
<td>13.85%</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>1.03%</td>
<td>0.29%</td>
<td>(2.98)%</td>
</tr>
<tr>
<td>Tax credits</td>
<td>(1.42)%</td>
<td>(0.82)%</td>
<td>(0.77)%</td>
</tr>
<tr>
<td>Effect of valuation allowance</td>
<td>(7.47)%</td>
<td>4.67%</td>
<td>3.45%</td>
</tr>
<tr>
<td>Other</td>
<td>0.36%</td>
<td>0.63%</td>
<td>0.33%</td>
</tr>
<tr>
<td>Total</td>
<td>0.27%</td>
<td>0.95%</td>
<td>(8.81)%</td>
</tr>
</tbody>
</table>

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The following table represents the components of the Company’s deferred tax assets and liabilities for the periods presented (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred tax assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accruals and prepaid</td>
<td>$ 39,942</td>
<td>$ 53,506</td>
</tr>
<tr>
<td>Deferred revenue</td>
<td>70,491</td>
<td>52,017</td>
</tr>
<tr>
<td>Net operating loss carryforwards</td>
<td>625,147</td>
<td>605,416</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>11,327</td>
<td>15,345</td>
</tr>
<tr>
<td>Investment tax and other credits</td>
<td>108,107</td>
<td>95,889</td>
</tr>
<tr>
<td>Interest expense</td>
<td>16,386</td>
<td>5,644</td>
</tr>
<tr>
<td>UNICAP costs</td>
<td>149,873</td>
<td>61,671</td>
</tr>
<tr>
<td>Interest rate derivatives</td>
<td>—</td>
<td>39,784</td>
</tr>
<tr>
<td>Total deferred tax assets</td>
<td>1,021,273</td>
<td>929,272</td>
</tr>
<tr>
<td>Less: Valuation allowance</td>
<td>(61,695)</td>
<td>(136,682)</td>
</tr>
<tr>
<td>Gross deferred tax assets</td>
<td>959,578</td>
<td>792,590</td>
</tr>
</tbody>
</table>

Deferred tax liabilities

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate derivatives</td>
<td>20,613</td>
<td>—</td>
</tr>
<tr>
<td>Capitalized costs to obtain a contract</td>
<td>266,697</td>
<td>171,219</td>
</tr>
<tr>
<td>Fixed asset depreciation and amortization</td>
<td>442,656</td>
<td>435,493</td>
</tr>
<tr>
<td>Deferred tax on investment in partnerships</td>
<td>362,659</td>
<td>287,631</td>
</tr>
<tr>
<td>Gross deferred tax liabilities</td>
<td>1,092,625</td>
<td>894,343</td>
</tr>
<tr>
<td>Net deferred tax liabilities</td>
<td>$(133,047)</td>
<td>$(101,753)</td>
</tr>
</tbody>
</table>

The Company accounts for investment tax credits as a reduction of income tax expense in the year in which the credits arise. As of December 31, 2022, the Company has an investment tax credit carryforward of approximately $87.5 million which begins to expire in the year 2033, if not utilized. $1.0 million of California enterprise zone credits which begin to expire in the year 2023, and $1.3 million of other state tax credits which begin to expire in the year 2023. As of December 31, 2021, the Company has an investment tax credit carryforward of approximately $75.5 million and California enterprise zone credits of approximately $1.0 million.
Generally, utilization of the net operating loss carryforwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code (IRC) of 1986, as amended and similar state provisions. The Company performed an analysis to determine whether an ownership change under IRC section 382 had occurred and determined that no ownership changes were identified as of December 31, 2022. Vivint Solar, Inc. underwent an ownership change as of October 8, 2020 which is not expected to impact the utilization of its net operating loss carryforwards or tax credits.

As of December 31, 2022, the Company has approximately $7.2 million of federal and $8.9 million of state capital loss carryforwards. The Company believes its capital loss carryforwards are not likely to be realized.

Valuation allowances are provided against deferred tax assets to the extent that it is more likely than not that the deferred tax asset will not be realized. The Company’s management considers all available positive and negative evidence including its history of operating income or losses, future reversals of existing taxable temporary difference, taxable income in carryback years and tax-planning strategies. The Company has concluded that it is more likely than not that the benefit from certain federal and state tax credits and net operating loss carryforwards will not be realized. In recognition of this risk, the Company has provided a valuation allowance of $61.7 million on the deferred tax assets relating to these federal and state tax credits and net operating loss carryforwards which is a decrease of $75.0 million in 2022.

The Company sells solar energy systems to investment Funds. As the investment Funds are consolidated by the Company, the gain on the sale of the assets has been eliminated in the consolidated financial statements. However, this gain is recognized for tax reporting purposes. The Company accounts for the income tax consequences of these intra-entity transfers, both current and deferred, as a component of income tax expense and deferred tax liability, net during the period in which the transfers occur.

Uncertain Tax Positions

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal, state and local jurisdictions, where applicable. The statute of limitations for the tax returns varies by jurisdiction.

The Company determines whether a tax position is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The Company uses a two-step approach to recognize and measure uncertain tax positions. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained upon tax authority examination, including resolution of related appeals or litigation processes, if any. The second step is to measure the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. The Company has analyzed its inventory of tax positions with respect to all applicable income tax issues for all open tax years (in each respective jurisdiction).

The Company’s policy is to include interest and penalties related to unrecognized tax benefits, if any, within the provision for taxes in the consolidated statements of operations.

As a result of the acquisition of Vivint Solar, the Company established an unrecognized tax benefit of $1.0 million as of December 31, 2022, 2021 and 2020 that, if recognized, would impact the Company’s effective tax rate. There have been no changes in unrecognized tax benefits during the year ended December 31, 2022.

The IRS is auditing one of the Company’s tax equity investors, relating to an investment fund covered by the Company’s 2018 insurance policy in an audit involving a review of the fair market value determination of solar energy systems. The Company is unable to determine if this audit will result in an adverse final determination at this time.

The Company is subject to taxation and files income tax returns in the U.S., its territories, and various state and local jurisdictions. Due to the Company’s net losses, substantially all of its federal, state and local income tax returns since inception are still subject to audit.
The following table summarizes the tax years that remain open and subject to examination by the tax authorities in the most significant jurisdictions in which the Company operates:

<table>
<thead>
<tr>
<th></th>
<th>U.S. Federal</th>
<th></th>
<th>Tax Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>2018 - 2022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Net Operating Loss Carryforwards**

As a result of the Company’s net operating loss carryforwards as of December 31, 2022, the Company does not expect to pay income tax, including in connection with its income tax provision for the year ended December 31, 2022. As of December 31, 2022, the Company had net operating loss carryforwards for federal and state income tax purposes of approximately $720.7 million and $2.5 billion, respectively, which will begin to expire in 2028 for federal purposes and in 2024 for state purposes. In addition, federal and certain state net operating loss carryforwards generated in tax years beginning after December 31, 2017 total $1.4 billion and $296.8 million, respectively, and have indefinite carryover periods and do not expire.

**Note 19. Commitments and Contingencies**

**Letters of Credit**

As of December 31, 2022 and 2021, the Company had $44.4 million and $23.2 million, respectively, of unused letters of credit outstanding, which each carry fees of 0.50% - 3.25% per annum and 1.25% - 3.25% per annum, respectively.

**Guarantees**

Certain tax equity funds and debt facilities require the Company to maintain an aggregate amount of $35.0 million of unencumbered cash and cash equivalents at the end of each month.

**Operating and Finance Leases**

The Company leases real estate under non-cancellable operating leases and equipment under finance leases.

The components of lease expense were as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>For the Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2022</td>
</tr>
<tr>
<td>Amortization of right-of-use assets</td>
<td>$15,873</td>
</tr>
<tr>
<td>Interest on lease liabilities</td>
<td>1,127</td>
</tr>
<tr>
<td>Operating lease cost</td>
<td>31,966</td>
</tr>
<tr>
<td>Short-term lease cost</td>
<td>2,602</td>
</tr>
<tr>
<td>Variable lease cost</td>
<td>9,246</td>
</tr>
<tr>
<td>Sublease income</td>
<td>(3,780)</td>
</tr>
<tr>
<td><strong>Total lease cost</strong></td>
<td><strong>$57,034</strong></td>
</tr>
</tbody>
</table>
Other information related to leases was as follows (in thousands):

<table>
<thead>
<tr>
<th>For the Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash paid for amounts included in the measurement of lease liabilities</td>
<td>$34,233</td>
<td>$28,230</td>
<td>$15,756</td>
</tr>
<tr>
<td>Operating cash flows from operating leases</td>
<td>896</td>
<td>952</td>
<td>854</td>
</tr>
<tr>
<td>Operating cash flows from finance leases</td>
<td>14,146</td>
<td>12,352</td>
<td>10,578</td>
</tr>
<tr>
<td>Financing cash flows from finance leases</td>
<td>38,543</td>
<td>41,068</td>
<td>2,071</td>
</tr>
<tr>
<td>Right-of-use assets obtained in exchange for lease obligations:</td>
<td>21,030</td>
<td>11,055</td>
<td>4,265</td>
</tr>
<tr>
<td>Operating leases</td>
<td>5.26</td>
<td>6.15</td>
<td>7.24</td>
</tr>
<tr>
<td>Finance leases</td>
<td>2.86</td>
<td>2.47</td>
<td>2.59</td>
</tr>
<tr>
<td>Weighted average remaining lease term (years):</td>
<td>3.8 %</td>
<td>3.8 %</td>
<td>4.2 %</td>
</tr>
<tr>
<td>Operating leases</td>
<td>3.7 %</td>
<td>3.1 %</td>
<td>4.3 %</td>
</tr>
<tr>
<td>Finance leases</td>
<td>3.7 %</td>
<td>3.1 %</td>
<td>4.3 %</td>
</tr>
</tbody>
</table>

Future minimum lease commitments under non-cancellable leases as of December 31, 2022 were as follows (in thousands):

<table>
<thead>
<tr>
<th>Net Operating Leases</th>
<th>Finance leases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Leases</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>35,769</td>
</tr>
<tr>
<td>2024</td>
<td>29,269</td>
</tr>
<tr>
<td>2025</td>
<td>25,158</td>
</tr>
<tr>
<td>2026</td>
<td>21,815</td>
</tr>
<tr>
<td>2027</td>
<td>12,699</td>
</tr>
<tr>
<td>Thereafter</td>
<td>21,060</td>
</tr>
<tr>
<td>Total future lease payments</td>
<td>145,770</td>
</tr>
<tr>
<td>Less: Amount representing interest</td>
<td>(13,695)</td>
</tr>
<tr>
<td>Present value of future payments</td>
<td>132,075</td>
</tr>
<tr>
<td>Less: Amount for tenant incentives</td>
<td>—</td>
</tr>
<tr>
<td>Revised Present value of future payments</td>
<td>132,075</td>
</tr>
<tr>
<td>Less: Current portion</td>
<td>(31,307)</td>
</tr>
<tr>
<td>Long term portion</td>
<td>$100,768</td>
</tr>
</tbody>
</table>

Purchase Commitment

The Company entered into purchase commitments, which have the ability to be canceled without significant penalties, with multiple suppliers to purchase $360.1 million of photovoltaic modules, inverters and batteries by the end of 2023.
Warranty Accrual

The Company accrues warranty costs when revenue is recognized for solar energy systems sales, based on the estimated future costs of meeting its warranty obligations. Warranty costs primarily consist of replacement costs for supplies and labor costs for service personnel since warranties for equipment and materials are covered by the original manufacturer’s warranty (other than a small deductible in certain cases). As such, the warranty reserve is immaterial in all periods presented. The Company makes and revises these estimates based on the number of solar energy systems under warranty, the Company’s historical experience with warranty claims, assumptions on warranty claims to occur over a systems’ warranty period and the Company’s estimated replacement costs. A warranty is provided for solar energy systems sold. However, for the solar energy systems under Customer Agreements, the Company does not accrue a warranty liability because those systems are owned by consolidated subsidiaries of the Company. Instead, any repair costs on those solar energy systems are expensed when they are incurred as a component of customer agreements and incentives costs of revenue.

Commercial ITC Indemnification

The Company is contractually committed to compensate its investors for any losses that they may suffer in certain limited circumstances resulting from reductions in Commercial ITCs, including any reduction in depreciable basis. Generally, such obligations would arise as a result of reductions to the value of the underlying solar energy systems as assessed by the Internal Revenue Service (the “IRS”). The Company set the purchase prices and claimed values based on fair market values determined with the assistance of an independent third-party appraisal with respect to the systems that generate Commercial ITCs (and the associated depreciable basis) that are passed-through to, and claimed by, the Fund investors. In April 2018, the Company purchased an insurance policy providing for certain payments by the insurers in the event there is a final determination (including a judicial determination) that reduced the Commercial ITCs and depreciation claimed in respect of solar energy systems sold or transferred to most Funds through April 2018, or later, in the case of Funds added to the policy after such date. In general, the policy indemnifies the Company and related parties for additional taxes (including penalties and interest) owed in respect of lost Commercial ITCs, depreciation, gross-up costs and expenses incurred in defending such claim, subject to negotiated exclusions from, and limitations to, coverage. The Company purchased similar additional insurance policies in January 2021 and in October 2022.

At each balance sheet date, the Company assesses and recognizes, when applicable, the potential exposure from this obligation based on all the information available at that time, including any audits undertaken by the IRS. The IRS is auditing one of our investors in an audit involving a review of the fair market value determination of our solar energy systems in the investment fund, which is covered by the Company’s 2018 insurance policy. If this audit results in an adverse final determination, we may be subject to an indemnity obligation to our investor, which may result in certain limited out-of-pocket costs and potential increased insurance premiums in the future.

Litigation

The Company is subject to certain legal proceedings, claims, investigations and administrative proceedings in the ordinary course of its business. The Company records a provision for a liability when it is both probable that the liability has been incurred and the amount of the liability can be reasonably estimated. These provisions, if any, are reviewed at least quarterly and adjusted to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel and other information and events pertaining to a particular case. Depending on the nature and timing of any such proceedings that may arise, an unfavorable resolution of a matter could materially affect the Company’s future consolidated results of operations, cash flows or financial position in a particular period.

In the normal course of business, the Company has from time to time been named as a party to various legal claims, actions, or complaints. While the outcome of these matters cannot currently be predicted with certainty, the Company does not currently believe that the outcome of any of these claims will have a material adverse effect, individually or in the aggregate, on its consolidated financial position, results of operations or cash flows.

The Company accrues for losses that are probable and can be reasonably estimated. The Company evaluates the adequacy of its legal reserves based on its assessment of many factors, including interpretations of the law and assumptions about the future outcome of each case based on available information.
Note 20. Net Income (Loss) Per Share

Basic net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted-average number of common shares outstanding during the period adjusted to include the effect of potentially dilutive securities. Potentially dilutive securities are excluded from the computation of dilutive EPS in periods in which the effect would be antidilutive.

The computation of the Company’s basic and diluted net income (loss) per share is as follows (in thousands, except per share amounts):

<table>
<thead>
<tr>
<th>Years Ended December 31,</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerator:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net income (loss) attributable to common stockholders</td>
<td>$ 173,377</td>
<td>$ (79,423)</td>
<td>$ (173,394)</td>
</tr>
<tr>
<td>Debt discount amortization</td>
<td>2,258</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Net Income (loss) available to common stockholders</strong></td>
<td>$ 175,635</td>
<td>$ (79,423)</td>
<td>$ (173,394)</td>
</tr>
</tbody>
</table>

| **Denominator:**         |      |      |      |
| Weighted average shares used to compute net income (loss) per share attributable to common stockholders, basic | 211,347 | 205,132 | 139,606 |
| Weighted average effect of potentially dilutive shares to purchase common stock | 7,810 | — | — |
| Weighted average shares used to compute net income (loss) per share attributable to common stockholders, diluted | 219,157 | 205,132 | 139,606 |

| **Net income (loss) per share attributable to common stockholders** |      |      |      |
| Basic | $ 0.82 | $ (0.39) | $ (1.24) |
| Diluted | $ 0.80 | $ (0.39) | $ (1.24) |

The following shares were excluded from the computation of diluted net income (loss) per share as the impact of including those shares would be antidilutive (in thousands):

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2022</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding stock options</td>
<td>1,661</td>
<td>799</td>
<td>1,286</td>
</tr>
<tr>
<td>Unvested restricted stock units</td>
<td>2,863</td>
<td>1,448</td>
<td>1,493</td>
</tr>
<tr>
<td>Convertible Senior Notes (if converted)</td>
<td>—</td>
<td>3,128</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4,524</td>
<td>5,375</td>
<td>2,779</td>
</tr>
</tbody>
</table>
Note 21. Related Party Transactions

Advances Receivable—Related Party

Net amounts due from direct-sales professionals were $18.1 million and $11.2 million as of December 31, 2022 and 2021, respectively. The Company provided a reserve of $1.9 million and $1.4 million as of December 31, 2022 and 2021, respectively, related to advances to direct-sales professionals who have terminated their employment agreement with the Company.


None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of our “disclosure controls and procedures” as of the end of the period covered by this Annual Report on Form 10-K, pursuant to Rules 13a-15(e) and 15d-15(e) under the Exchange Act.

In connection with that evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective and designed to provide reasonable assurance that the information required to be disclosed is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission rules and forms as of December 31, 2022. The term “disclosure controls and procedures,” as defined in Rules 13a-15I and 15d-15I under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management’s Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Our management used the Committee of Sponsoring Organizations of the Treadway Commission Internal Control - Integrated Framework (2013), or the COSO framework, to evaluate the effectiveness of internal control over financial reporting. Management believes that the COSO framework is a suitable framework for its evaluation of financial reporting because it is free from bias, permits reasonably consistent qualitative and quantitative measurements of our internal control over financial reporting, is sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of our internal control over financial reporting are not omitted and is relevant to an evaluation of internal control over financial reporting.

Management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2022 and has concluded that such internal control over financial reporting is effective.
The effectiveness of our internal control over financial reporting as of December 31, 2022 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in its report which is included in Item 8 of this Annual Report on Form 10-K.

**Item 9B. Other Information.**

None.

**Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.**

Not Applicable.
PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by this Item 10 of Form 10-K will be set forth in our proxy statement to be filed with the SEC in connection with the solicitation of proxies for our 2023 Annual Meeting of Stockholders (“Proxy Statement”) and is incorporated herein by reference. The Proxy Statement will be filed with the SEC within 120 days after the year-end of the fiscal year which this report relates.

Item 11. Executive Compensation.

The information required by this Item 11 will be set forth in the Proxy Statement and is incorporated herein by reference.


The information required by this Item 12 will be set forth in the Proxy Statement and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this Item 13 will be set forth in the Proxy Statement and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

The information required by this Item 14 will be set forth in the Proxy Statement and is incorporated herein by reference.
PART IV


Documents filed as part of this report are as follows:

(1) Consolidated Financial Statements

Our Consolidated Financial Statements are listed in the “Index to Consolidated Financial Statements” under Item 8 of Part II of this Annual Report on Form 10-K.

(2) Financial Statement Schedules

The required information is included elsewhere in this Annual Report on Form 10-K, not applicable, or not material.

(3) Exhibits

The exhibits listed in the accompanying “Exhibit Index” are filed or incorporated by reference as part of this Annual Report on Form 10-K.
<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Exhibit Description</th>
<th>Form</th>
<th>File No.</th>
<th>Exhibit</th>
<th>Filing Date</th>
<th>Filed Herewith</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Amended and Restated Certificate of Incorporation of the Registrant</td>
<td>10-Q</td>
<td>001-37511</td>
<td>3.1</td>
<td>9/15/2015</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Amended and Restated Bylaws of the Registrant</td>
<td>10-Q</td>
<td>001-37511</td>
<td>3.2</td>
<td>9/15/2015</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Amendment to Amended and Restated Bylaws</td>
<td>8-K</td>
<td>001-37511</td>
<td>3.1</td>
<td>7/10/2020</td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Form of common stock certificate of the Registrant</td>
<td>S-1</td>
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<td>Form of Stock Issuance Agreement</td>
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<td>4.3</td>
<td>Indenture, dated January 28, 2021, between Sunrun Inc. and Wells Fargo Bank, National Association</td>
<td>8-K</td>
<td>001-37511</td>
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<td>Form of 0% Convertible Senior Note due 2026</td>
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<td>Description of Capital Stock</td>
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<td>Form of Indemnification Agreement between the Registrant and each of its directors and executive officers</td>
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<td>Sunrun Inc. Amended and Restated Employee Stock Purchase Plan and related form agreements</td>
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<td>Sunrun-VSI 2014 Equity Incentive Plan, and the forms thereunder</td>
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<td>Sunrun Inc. 2008 Equity Incentive Plan and related form agreements</td>
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<td>Sunrun Inc. Amended and Restated Executive Incentive Compensation Plan</td>
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<td>Form of Notice of Stock Option Grant and Stock Option Agreement under the Vivint Solar, Inc. 2014 Equity Incentive Plan</td>
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<td>Amended and Restated Confirmatory Employment Letter by and between Lynn Jurich and Sunrun, Inc., dated February 22, 2023</td>
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<td>Employment Letter between the Registrant and Christopher Dawson, dated as of November 13, 2017</td>
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<td>Employment Agreement between Sunrun Inc. and Paul Dickson, dated December 3, 2021</td>
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<td>Consulting Agreement by and between Sunrun Inc. and Tom vonReichbauer, dated May 4, 2022</td>
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<td>Separation Agreement by and between Christopher Dawson and Sunrun Inc., dated December 31, 2021</td>
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<td>Amended and Restated Non-Employee Director Pay Policy, Amended December 23, 2021</td>
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<td>Subscription Agreement dated July 29, 2020, between Sunrun Inc. and SK E&amp;S Co., Ltd.</td>
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<td>7/30/2020</td>
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<td>10.28</td>
<td>Purchase Agreement, dated January 25, 2021, by and among Sunrun Inc. Credit Suisse Securities (USA) LLC and Morgan Stanley &amp; Co. LLC, as representatives of the several initial purchasers named in Schedule I thereto</td>
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<td>Form of Capped Call Confirmation</td>
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<td>Employment Agreement between Sunrun Inc. and Mary Powell, dated August 31, 2021</td>
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<td>8/5/2021</td>
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<td>10.31+</td>
<td>Credit Agreement, dated as of April 20, 2021, among Sunrun Luna Portfolio 2021, LLC, Credit Suisse AG, New York Branch (as administrative agent), Wells Fargo Bank, National Association (as collateral agent and as paying agent) and each of the lenders and funding agents identified on the signature pages thereto</td>
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<td>Amendment to the Credit Agreement, dated as of May 5, 2021, among Sunrun Luna Portfolio 2021, LLC, Credit Suisse AG, New York Branch (as administrative agent) and each of the lenders and funding agents identified on the signature pages thereto</td>
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<td>001-37511</td>
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<td>Exhibit Description</td>
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<td>10.33†</td>
<td>Second Amendment to the Credit Agreement, dated as of October 8, 2021, among Sunrun Luna Portfolio 2021, LLC, Credit Suisse AG, New York Branch (as administrative agent) and each of the lenders and funding agents identified on the signature pages thereto</td>
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<td>Credit Agreement, dated as of January 24, 2022, by and among the Company, KeyBank National Association, as administrative agent, Silicon Valley Bank, as collateral agent, and each of the guarantors, lenders, and arrangers identified on the signature pages thereto</td>
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<td>001-37511</td>
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<td>Credit Agreement, dated as of January 24, 2022, by and among the Company, KeyBank National Association, as administrative agent, Silicon Valley Bank, as collateral agent, and each of the guarantors, lenders and arrangers identified on the signature pages thereto, and as amended by Amendment No. 1 to the Credit Agreement, dated as of March 8, 2022; and as further amended by Amendment No. 2 to the Credit Agreement, dated as of November 2, 2022</td>
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<td>10.36¥</td>
<td>Credit Agreement, dated as of January 24, 2022, by and among the Company, KeyBank National Association, as administrative agent, Silicon Valley Bank, as collateral agent, and each of the guarantors, lenders and arrangers identified on the signature pages thereto, and as amended by Amendment No. 1 to the Credit Agreement, dated as of March 8, 2022, and as further amended by Amendment No. 2 to the Credit Agreement, dated as of November 2, 2022</td>
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<td>Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</td>
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<td>Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</td>
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<td>32.1†</td>
<td>Certifications of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</td>
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† The certifications attached as Exhibit 32.1 that accompany this Annual Report on Form 10-K, are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Sunrun Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

‡ Indicates management contract or compensatory plan.

¥ Confidential treatment has been requested as to certain portions of this exhibit, which portions have been omitted and submitted separately to the Securities and Exchange Commission.

^ Portions of this exhibit have been omitted from the exhibit because they are both not material and would be competitively harmful if publicly disclosed.
Item 16. Form 10-K Summary.

None.
SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

Sunrun Inc.

Date: February 22, 2023

By: /s/ Mary Powell

Mary Powell  
Chief Executive Officer and Director

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>/s/ Mary Powell</td>
<td>Chief Executive Officer and Director (Principal Executive Officer)</td>
<td>February 22, 2023</td>
</tr>
<tr>
<td>Mary Powell</td>
<td></td>
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<tr>
<td>/s/ Danny Abajian</td>
<td>Chief Financial Officer (Principal Financial Officer)</td>
<td>February 22, 2023</td>
</tr>
<tr>
<td>Danny Abajian</td>
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<tr>
<td>/s/ Michelle Philpot</td>
<td>Chief Accounting Officer (Principal Accounting Officer)</td>
<td>February 22, 2023</td>
</tr>
<tr>
<td>Michelle Philpot</td>
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<tr>
<td>/s/ Lynn Jurich</td>
<td>Co-Chair and Director</td>
<td>February 22, 2023</td>
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<tr>
<td>Lynn Jurich</td>
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<tr>
<td>/s/ Edward Fenster</td>
<td>Co-Chair and Director</td>
<td>February 22, 2023</td>
</tr>
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<td>Edward Fenster</td>
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<td></td>
</tr>
<tr>
<td>/s/ Katherine August-de Wilde</td>
<td>Director</td>
<td>February 22, 2023</td>
</tr>
<tr>
<td>Katherine August-de Wilde</td>
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<tr>
<td>/s/ Leslie Dach</td>
<td>Director</td>
<td>February 22, 2023</td>
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<td>Leslie Dach</td>
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<tr>
<td>/s/ Alan Ferber</td>
<td>Director</td>
<td>February 22, 2023</td>
</tr>
<tr>
<td>Alan Ferber</td>
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</tr>
<tr>
<td>/s/ Sonita Lontoh</td>
<td>Director</td>
<td>February 22, 2023</td>
</tr>
<tr>
<td>Sonita Lontoh</td>
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<td></td>
</tr>
<tr>
<td>/s/ Gerald Risk</td>
<td>Director</td>
<td>February 22, 2023</td>
</tr>
<tr>
<td>Gerald Risk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/s/ Manjula Talreja</td>
<td>Director</td>
<td>February 22, 2023</td>
</tr>
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<td>Manjula Talreja</td>
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CREDIT AGREEMENT*

Dated as of January 24, 2022

among

SUNRUN INC.,
as the Borrower,

THE SUBSIDIARIES OF THE BORROWER PARTY HERETO,
as the Guarantors,

KEYBANK NATIONAL ASSOCIATION,
as Administrative Agent,

SILICON VALLEY BANK,
as Collateral Agent

THE LENDERS PARTY HERETO

and

KEYBANC CAPITAL MARKETS INC.,
as Coordinating Lead Arranger

MUFG BANK, LTD.,
as Joint Lead Arranger

KEYBANC CAPITAL MARKETS INC. and
MUFG BANK, LTD.,
as Joint Bookrunners

* All amendments made pursuant to Amendment No. 1 to the Credit Agreement, dated as of March 8, 2022, and Amendment No. 2 to the Credit Agreement, dated as of November 2, 2022, each among the parties hereto, are reflected herein.

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
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* All amendments made pursuant to Amendment No. 1 to the Credit Agreement, dated as of March 8, 2022, and Amendment No. 2 to the Credit Agreement, dated as of November 2, 2022, each among the parties hereto, are reflected herein.

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CREDIT AGREEMENT

This CREDIT AGREEMENT is entered into as of January 24, 2022, by and among SUNRUN INC., a Delaware corporation (“Sunrun” or the “Borrower”), the Guarantors (defined herein), the Lenders (defined herein), KEYBANK NATIONAL ASSOCIATION (“KeyBank”), as the Administrative Agent, SILICON VALLEY BANK, as the Collateral Agent, KEYBANC CAPITAL MARKETS INC., as Coordinating Lead Arranger and Joint Bookrunner, and MUFG BANK, LTD., as Joint Lead Arranger and Joint Bookrunner.

PRELIMINARY STATEMENTS:

WHEREAS, the Borrower has requested that the Lenders make loans and other financial accommodations to the Borrower in an aggregate amount of up to $600,000,000; and

WHEREAS, the Lenders have agreed to make such loans and other financial accommodations to the Borrower on the terms and subject to the conditions set forth herein.

NOW THEREFORE, in consideration of the mutual conditions and agreements set forth in this Agreement, and for good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereto hereby agree as follows:

ARTICLE I
DEFINITIONS AND ACCOUNTING TERMS

Section 1.01 Defined Terms.

As used in this Agreement, the following terms shall have the respective meanings set forth below:

“Account Debtor” means the party who is obligated on or under any Account.

“Accounts” means all presently existing and hereafter arising accounts, contract rights, payment intangibles and all other forms of obligations owing to the Borrower, a Guarantor or an Excluded Subsidiary, as applicable, including, without limitation, (a) Customer Prepayments, (b) obligations of the applicable Direct Payments Obligor to make payments to a Loan Party, either directly or by an assignment of a Direct Payment from an Excluded Subsidiary or, in the case of an Inverted Lease Structure, a Tax Equity Investor, or (c) accounts or accounts receivable as defined under the UCC, including without limitation, with respect to any Person, any right of such Person to payment for goods sold or leased or for services rendered.

“Acquisition” means the acquisition, whether through a single transaction or a series of related transactions, of (a) a majority of the Voting Stock or other controlling ownership interest in another Person (including the purchase of an option, warrant or convertible or similar type security to acquire such a controlling interest at the time it becomes exercisable by the holder thereof), whether by purchase of such equity or other ownership interest or upon the exercise of an option or warrant for, or conversion of securities into, such equity or other ownership interest, or (b) assets of another Person which constitute all or substantially all of the assets of such Person or of a division, line of business or other business unit of such Person.

“Additional Secured Obligations” means (a) all obligations arising under Secured Cash Management Agreements and Secured Hedge Agreements and (b) all costs and expenses

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incurred in connection with enforcement and collection of the foregoing, including the fees, charges and disbursements of counsel, in each case whether direct or indirect (including those acquired by assumption), absolute or contingent, due or to become due, now existing or hereafter arising and including interest and fees that accrue after the commencement by or against any Loan Party or any Affiliate thereof of any proceeding under any Debtor Relief Laws naming such Person as the debtor in such proceeding, regardless of whether such interest and fees are allowed claims in such proceeding; provided that, Additional Secured Obligations of a Loan Party shall exclude any Excluded Swap Obligations with respect to such Loan Party.

“Adjusted Applicable Percentage” means, with respect to any Lender at any time with respect to any Revolving Borrowing or any risk participation in any L/C Credit Extension (including the obligation to make any L/C Advance in connection with such L/C Credit Extension), such Lender’s Adjusted Applicable Percentage determined in accordance with the provisions of Section 2.01(c) and subject to adjustment as provided in Sections 2.05, 2.14 and 2.15.

“Adjusted Cash Flow” means, in respect of any Measurement Period, the aggregate amount of Distributed Cash and Net Refinancing Proceeds, in each case, received by any Loan Party during such Measurement Period; provided, that any Distributed Cash or Net Refinancing Proceeds generated by an Excluded Subsidiary during such Measurement Period that is retained by such Excluded Subsidiary but is permitted and available for distribution, directly or indirectly, to any Loan Party as of the last day of such Measurement Period shall be deemed Adjusted Cash Flow for such Measurement Period (and any such amounts actually distributed, directly or indirectly, to any Loan Party in any subsequent fiscal quarter shall not be counted as having been distributed during such subsequent fiscal quarter).

“Adjusted Term SOFR Rate” means, for any Available Tenor and Interest Period with respect to a Term SOFR Loan, the greater of (a) the Floor and (b) the sum of (i) the Term SOFR Adjustment plus (ii) the forward-looking term rate for a period comparable to such Available Tenor based on SOFR (“Term SOFR”) that is published by CME Group Benchmark Administration Ltd (“CBA”) or a successor Term SOFR Administrator, as applicable, and displayed on CBA’s Market Data Platform (or other commercially available source of the applicable Term SOFR Administrator providing such quotations as may be selected by the Administrative Agent in its reasonable discretion from time to time), at approximately 6:00 a.m. New York City time, two SOFR Business Days (the “Lookback Day”) prior to the commencement of such Interest Period (and rounded to the nearest 1/16th of 1%); provided that, if, by 5:00 pm (New York City time) on any Lookback Day, prior to the commencement of such Interest Period, Term SOFR for the applicable Interest Period has not been published, then the Term SOFR for such Interest Period will be the Term SOFR as published by the Term SOFR Administrator in respect of the first preceding SOFR Business Day for which such rate was published; provided, further, that any Tenor of Term SOFR determined pursuant to this sentence shall be utilized for purposes of calculation of such Tenor of Term SOFR for no more than three (3) consecutive SOFR Business Days.

“Administrative Agent” means KeyBank National Association, in its capacity as sole administrative agent under any of the Loan Documents, or any successor administrative agent.
“Administrative Agent’s Office” means the Administrative Agent’s address and, as appropriate, account as set forth on Schedule 1.01(a), or such other address or account as the Administrative Agent may from time to time notify the Borrower and the Lenders.

“Administrative Questionnaire” means an Administrative Questionnaire in substantially the form of Exhibit A or any other form approved by the Administrative Agent.

“Affected Financial Institution” means (a) any EEA Financial Institution or (b) any UK Financial Institution.

“Affiliate” means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

“Aggregate Commitments” means the Commitments of all the Lenders.

“Agreement” means this Credit Agreement.

“Applicable Margin” means (A) 2.25% for Loans that are Base Rate Loans, (B) 3.25% for Loans that are Term SOFR Loans, (C) 3.25% for the Letter of Credit Fee and (D) 0.50% for the Commitment Fee.

“Applicable Percentage” means with respect to any Lender at any time with respect to any Revolving Borrowing or any risk participation in any L/C Credit Extension (including the obligation to make any L/C Advance in connection with such L/C Credit Extension), such Lender’s Unadjusted Applicable Percentage or such Lender’s Adjusted Applicable Percentage, as the case may be, determined in accordance with the provisions of Section 2.01(c) and subject to adjustment as provided in Sections 2.05, 2.14 and 2.15.

“Applicable Revolving Percentage” means, with respect to any Lender at any time with respect to any Revolving Borrowing or any risk participation in any L/C Credit Extension (including the obligation to make any L/C Advance in connection with such L/C Credit Extension), such Lender’s Applicable Percentage at such time.

“Applicable Permit” means any Permit, including any Environmental Permit or zoning, FERC, any state public utility commission, safety, siting or building Permit (a) that is material and necessary at any given time to (i) design, construct, operate, maintain, repair, own or use any Project as contemplated by the Loan Documents or the Host Customer Agreements, (ii) sell electric energy, capacity, or ancillary services, or renewable energy credits, “green tags,” or other like environmental credits or benefits therefrom, or (iii) consummate any transaction contemplated by the Loan Documents or the Host Customer Agreements, or (b) that is necessary so that (i) none of the Administrative Agent, the Collateral Agent, any Lender, or any Affiliate of any of them may be deemed by any Governmental Authority to be subject to regulation under the FPA or PUHCA or under any state laws or regulations respecting the rates or the financial or organizational regulation of electric utilities solely as a result of the construction or operation of any such Project or the sale of electricity or renewable energy credits, “green tags” or other like environmental credits or benefits therefrom, or (ii) neither the Borrower nor any of its Affiliates may be deemed by any Governmental Authority to be subject to, or not exempted from, regulation under the FPA, PUHCA (other than Section 1265 thereof or any regulation applicable to “exempt wholesale generators” or “foreign utility companies” under Section 1262(6) of PUHCA), as applicable, or state laws or regulations respecting the rates or the financial or organizational regulation of electric utilities.

“Applicable Revolving Percentage” means, with respect to any Lender at any time with respect to any Revolving Borrowing or any risk participation in any L/C Credit Extension (including the obligation to make any L/C Advance in connection with such L/C Credit Extension), such Lender’s Applicable Percentage at such time.

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“Appraisal” means the appraisal acquired by the Borrower on a semi-annual basis, which (i) is from a nationally recognized third-party appraiser that (A) is qualified to appraise independent electric generating businesses and (B) (x) has been engaged in the appraisal or business valuation and consulting business for no fewer than three (3) years or (y) is otherwise acceptable to the Collateral Agent, and (ii) (A) is used by the Borrower or its Subsidiaries in connection with a Tax Equity Partnership and (B) shows the fair market value of new Projects in each of the States of the United States in which Projects are being installed, in each case expressed in terms of dollars per watt of installed capacity.

“Appropriate Lender” means, at any time, (a) with respect to the Facility, a Lender that has a Commitment or holds a Revolving Loan at such time, and (b) with respect to the Letter of Credit Sublimit, (i) the L/C Issuer and (ii) if any Letters of Credit have been issued pursuant to Section 2.03, the Lenders.

“Approved Fund” means any Fund that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

“Arranger” means each of KeyBanc Capital Markets Inc., in its capacity as the coordinating lead arranger and a joint book runner, and MUFG Bank, Ltd., in its capacity as a joint lead arranger and a joint book runner.

“Assignment and Assumption” means an assignment and assumption entered into by a Lender and an Eligible Assignee (with the consent of any party whose consent is required pursuant to Section 11.06(b)), and accepted by the Administrative Agent, in substantially the form of Exhibit B or any other form (including electronic documentation generated by MarkitClear or other electronic platform) approved by the Administrative Agent.

“Attributable Indebtedness” means, on any date, (a) in respect of any Capitalized Lease of any Person, the capitalized amount thereof that would appear on a balance sheet of such Person prepared as of such date in accordance with GAAP, and (b) in respect of any Synthetic Lease Obligation, the capitalized amount of the remaining lease or similar payments under the relevant lease or other applicable agreement or instrument that would appear on a balance sheet of such Person prepared as of such date in accordance with GAAP if such lease or other agreement or instrument were accounted for as a Capitalized Lease.

“Audited Financial Statements” means the audited Consolidated balance sheet of Sunrun and its Subsidiaries for the fiscal year ended December 31, 2020, and the related Consolidated statements of income or operations, shareholders’ equity and cash flows for such fiscal year of Sunrun and its Subsidiaries, including the notes thereto.

“Availability Period” means in respect of the Facility the period from and including the Closing Date to the earliest of (i) the Maturity Date of the Facility, (ii) the date of termination of the Commitments pursuant to Section 2.05, and (iii) the date of termination of the Commitment of each Lender to make Revolving Loans and of the obligation of the L/C Issuer to make L/C Credit Extensions pursuant to Section 8.02.

“Available Take-Out” means, as of a given date of determination, the sum of:

(a) the aggregate amount of committed and undrawn amounts under any Permitted Asset Financing Transactions in respect of Projects; and

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(b) the aggregate amount of other committed and undrawn financings acceptable to the Collateral Agent and the Required Lenders (and
not otherwise covered by the foregoing clause (a));
in each case as set forth in the Take-Out Spreadsheet.

“Available Tenor” means, as of any date of determination and with respect to the then-current Benchmark, as applicable, (x) if such
Benchmark is a term rate, any tenor for such Benchmark (or component thereof) that is or may be used for determining the length of an interest
period pursuant to this Agreement, or (y) otherwise, any payment period for interest calculated with reference to such Benchmark (or
component thereof) that is or may be used for determining any frequency of making payments of interest calculated with reference to such
Benchmark, in each case, as of such date and not including, for the avoidance of doubt, any tenor for such Benchmark that is then-removed
from the definition of “Interest Period” pursuant to Section 3.03(b).

“Back-Log Spreadsheet” means a spreadsheet for Projects, substantially in the form attached hereto as Exhibit Q, providing for the
status and amount of Project Back-Log.

“Bail-In Action” means the exercise of any Write-Down and Conversion Powers by the applicable Resolution Authority in respect of
any liability of an Affected Financial Institution.

“Bail-In Legislation” means (a) with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the
European Parliament and of the Council of the European Union, the implementing law, regulation, rule or requirement for such EEA Member
Country from time to time that is described in the EU Bail-In Legislation Schedule and (b) with respect to the United Kingdom, Part I of the
United Kingdom Banking Act 2009 (as amended from time to time) and any other law, regulation or rule applicable in the United Kingdom
relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (other than through
liquidation, administration or other insolvency proceedings).

“Base Rate” means for any day a fluctuating rate per annum equal to the highest of (a) the Federal Funds Rate plus 0.50%, (b) the rate
of interest in effect for such day as determined from time to time by Administrative Agent as its prime rate (the “Prime Rate”) and notified to
the Borrower, (c) the Adjusted Term SOFR Rate for a one-month Interest Period in effect on such day (or if such day is not a Business Day,
the immediately preceding Business Day) plus 1.00% and (d) the Floor. The Prime Rate is a rate set by the Administrative Agent based upon
various factors including the Administrative Agent’s costs and desired return, general economic conditions and other factors, and is used as a
reference point for pricing some loans, which may be priced at, above, or below such rate. Any change in the Prime Rate shall take effect at the
opening of business on the day of such change. Any change in the Base Rate due to a change in the Prime Rate, the Federal Funds Rate or the
Adjusted Term SOFR Rate shall be effective on the effective date of such change in the Prime Rate, the Federal Funds Rate or the Adjusted
Term SOFR Rate, as the case may be. If the Base Rate is being used as an alternative rate of interest pursuant to Section 3.03(b), then the Base
Rate shall be the greater of clauses (a) and (b) above and shall be determined without reference to clause (c) above until a Benchmark
Replacement is determined.

“Base Rate Loan” means a Revolving Loan that bears interest based on the Base Rate.

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if
publicly disclosed.
“Benchmark” means, initially, Term SOFR; provided that, if a Benchmark Transition Event has occurred with respect to Term SOFR or the then-current Benchmark, then “Benchmark” means the applicable Benchmark Replacement to the extent that such Benchmark Replacement has replaced such prior benchmark rate pursuant to Section 3.03(b).

“Benchmark Replacement” means, with respect to any Benchmark Transition Event for the then-current Benchmark, the sum of: (i) the alternate benchmark rate that has been selected by the Administrative Agent and the Borrower as the replacement for such Benchmark giving due consideration to (A) any selection or recommendation of a replacement benchmark rate or the mechanism for determining such a rate by the Relevant Governmental Body or (B) any evolving or then-prevailing market convention for determining a benchmark rate as a replacement for such Benchmark for syndicated credit facilities denominated in Dollars at such time and (ii) the related Benchmark Replacement Adjustment, if any; provided that, if such Benchmark Replacement as so determined would be less than the Floor, such Benchmark Replacement will be deemed to be the Floor for the purposes of this Agreement and the other Loan Documents.

“Benchmark Replacement Adjustment” means, with respect to any replacement of any then-current Benchmark with an Unadjusted Benchmark Replacement for any applicable Available Tenor, the spread adjustment, or method for calculating or determining such spread adjustment (which may be a positive or negative value or zero), if any, that has been selected by the Administrative Agent and the Borrower giving due consideration to (a) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of such Benchmark with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body or (b) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of such Benchmark with the applicable Unadjusted Benchmark Replacement for Dollar-denominated syndicated credit facilities.

“Benchmark Replacement Conforming Changes” means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of “Base Rate”, the definition of “Business Day,” or “SOFR Business Day”, the definition of “Interest Period” or any similar or analogous definition (or the addition of a concept of “interest period”), the timing and frequency of determining rates and making payments of interest, timing of borrowing requests or prepayment, conversion or continuation notices, length of lookback periods, the applicability of Section 3.05 and other technical, administrative or operational matters) that the Administrative Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent determines that no market practice for the administration of such Benchmark Replacement exists, in such other manner of administration as the Administrative Agent determines is reasonably necessary in connection with the administration of this Agreement and the other Loan Documents).

“Benchmark Replacement Date” means the earlier to occur of the following events with respect to the then-current Benchmark:

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
(a) in the case of clause (a) or (b) of the definition of “Benchmark Transition Event”, the later of (i) the date of the public statement or publication of information referenced therein and (ii) the date on which the administrator of such Benchmark (or the published component used in the calculation thereof) permanently or indefinitely ceases to provide all Available Tenors of such Benchmark (or such component thereof); or

(b) in the case of clause (c) of the definition of “Benchmark Transition Event”, the first date on which such Benchmark (or the published component used in the calculation thereof) has been determined and announced by the regulatory supervisor for the administrator of such Benchmark (or such component thereof) to be no longer representative; provided, that such non-representativeness will be determined by reference to the most recent statement or publication referenced in such clause (c) and even if any Available Tenor of such Benchmark (or such component thereof) continues to be provided on such date.

For the avoidance of doubt, (A) if the event giving rise to the Benchmark Replacement Date for any Benchmark occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such Benchmark and for such determination and (B) the “Benchmark Replacement Date” will be deemed to have occurred in the case of clause (a) or (b) with respect to any Benchmark upon the occurrence of the applicable event or events set forth therein with respect to all then-current Available Tenors of such Benchmark (or the published component used in the calculation thereof).

“Benchmark Transition Event” means, with respect to the then-current Benchmark, the occurrence of one or more of the following events with respect to such Benchmark:

(a) a public statement or publication of information by or on behalf of the administrator of such Benchmark (or the published component used in the calculation thereof) announcing that such administrator has ceased or will cease to provide all Available Tenors of such Benchmark (or such component thereof), permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide any Available Tenor of such Benchmark (or such component thereof);

(b) a public statement or publication of information by the regulatory supervisor for the administrator of such Benchmark (or the published component used in the calculation thereof), the FRB, the Federal Reserve Bank of New York, an insolvency official with jurisdiction over the administrator for such Benchmark (or such component), a resolution authority with jurisdiction over the administrator for such Benchmark (or such component) or a court or an entity with similar insolvency or resolution authority over the administrator for such Benchmark (or such component), which states that the administrator of such Benchmark (or such component) has ceased or will cease to provide all Available Tenors of such Benchmark (or such component thereof) permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide any Available Tenor of such Benchmark (or such component thereof); or

(c) a public statement or publication of information by the regulatory supervisor for the administrator of such Benchmark (or the published component used in the calculation thereof) announcing that all Available Tenors of such Benchmark (or such component thereof) are no longer, or as of a specified future date will no longer be, representative.

For the avoidance of doubt, a “Benchmark Transition Event” will be deemed to have occurred with respect to any Benchmark if a public statement or publication of information set
forth above has occurred with respect to each then-current Available Tenor of such Benchmark (or the published component used in the calculation thereof).

“Benchmark Transition Start Date” means, with respect to any Benchmark, in the case of a Benchmark Transition Event, the earlier of (i) the applicable Benchmark Replacement Date and (ii) if such Benchmark Transition Event is a public statement or publication of information of a prospective event, the 90th day prior to the expected date of such event as of such public statement or publication of information (or if the expected date of such prospective event is fewer than 90 days after such statement or publication, the date of such statement or publication).

“Benchmark Unavailability Period” means, with respect to any then-current Benchmark, the period (if any) (i) beginning at the time that a Benchmark Replacement Date with respect to such Benchmark pursuant to clauses (a) or (b) of that definition has occurred if, at such time, no Benchmark Replacement has replaced the then-current Benchmark for all purposes hereunder and under any Loan Document in accordance with Section 3.03(b) and (ii) ending at the time that a Benchmark Replacement has replaced such Benchmark for all purposes hereunder and under any Loan Document in accordance with Section 3.03(b).

“Beneficial Ownership Certification” means a certification regarding beneficial ownership as required by the Beneficial Ownership Regulation.


“BHC Act Affiliate” of a party means an “affiliate” (as such term is defined under, and interpreted in accordance with, 12 U.S.C. 1841(k)) of such party.

“Borrower” has the meaning specified in the introductory paragraph hereto.

“Borrower Materials” has the meaning specified in Section 6.02.

“Borrowing” means a Revolving Borrowing.

“Borrowing Base” means, as of any date of determination, the sum of the following:

(a) the least of (i) [***] of the Project Value of Eligible Project Back-Log (net of terminated contracts, which will be calculated as reported on the most-recent Borrowing Base Certificate) for Projects (less cash sale Projects in the Project Back-Log accounted for in clause (e) below), (ii) [***] of Eligible Take-Out less the amount determined pursuant to clause (b) below for such date of determination and (iii) [***] of Contracted Net Earning Assets; plus

(b) [***] of committed but undrawn Permitted Asset Financing Transaction proceeds for Projects that have been sold or contributed to an Excluded Subsidiary or a Tax Equity Investor (and are not included in Eligible Project Back-Log pursuant to clause (a) above); plus

(c) [***] of the Eligible Direct Payment Receivables expected to be received on Projects that have achieved Milestone One; plus

(d) [***] of the Eligible Customer Upfront Payment Receivables expected to be received on Projects that have achieved Milestone One; plus

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
(e) [***] of the estimated final sale value of direct cash sale Projects in the Project Back-Log as of a given date of determination (regardless of whether the payment is made directly by the consumer or a lender or financing party on behalf of the consumer); plus

(f) [***] of the Eligible Trade Accounts of the Loan Parties; and plus

(g) [***] of Eligible Inventory owned directly by any Loan Party as of a given date of determination, up to a maximum amount equal to [***] of the Aggregate Commitments;

provided that (x) Eligible Inventory comprising the components of clause (g) of the formula for calculation of the Borrowing Base set forth above shall be subject to appraisal at the request of the Collateral Agent with results reasonably satisfactory to the Collateral Agent, (y) the components of clauses (c) and (d) of the formula for calculation of the Borrowing Base set forth above shall be factually supportable and reasonably expected to be received on the applicable Projects in the good faith judgment of the Borrower and (z) if the Collateral Agent, at the direction or with the concurrence of the Required Lenders, in their good faith business judgment based on events, conditions, contingencies or risks reasonably determines that the foregoing amounts and percentages, if left unchanged, would reasonably be expected to result in a material overvaluation of the Collateral, then the Collateral Agent shall give the Borrower written notice of suggested amendments to the Borrowing Base calculation and the justification for such changes and the Parties shall work in good faith to revise such amounts and percentages. For purposes of clause (z), if the Collateral is overvalued by 5% or more, such overvaluation shall be deemed to be a material overvaluation of the Collateral.

“Borrowing Base Certificate” means a certificate substantially in the form of Exhibit P.

“Borrowing Base Deficiency” means, as of any date of determination, the failure of the Borrowing Base to at least equal the Total Outstandings. Such determination shall be made based on the most recently delivered Borrowing Base Certificate and Total Outstandings as reflected in the Register.

“Borrowing Base Threshold” means, as of any date of determination, that (i) the Borrowing Base as of such date of determination is equal to or greater than [***] of Total Outstandings and (ii) Total Outstandings are less than [***] of total Commitments. Such determination shall be made based on the most recently delivered Borrowing Base Certificate and Total Outstandings as reflected in the Register.

“Business Day” means the hours between 9:00 a.m. and 4:00 p.m., Eastern time, Monday through Friday, other than the following days: (a) New Year’s Day, Dr. Martin Luther King, Jr. Day, Washington’s Birthday (celebrated on President’s Day), Memorial Day, the day before Independence Day, Independence Day, Labor Day, Columbus Day, Veterans’ Day, the day before and after Thanksgiving Day, Thanksgiving Day, Christmas Eve, Christmas Day and New Year’s Eve, (b) any other day on which banks are required or authorized by Law to close in New York State, (c) a legal holiday in the State of New York or California, (d) with respect to any matters relating to Term SOFR Loans, a SOFR Business Day and (e) any day on which commercial banks and the U.S. Federal Reserve Bank are authorized or required to be closed in any of the foregoing states. For purposes hereof, if any day listed above as a day on which a bank is closed falls on a Saturday or Sunday, such day is celebrated on either the prior Friday or the following Monday.

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
“CAD Project” means, at any time, any Project (i) the System related to which has not been installed as of such time, (ii) with respect to which a Loan Party has (A) entered into a Host Customer Agreement and (B) completed a system design, in each case, at such time, (iii) with respect to which the Loan Parties have not received all necessary permits from any Governmental Authority required to be obtained prior to installation of the related System and (iv) that has not been Tranched as of such time.

“California Governmental Payments” means direct payments available under the California Self-Generation Incentive Program (SGIP), the California Solar on Multifamily Affordable Housing (SOMAH) program, the California Solar Initiative’s Multifamily Affordable Solar Housing (MASH) Program or the California Low-Income Weatherization Program (LIWP).

“Capital Expenditures” means, with respect to any Person for any period, any expenditure in respect of the purchase or other acquisition of any fixed or capital asset (excluding (i) acquisitions of Systems made in the ordinary course of business and (ii) normal replacements and maintenance which are properly charged to current operations).

“Capitalized Leases” means all leases that have been or should be, in accordance with GAAP, recorded as capitalized leases.

“Cash Collateral Account” means a blocked, non-interest bearing deposit account of one or more of the Loan Parties at a bank acceptable to the Administrative Agent, in the name of the Collateral Agent and under the sole dominion and control of the Collateral Agent, and otherwise established in a manner satisfactory to the Collateral Agent.

“Cash Collateralize” means, to pledge and deposit with or deliver to the Collateral Agent, for the benefit of one or more of the L/C Issuers or the Lenders, as collateral for L/C Obligations, (a) cash or deposit account balances, (b) backstop letters of credit entered into on terms, from issuers and in amounts satisfactory to the Collateral Agent and the applicable L/C Issuer, and/or (c) if the Collateral Agent and the applicable L/C Issuer shall agree, in their sole discretion, other credit support, in each case, in Dollars and pursuant to documentation in form and substance satisfactory to the Collateral Agent and such L/C Issuer. “Cash Collateral” shall have a meaning correlative to the foregoing and shall include the proceeds of such Cash Collateral and other credit support.

“Cash Consideration” means, with respect to any Acquisition, as of the date of consummation of such Acquisition, the amount of any cash and fair market value or other property (excluding Equity Consideration, earnout payments and the unpaid principal amount of any debt instrument) given as consideration in connection with such Acquisition.

“Cash Equity Commitment” means, with respect to a given Cash Equity Investor, such Cash Equity Investor’s commitment to contribute to the Cash Equity Partnership for the payment of the purchase price of a Project purchased by the Cash Equity Partnership or a wholly-owned Subsidiary thereof.

“Cash Equity Document” means any agreement entered into by Sunrun or any of its Subsidiaries, on the one hand, and Cash Equity Investors, on the other hand, in each case relating to, arising under or in connection with a Cash Equity Partnership.

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
“Cash Equity Investor” means an investor that has entered into agreements with the Borrower or any of its Subsidiaries to make contributions to a Cash Equity Partnership.

“Cash Equity Partnership” means a special purpose entity whose membership interests are held by any Loan Party or an Excluded Subsidiary, as the managing member, and a Cash Equity Investor, as the investor member, and whose members are obligated to advance capital contributions to the Cash Equity Partnership in accordance with the terms of the applicable Cash Equity Documents.

“Cash Equivalents” means any of the following types of investments, to the extent owned by the Borrower or any of its Subsidiaries free and clear of all Liens (other than Permitted Liens):

(a) readily marketable obligations issued or directly and fully guaranteed or insured by the United States or any agency or instrumentality thereof having maturities of not more than three hundred sixty days (360) days from the date of acquisition thereof; provided that, the full faith and credit of the United States is pledged in support thereof;

(b) time deposits with, or insured certificates of deposit or bankers’ acceptances of, any commercial bank that (i) (A) is a Lender or (B) is organized under the laws of the United States, any state thereof or the District of Columbia or is the principal banking subsidiary of a bank holding company organized under the laws of the United States, any state thereof or the District of Columbia, and is a member of the Federal Reserve System, (ii) issues (or the parent of which issues) commercial paper rated as described in clause (c) of this definition and (iii) has combined capital and surplus of at least $1,000,000,000, in each case with maturities of not more than one hundred eighty (180) days from the date of acquisition thereof;

(c) commercial paper issued by any Person organized under the laws of any state of the United States and rated at least “Prime-1” (or the then equivalent grade) by Moody’s or at least “A-1” (or the then equivalent grade) by S&P, in each case with maturities of not more than one hundred eighty (180) days from the date of acquisition thereof; and

(d) Investments, classified in accordance with GAAP as current assets of the Borrower or any of its Subsidiaries, in money market investment programs registered under the Investment Company Act, which are administered by financial institutions that have the highest rating obtainable from either Moody’s or S&P, and the portfolios of which are limited solely to Investments of the character, quality and maturity described in clauses (a), (b) and (c) of this definition.

“Cash Management Agreement” means any agreement that is not prohibited by the terms hereof to provide treasury or cash management services, including deposit accounts, overnight draft, credit cards, debit cards, p-cards (including purchasing cards and commercial cards), funds transfer, automated clearinghouse, zero balance accounts, returned check concentration, controlled disbursement, lockbox, account reconciliation and reporting and trade finance services and other cash management services.

“Cash Management Bank” means any Person in its capacity as a party to a Cash Management Agreement that, (a) at the time it enters into a Cash Management Agreement with a Loan Party, is a Lender or an Affiliate of a Lender, or (b) at the time it (or its Affiliate) becomes a Lender, is a party to a Cash Management Agreement with a Loan Party, in each case in its

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capacity as a party to such Cash Management Agreement (even if such Person ceases to be a Lender or such Person’s Affiliate ceased to be a Lender); provided, however, that for any of the foregoing to be included as a “Secured Cash Management Agreement” on any date of determination by the Administrative Agent, the applicable Cash Management Bank (other than the Administrative Agent or an Affiliate of the Administrative Agent) must have delivered a Secured Party Designation Notice to the Administrative Agent prior to such date of determination.

“CBA” has the meaning provided in the definition of “Adjusted Term SOFR Rate.”


“CERCLIS” means the Comprehensive Environmental Response, Compensation and Liability Information System maintained by the U.S. Environmental Protection Agency.

“CFC” means a Person that is a controlled foreign corporation under Section 957 of the Code.

“Change in Law” means the occurrence, after the Closing Date, of any of the following: (a) the adoption or taking effect of any law, rule, regulation or treaty, (b) any change in any law, rule, regulation or treaty or in the administration, interpretation, implementation or application thereof by any Governmental Authority or (c) the making or issuance of any request, rule, guideline or directive (whether or not having the force of law) by any Governmental Authority; provided that, notwithstanding anything herein to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (ii) all requests, rules, guidelines or directives promulgated by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a “Change in Law,” regardless of the date enacted, adopted or issued.

“Change of Control” means an event or series of events by which:

(a) any “person” or “group” (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act, but excluding any employee benefit plan of such person or its subsidiaries, and any person or entity acting in its capacity as trustee, agent or other fiduciary or administrator of any such plan) becomes the “beneficial owner” (as defined in Rules 13d-3 and 13d-5 under the Exchange Act, except that a person or group shall be deemed to have “beneficial ownership” of all securities that such person or group has the right to acquire, whether such right is exercisable immediately or only after the passage of time (such right, an “option right”)), directly or indirectly, of 35% or more of the Equity Interests of the Borrower entitled to vote for members of the board of directors or equivalent governing body of the Borrower on a fully-diluted basis (and taking into account all such securities that such “person” or “group” has the right to acquire pursuant to any option right); or

(b) during any period of twelve (12) consecutive months, a majority of the members of the board of directors or other equivalent governing body of Sunrun ceases to be composed of individuals (i) who were members of that board or equivalent governing body on the first day of such period, (ii) whose election or nomination to that board or equivalent governing body was approved by individuals referred to in clause (i) above
constituting at the time of such election or nomination at least a majority of that board or equivalent governing body or (iii) whose election or nomination to that board or other equivalent governing body was approved by individuals referred to in clauses (i) and (ii) above constituting at the time of such election or nomination at least a majority of that board or equivalent governing body.

“Closing Date” means January 25, 2022.


“Collateral” means all of the “Collateral” and “Mortgaged Property” referred to in the Collateral Documents and all of the other property that is or is intended under the terms of the Collateral Documents to be subject to Liens in favor of the Collateral Agent for the benefit of the Secured Parties.

“Collateral Agent” means Silicon Valley Bank in its capacity as sole collateral agent under any of the Loan Documents, or any successor collateral agent.

“Collateral Access Agreement” means a bailee agreement, landlord waiver or other collateral access agreement in form and substance satisfactory to the Collateral Agent in its sole discretion (it being acknowledged and agreed that any bailee agreement substantially in the form of Exhibit M-1 or any landlord waiver substantially in the form of Exhibit M-2 is satisfactory to the Collateral Agent), pursuant to which a mortgagee or lessor of real property on which over $5,000,000 worth of Collateral is stored or otherwise located or a warehouseman, processor or other bailee of over $5,000,000 worth of inventory or other property owned by the Loan Parties, acknowledges the Liens under the Collateral Documents and subordinates or waives any Liens held by such Person on such property, and such other agreements with respect to the Collateral as the Collateral Agent may require in its reasonable discretion, as the same may be amended, restated or otherwise modified from time to time.

“Collateral Documents” means, collectively, the Security Agreement, the Mortgages, the Collateral Access Agreements, any related Mortgaged Property Support Documents, each Joinder Agreement, each of the mortgages, collateral assignments, security agreements, pledge agreements or other similar agreements delivered to the Collateral Agent pursuant to Section 6.14, and each of the other agreements, instruments or documents that creates or purports to create a Lien in favor of the Collateral Agent for the benefit of the Secured Parties.

“Commitment” means, as to each Lender, its obligation to (a) make Revolving Loans to the Borrower pursuant to Section 2.01(b) and (b) purchase participations in L/C Obligations, in an aggregate principal amount at any one time outstanding not to exceed the amount set forth opposite such Lender’s name on Schedule 1.01(b) under the caption “Commitment” or opposite such caption in the Assignment and Assumption pursuant to which such Lender becomes a party hereto, as applicable, as such amount may be adjusted from time to time in accordance with this Agreement.

“Commitment Fee” has the meaning set forth in Section 2.08(a).

“Commodity Exchange Act” means the Commodity Exchange Act (7 U.S.C. § 1 et seq.), as amended from time to time, and any successor statute.

“Common Stock” means the common stock of Sunrun with a par value of $0.0001.

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“Competitor” means any Person that is primarily in the business of developing, owning, installing, constructing or operating solar equipment and providing solar electricity from such solar equipment to residential customers located in jurisdictions where the Loan Parties are then doing business, primarily through power purchase agreements, customer service or lease agreements or capital loan products and not through direct sales of solar panels or any Affiliate of such a Person, but shall not include any back-up servicer or any Person engaged in the business of making loans in respect of, or passive ownership or tax equity investments in, such solar equipment and associated businesses so long as such Person has in place procedures to prevent the distribution of confidential information that is prohibited under the Loan Documents; provided that (x) the Administrative Agent shall have no duties or responsibilities for monitoring or enforcing prohibitions on assignments to Competitors or have any liability with respect to or arising out of any assignment of Loans, or disclosure of confidential information, to any Competitor, (y) in no event shall any bank or other financial institution (other than any venture capital or private equity firm that owns any interest in one or more Competitors) be deemed a Competitor and (z) in no event shall any debt fund Affiliate of a Competitor (i.e. a debt fund Affiliate of a venture capital or private equity firm) be deemed a Competitor; provided, further, that in the case of (z), such debt fund Affiliate has in place procedures to prevent the distribution of confidential information that is prohibited under the Loan Documents.

“Compliance Certificate” means a certificate substantially in the form of Exhibit C.

“Connection Income Taxes” means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

“Consolidated” means, when used with reference to financial statements or financial statement items of any Person, such statements or items on a consolidated basis in accordance with the consolidation principles of GAAP.

“Contracted Gross Earning Assets” means, as of a given date of determination, the “Gross Earning Assets Contracted Period” reported by Sunrun on its most recent 10-Q or 10-K, provided that if such “Gross Earning Assets Contracted Period” reported by Sunrun on its most recent 10-Q or 10-K, as applicable, was calculated by discounting future cash flows at an annual rate less than five percent (5%), then for purposes of this Agreement, Contracted Gross Earning Assets shall be recalculated to determine the present value of such cash flows on or after the applicable date of determination based on discounting such cash flows to such date of determination at an annual rate equal to five percent (5%).

“Contracted Net Earning Assets” means, as of a given date of determination:

(a) the Contracted Gross Earning Assets as of such date of determination, less

(b) the amount of all Indebtedness under Permitted Asset Financing Transactions (net of the pro-rata share of non-recourse Indebtedness allocated to any Cash Equity Investor’s share in a Cash Equity Partnership) reported on the most recent (i) annual audited financial statements of Sunrun or (ii) quarterly unaudited financial statements of Sunrun and in respect of which cash flows included in Contracted Gross Earning Assets are subject, plus

(c) cash held by any Excluded Subsidiary in maintenance reserve accounts, debt service reserve accounts or distribution suspense accounts as of such date of determination in connection with Indebtedness described in clause (b) (collectively, the “Reserves”), and less

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(d) 100% of the value of any items otherwise accounted for in a component of the Borrowing Base pursuant to clauses (b) through (g) of the definition thereof;

provided, that to the extent, as of such date of determination, any Projects are subject directly or indirectly to any Indebtedness incurred by an Excluded Subsidiary and the Standalone Contracted Net Earning Assets of such Projects is not greater than zero, Contracted Net Earning Assets as of such date of determination shall be determined without regard to any such Projects and the related Indebtedness and Reserves.

“Contractual Obligation” means, as to any Person, any provision of any security issued by such Person or of any agreement, instrument or other undertaking to which such Person is a party or by which it or any of its property is bound.

“Control” means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person, whether through the ability to exercise voting power, by contract or otherwise. “Controlling” and “Controlled” have meanings correlative thereto.

“Convertible Debt” means any unsecured Indebtedness of Sunrun which by its terms may be converted into or exchanged for Equity Interests of Sunrun (or other securities or property following a merger event, reclassification or other change of the Equity Interests of Sunrun), cash or a combination thereof (such amount of cash determined by reference to the price of the underlying Equity Interests or such other securities or property), and cash in lieu of fractional shares of Equity Interests of Sunrun.

“Cost of Acquisition” means, with respect to any Acquisition, as at the date of entering into any agreement therefor, the sum of the following (without duplication): (a) Equity Consideration, (b) Cash Consideration, (c) the amount (determined by using the face amount or the amount payable at maturity, whichever is greater) of any Indebtedness incurred, assumed or acquired by the Borrower or any of its Subsidiaries in connection with such Acquisition, (d) a reasonable estimate of all additional purchase price amounts in the form of earnouts and other contingent obligations that should be recorded on the financial statements of the Borrower and its Subsidiaries in accordance with GAAP in connection with such Acquisition, (e) a reasonable estimate of all amounts paid in respect of covenants not to compete, consulting agreements that should be recorded on the financial statements of the Borrower and its Subsidiaries in accordance with GAAP, and other affiliated contracts in connection with such Acquisition, and (f) the aggregate fair market value of all other consideration given by the Borrower or any of its Subsidiaries in connection with such Acquisition.

“Covered Entity” means any of the following: (i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. §252.82(b); (ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. §47.3(b); or (iii) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. §382.2(b).

“Credit Extension” means each of the following: (a) a Borrowing and (b) an L/C Credit Extension.

“Current Ratio” means, as of the last day of any fiscal quarter, Sunrun’s ratio of (a) consolidated current assets, as presented, in accordance with GAAP, on the (x) quarterly unaudited financial statements of Sunrun or (y) annual audited financial statements of Sunrun for the fiscal quarter or year, as applicable, ending on the last day of such fiscal quarter, but
excluding non-cash assets under FASB ASC 815, plus the unused amount of the Aggregate Commitments as of such last day to (b) consolidated current liabilities, as presented, in accordance with GAAP on the (x) quarterly unaudited financial statements of Sunrun or (y) annual audited financial statements of Sunrun for the fiscal quarter or year, as applicable, ending on the last day of such fiscal quarter, excluding (i) non-cash obligations under FASB ASC 606 and 815 and (ii) so long as no Event of Default exists and is continuing, the current portion of the Loans and the L/C Obligations under this Agreement, including any amortization.

“Current Unencumbered Liquidity” means, at any given time, the sum of the Loan Parties’ cash and Cash Equivalents held in deposit accounts and securities accounts maintained at a bank reasonably acceptable to the Administrative Agent, in which the Collateral Agent has obtained a perfected first priority Lien subject to no other Liens.

“Customer Lease Agreement” means a lease agreement between Sunrun or a Subsidiary thereof and a customer, pursuant to which such customer agrees to lease a System from such Person in the ordinary course of business.

“Customer Prepayments” means those initial lump-sum prepayments owing from a customer to any Loan Party or an Excluded Subsidiary pursuant to the applicable Host Customer Agreement.

“Debtor Relief Laws” means the Bankruptcy Code of the United States, and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, rearrangement, receivership, insolvency, reorganization, or similar debtor relief Laws of the United States or other applicable jurisdictions from time to time in effect.

“Default” means any event or condition that constitutes an Event of Default or that, with the giving of any notice, the passage of time, or both, would be an Event of Default.

“Default Rate” means (a) with respect to any Obligation for which a rate is specified, a rate per annum equal to two percent (2.0%) in excess of the rate otherwise applicable thereto and (b) with respect to any Obligation for which a rate is not specified or available, a rate per annum equal to the Base Rate plus the Applicable Margin for Revolving Loans that are Base Rate Loans plus two percent (2%), in each case, to the fullest extent permitted by applicable Law.

“Defaulting Lender” means, subject to Section 2.14(b), any Lender that (a) has failed to (i) fund all or any portion of its Loans within two (2) Business Days of the date such Loans were required to be funded hereunder unless such Lender notifies the Administrative Agent and the Borrower in writing that such failure is the result of such Lender’s determination that one or more conditions precedent to funding (each of which conditions precedent, together with any applicable default, shall be specifically identified in such writing) has not been satisfied, or (ii) pay to the Administrative Agent, the L/C Issuer or any other Lender any other amount required to be paid by it hereunder (including in respect of its participation in Letters of Credit) within two (2) Business Days of the date when due, (b) has notified the Borrower, the Administrative Agent or the L/C Issuer in writing that it does not intend to comply with its funding obligations hereunder, or has made a public statement to that effect (unless such writing or public statement relates to such Lender’s obligation to fund a Loan hereunder and states that such position is based on such Lender’s determination that a condition precedent to funding

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(which condition precedent, together with any applicable default, shall be specifically identified in such writing or public statement) cannot be satisfied), (c) has failed, within three (3) Business Days after written request by the Administrative Agent or the Borrower, to confirm in writing to the Administrative Agent and the Borrower that it will comply with its prospective funding obligations hereunder (provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon receipt of such written confirmation by the Administrative Agent and the Borrower), or (d) has, or has a direct or indirect parent company that has, (i) become the subject of a proceeding under any Debtor Relief Law, or (ii) had appointed for it a receiver, custodian, conservator, trustee, administrator, assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or assets, including the Federal Deposit Insurance Corporation or any other state or federal regulatory authority acting in such a capacity; provided that a Lender shall not be a Defaulting Lender solely by virtue of the ownership or acquisition of any Equity Interest in that Lender or any direct or indirect parent company thereof by a Governmental Authority so long as such ownership interest does not result in or provide such Lender with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Lender (or such Governmental Authority) to reject, repudiate, disavow or disaffirm any contracts or agreements made with such Lender. Any determination by the Administrative Agent that a Lender is a Defaulting Lender under any one or more of clauses (a) through (d) above, and the effective date of such status, shall be conclusive and binding absent manifest error, and such Lender shall be deemed to be a Defaulting Lender (subject to Section 2.14(b)) as of the date established therefor by the Administrative Agent in a written notice of such determination, which shall be delivered by the Administrative Agent to the Borrower, the L/C Issuer and each other Lender promptly following such determination.

“Deposit Account” has the meaning set forth in the UCC.

“Direct Payment Offsets” means, with respect to any Direct Payments in any jurisdiction, (a) any income (or similar) tax, that is, has been or may in the future be imposed, assessed or collected by such jurisdiction, and (b) each liability for the payment of any amounts of the type described in clause (a) as a result of any express or implied obligation to pay directly, indemnify or otherwise assume or succeed to the liability of any other Person, in each case that may result in a reduction or offset of the Direct Payments that would otherwise be payable directly to the applicable taxpayer.

“Direct Payments” means, in respect of any Project, a direct payment, including refundable tax credits, to the applicable owner or installer of a Project that is required by applicable Law and made by any Governmental Authority or any other Person in connection with a program sponsored by Governmental Authority that, in each case, at the time of the initial inclusion of such Direct Payment as Eligible Direct Payment Receivables, meets the Minimum Credit Rating Requirement (a “Direct Payments Obligor”), to the extent such payments are payable even if the recipient has no tax liability in the applicable jurisdiction. Direct Payments include but are not limited to the Hawaii Tax Credit, the Illinois Governmental Payments and the California Governmental Payments. For the avoidance of doubt, payments under Host Customer Agreements are not Direct Payments.

“Direct Payments Obligor” has the meaning set forth in the definition of “Direct Payments.”

“Disposition” or “Dispose” means the sale, transfer, license, lease or other disposition (including any Sale and Leaseback Transaction) of any property (or the granting of any option or other right to do any of the foregoing), including any sale, assignment, transfer or other disposal,
with or without recourse, of any notes or accounts receivable or any rights and claims associated therewith. For the avoidance of doubt, an Investment permitted under Section 7.03 shall not constitute a Disposition.

“Disqualified Person” means:

(a) a Person that is a “tax-exempt entity” or a “tax-exempt controlled entity” within the meaning of Section 168(h) of the Code;

(b) an entity described in Sections 46(e), 46(f) or 46(g) of the Code, in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990; or

(c) a Person that is for U.S. federal income tax purposes an entity disregarded as separate from its owner or a partnership a direct or indirect owner of a beneficial interest in which is a Person described in (a) or (b) above, unless such Person holds its interest through a taxable C Corporation (as defined in the Code) that either (i) is not a “tax-exempt controlled entity” within the meaning of Section 168(h) of the Code or (ii) is not treated as a “tax-exempt controlled entity” under Section 168(h)(6)(F) of the Code because it has made an election under Section 168(h)(6)(F)(ii) of the Code;

provided that a Person will not be treated as a Disqualified Person if it is demonstrated to the satisfaction of the Administrative Agent and the Lenders that a loss or recapture of ITC will not occur as a result of such Person owning a direct or indirect interest in the Borrower.

“Distributed Cash” means, without duplication, internally generated cash and Cash Equivalents distributed by any Excluded Subsidiary, directly or indirectly, to any Loan Party in respect of the Equity Interests of such Excluded Subsidiary owned, directly or indirectly, by such Loan Party (other than (i) dividends or other distributions that are funded, directly or indirectly, with substantially concurrent cash Investments, or cash Investments that were not intended to be used by such Excluded Subsidiary for capital expenditures or for operational purposes, by a Loan Party or any of its Subsidiaries in such Excluded Subsidiary and (ii) for the avoidance of doubt, cash that is derived from the incurrence of Indebtedness).

“Dollar” and “$” mean the lawful money of the United States.

“EEA Financial Institution” means (a) any credit institution or investment firm established in any EEA Member Country that is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country that is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country that is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“EEA Member Country” means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“EEA Resolution Authority” means any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.
“Eligible Assignee” means any Person that meets the requirements to be an assignee under Section 11.06 (subject to such consents, if any, as may be required under Section 11.06(b)(iii)).

“Eligible Customer Upfront Payment Receivables” means those Accounts consisting of Customer Prepayment obligations under the Host Customer Agreements that (a) are due and owing to the Borrower, either directly or by assignment from an Excluded Subsidiary or, in the case of an Inverted Lease Structure, a Tax Equity Investor, pursuant to the Host Customer Agreement as a result of the applicable Project achieving Milestone One, (b) arise in the ordinary course of the Borrower’s or Excluded Subsidiary’s business, (c) comply with all of the related representations and warranties set forth in Section 5.33 of this Agreement, (d) will be paid into an account permitted by the Loan Documents or into a deposit account maintained by an Excluded Subsidiary, and (e) are not subject to any Lien of a Permitted Asset Financing Transaction or other financing arrangement, except to the extent approved by the Collateral Agent. Unless otherwise agreed to by the Collateral Agent, Eligible Customer Upfront Payment Receivables shall not include Accounts with respect to an Account Debtor that have not been paid (a) within 120 days of achievement of Milestone One, if Milestone Three has not been achieved during such 120-day period, or (b) within 180 days of achievement of Milestone Three.

“Eligible Direct Payment Receivables” means those Accounts consisting of obligations of a Direct Payments Obligor to make payments to a Loan Party, either directly or by assignment from an Excluded Subsidiary or, in the case of an Inverted Lease Structure, a Tax Equity Investor, of Direct Payments, which Accounts, with respect to the Projects of a particular Excluded Subsidiary, (i) arise in the ordinary course of business of such Excluded Subsidiary after Milestone One has been achieved, (ii) comply with all of the related representations and warranties set forth in Section 5.32 of this Agreement, and (iii) are not subject to any Lien of a Permitted Asset Financing Transaction or other financing arrangement, except to the extent approved by Collateral Agent; provided that at the time of the initial inclusion of such Eligible Direct Payment Receivables, (a) the program in respect of the related Direct Payment is in full force and effect and there has not occurred, and there is not reasonably likely to occur, a material change in such program that could reasonably be expected to result in the ineligibility, restriction or other impediment to a Loan Party (either directly or by an assignment from an Excluded Subsidiary or Tax Equity Investor) receiving such payments; provided, however, that a reduction in the amount of the Direct Payment that a Loan Party, either directly or by assignment from an Excluded Subsidiary or a Tax Equity Investor, is eligible for or in the amount of the Eligible Direct Payment Receivable is entitled to shall not be deemed to be a material change in such program so long as any such reduction results in a corresponding reduction in the amount of the Eligible Direct Payment Receivable included in the Borrowing Base, and (b) the Borrower has demonstrated to the Collateral Agent that such Eligible Direct Payments Receivables are not reduced by any Direct Payment Offsets. Unless otherwise agreed to by the Collateral Agent, “Eligible Direct Payment Receivables” shall not include Accounts with respect to an Account Debtor that have not been paid within [***] months of the last day of the calendar year in which Milestone Three was achieved.

“Eligible Inventory” means Inventory, valued at the lower of cost or market value, of any Loan Party which meets each of the following requirements on the date that such Inventory is included in the applicable Borrowing Base Certificate:

(a) it (i) is subject to a first priority perfected Lien in favor of the Collateral Agent and (ii) is not subject to any other Lien that has or could have priority over the Lien in favor of the Collateral Agent;

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(b) it is in saleable condition;

(c) it (i) is stored and held in locations owned by any Loan Party or, if such locations are not so owned, the Collateral Agent is in possession of a Collateral Access Agreement or other similar waiver or acknowledgment agreements (but only to the extent such location has over $5,000,000 worth of Inventory), pursuant to which the applicable lessor, warehouseman, processor, operator or bailee provides satisfactory lien waivers and access rights to the Inventory, (ii) has not been identified or otherwise set aside for use by a Project in the Project Back-Log and (iii) to the extent any such Inventory is stored and held in a location that includes inventory owned by any Subsidiary of Sunrun that is not a Loan Party, such location shall be a warehouse that has a Warehouse Operating System and all Inventory stored and held in such warehouse shall be included in the Warehouse Operating System;

(d) it is not Inventory produced in violation of the Fair Labor Standards Act and subject to the “hot goods” provisions contained in Title 29 U.S.C. §215;

(e) it is located in the United States or in any territory or possession of the United States that has adopted Article 9 of the UCC;

(f) (i) it is not “in transit” to any Loan Party and (ii) it is not held by any Loan Party on consignment;

(g) it is not subject to any agreement which would restrict the Collateral Agent’s ability to sell or otherwise dispose of such Inventory;

(h) it is not work-in-progress Inventory, unfinished goods, sample Inventory or spare Inventory;

(i) it is not Inventory that has been aged twelve (12) months or longer;

(j) it is not stored or held in a location for which the value of all Inventory of the Loan Parties stored or held at such location is less than $100,000 in the aggregate; and

(k) the Collateral Agent shall not have determined in its reasonable discretion following a field inspection to be unacceptable due to age, type and/or quality.

Inventory which is at any time Eligible Inventory but which subsequently fails to meet any of the foregoing requirements shall forthwith cease to be Eligible Inventory.

“Eligible Project Back-Log” means the Project Back-Log except for the following, which shall be deemed ineligible:

(a) An incremental percentage of Projects for which the period of time during which the applicable customer can terminate the Host Customer Agreement has not yet expired, which incremental percentage shall be equal to the percentage which, when combined with the cancelled Projects previously excluded from the Project Back-Log, would result in an overall cancellation rate of [***] of the total value of Projects that have achieved Sunrun Sign-Off over the prior twelve (12) months;

(b) Projects which are purchased in cash by a customer (to the extent included in Project Back-Log);

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(c) Projects which are subject to any Lien other than (i) Liens in favor of the Collateral Agent and (ii) Liens thereon permitted under Section 7.01;

(d) Projects in which any Person other than a Loan Party or [***] shall have any ownership interest or any other interest or title, other than (i) any such interest or title of any customer pursuant to the Host Customer Agreement related thereto and (ii) Liens thereon permitted under Section 7.01;

(e) Projects (i) the PV Systems related to which use solar photovoltaic panels or inverters that were obtained from, or are a product of, or (ii) the standalone energy storage device related to which was obtained from, or is a product of, in each case, a manufacturer that has not been approved by any Tax Equity Investor or provider of any other Permitted Asset Financing Transaction;

(f) Projects located in a state or locality that has not been approved by a Tax Equity Investor or any provider of any other Permitted Asset Financing Transaction;

(g) Projects for which any manufacturer’s warranty related to the photovoltaic panels and inverters or any standalone energy storage device, as applicable, related thereto is not in full force or effect or cannot be enforced by a Loan Party;

(h) Inactive Projects;

(i) to the extent applicable, Projects specifically identified to be Tranched in order to cure a True-Up Liability; and

(j) a Project which has been identified for Tranching using Available Take-Out which is not Eligible Take-Out.

“Eligible Take-Out” means the Available Take-Out except for the following, which shall be deemed ineligible:

(a) Available Take-Out provided by any Person (i) that has provided written notice that it disputes its obligation to fund such Available Take-Out, (ii) that generally made statements that it is unable to satisfy its funding obligations, or (iii) for which any Person may have any valid and asserted claim, demand, or liability whether by action, suit, counterclaim or otherwise against such Available Take-Out;

(b) the Person providing such Available Take-Out is the subject of any action or proceeding of a type described in Section 8.01(f);

(c) Available Take-Out provided by a Person who then has the right to set-off any amounts owed to such Person by the Borrower or its Subsidiaries; provided, that ineligibility shall be limited to the amount of such set-off; and

(d) any Available Take-Out with respect to which a Loan Party or any Subsidiary has given or received formal written notice that a default or event of default has occurred and is continuing under the documents governing the applicable Permitted Asset Financing Transaction, or has knowledge of the occurrence and continuation of such default or event of default but has not given such formal written notice; provided that this clause (d) shall not apply to the extent that (x) any default that has not become an event of default thereunder has been cured within the applicable cure period thereunder
and (y) no Material Adverse Effect has resulted from such default; and provided, further, that this clause (d) shall be operative solely to the extent that the provider of such Permitted Asset Financing Transaction would, as a result of the continuation of such default or event of default, have the right to cease funding (unless such right to cease funding has been waived).

“Eligible Trade Accounts” means an Account as to which the following is true and accurate as of the date that such Account is included in the applicable Borrowing Base Certificate:

(a) such Account arose in the ordinary course of the business of a Loan Party out of either (i) a bona fide sale of Inventory by such Loan Party, and in such case such Inventory has in fact been shipped to the applicable Account Debtor or the Inventory has otherwise been accepted by the applicable Account Debtor, or (ii) services performed by such Loan Party under an enforceable contract (written or oral), and in such case such services have in fact been performed for the applicable Account Debtor and accepted by such Account Debtor;

(b) such Account represents a legally valid and enforceable claim which is due and owing to a Loan Party by the applicable Account Debtor and for such amount as is represented by the Borrower to the Collateral Agent in the applicable Borrowing Base Certificate;

(c) such Account is evidenced by an invoice dated not later than three (3) Business Days after the date of the delivery or shipment of the related Inventory giving rise to such Account, not more than sixty (60) days have passed since the due date corresponding to such Account and not more than one hundred twenty (120) days have passed since the invoice date corresponding to such Account;

(d) the unpaid balance of such Account (or portion thereof) that is included in the applicable Borrowing Base Certificate is not subject to any defense or counterclaim that has been asserted by the applicable Account Debtor, or any setoff, contra account, credit, allowance or adjustment by the Account Debtor because of returned, inferior or damaged Inventory or services, or for any other reason, except for customary discounts allowed by the applicable Loan Party in the ordinary course of business for prompt payment, and, to the extent there is any agreement between the applicable Loan Party, the related Account Debtor and any other Person, for any rebate, discount, concession or release of liability in respect of such Account, in whole or in part, the amount of such rebate, discount, concession or release of liability shall be excluded from the Borrowing Base;

(e) the applicable Loan Party has granted to the Collateral Agent pursuant to or in accordance with the Collateral Documents (except to the extent not required to do so thereunder) a first priority perfected security interest in such Account prior in right to all other Persons and such Account has not been sold, transferred or otherwise assigned or encumbered by such Loan Party, as applicable, to or in favor of any Person other than pursuant to or in accordance with the Collateral Documents or this Agreement;

(f) such Account is not owing by any Account Debtor who, as of the date of determination, has failed to pay twenty-five percent (25%) or more of the aggregate amount of its Accounts owing to any Loan Party within sixty (60) days since the due date

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corresponding to such Accounts and within one hundred twenty (120) days since the original invoice date corresponding to such Accounts;

(g) it is not an Account owing by any Account Debtor which when aggregated with all other Accounts owing by such Account Debtor would cause the Loan Parties’ Accounts owing from such Account Debtor to exceed an amount equal to twenty five percent (25%) of the Loan Parties’ aggregate Eligible Trade Accounts owing from all Account Debtors (the “Concentration Limit”); provided that to the extent that the aggregate outstanding amount of otherwise eligible Accounts due from any Account Debtor exceeds the Concentration Limit, only the amount of such excess shall be ineligible;

(h) such Account is not represented by any note, trade acceptance, draft or other negotiable instrument or by any chattel paper, except to the extent any such note, trade acceptance, draft, other negotiable instrument or chattel paper has been endorsed and delivered by any Loan Party pursuant to or in accordance with the Collateral Documents or this Agreement and/or otherwise in a manner satisfactory to the Collateral Agent on or prior to such Account’s inclusion in any applicable Borrowing Base Certificate;

(i) the Loan Parties have not received, with respect to such Account, any notice of the dissolution, liquidation, termination of existence, insolvency, business failure, appointment of a receiver for any part of the property of, assignment for the benefit of creditors by, or the filing of a petition in bankruptcy or the commencement of any proceeding under any bankruptcy or insolvency laws by or against, such Account Debtor;

(j) it is not an account billed in advance, payable on delivery, for consigned goods, for guaranteed sales, for unbilled sales, payable at a future date, bonded or insured by a surety company or subject to a retainage or holdback by the Account Debtor;

(k) the Account Debtor on such Account is not:

(i) an Affiliate of any Loan Party;

(ii) the United States of America, or any department, agency, or instrumentality thereof (unless the applicable Loan Party has assigned its right to payment of such Account to the Agent in a manner satisfactory to the Agent so as to comply with the provisions of the Federal Assignment of Claims Act);

(iii) a citizen or resident of any jurisdiction other than one of the United States or Canada, unless such Account is secured by a letter of credit issued by a bank acceptable to the Agent which letter of credit shall be in form and substance acceptable to the Collateral Agent; or

(iv) an Account Debtor whose Accounts the Collateral Agent, acting in its reasonable credit judgment, has deemed not to constitute Eligible Trade Accounts because the collectability of such Accounts is or is reasonably expected to be impaired;

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(l) such Account is not included in any other component of the Borrowing Base.

Any Account, which is at any time an Eligible Trade Account but which subsequently fails to meet any of the foregoing requirements, shall forthwith cease to be an Eligible Trade Account.

“Environmental Laws” means any and all Laws (including common laws) pertaining to protected animal and plant species, navigation, human health, safety or the environment, or to the presence, treatment, transport, storage, use, management, disposal or Release of any Hazardous Materials or to property damage or personal injury as a result of Hazardous Materials, including, without limitation, the Clean Air Act, as amended, CERCLA, the Federal Water Pollution Control Act, as amended, the Resource Conservation and Recovery Act of 1976, as amended (“RCRA”), the Safe Drinking Water Act, as amended, the Toxic Substances Control Act, as amended, the Superfund Amendments and Reauthorization Act of 1986, as amended, Section 10 of the Rivers and Harbors Act of 1899, as amended, the Endangered Species Act, as amended, the Migratory Bird Treaty Act, as amended, and any other federal, state, regional or local environmental conservation, environmental protection, health or safety Laws as each may from time to time be amended or supplemented.

“Environmental Liability” means any costs, losses or liability, contingent or otherwise (including any liability for damages, costs of environmental remediation, fines, penalties or indemnities), of the Borrower, any other Loan Party or any of their respective Subsidiaries directly or indirectly resulting from or based upon (a) violation of any Environmental Law, (b) the generation, use, handling, transportation, storage, or treatment of any Hazardous Materials, (c) exposure to any Hazardous Materials, (d) the Release or threatened Release of any Hazardous Materials or (e) any contract, agreement or other consensual arrangement pursuant to which costs or liability is assumed or imposed with respect to any of the foregoing.

“Environmental Permit” means any permit, approval, consent, identification number, license, exemption, authorization or other form of permission required to be issued or obtained under any Environmental Law.

“Equity Consideration” means, with respect to any Acquisition, as at the date of consummation of such Acquisition, the Equity Interests of the Borrower or any of its Subsidiaries to be transferred as consideration in connection with such Acquisition. For purposes of determining the Equity Consideration for any transaction, the Equity Interests of the Borrower shall be valued in accordance with GAAP.

“Equity Interests” means, with respect to any Person, all of the shares of capital stock of (or other ownership or profit interests in) such Person, all of the warrants, options or other rights for the purchase or acquisition from such Person of shares of capital stock of (or other ownership or profit interests in) such Person, all of the securities convertible into or exchangeable for shares of capital stock of (or other ownership or profit interests in) such Person or warrants, rights or options for the purchase or acquisition from such Person of such shares (or such other interests), and all of the other ownership or profit interests in such Person (including partnership, member or trust interests therein), whether voting or nonvoting, and whether or not such shares, warrants, options, rights or other interests are outstanding. Notwithstanding the foregoing, debt securities convertible into Equity Interests, cash or a combination thereof (including Convertible Debt) and Permitted Call Spread Transactions shall not constitute Equity Interests.

“ERISA Affiliate” means any Person, trade or business (whether or not incorporated) under common control with the Borrower within the meaning of Section 414(b), (c), (m) or (o) of the Code or Section 4001(b) of ERISA.

“ERISA Event” means (a) a Reportable Event with respect to a Pension Plan; (b) the withdrawal of the Borrower or any ERISA Affiliate from a Pension Plan subject to Section 4063 of ERISA during a plan year in which such entity was a “substantial employer” as defined in Section 4001(a)(2) of ERISA or a cessation of operations that is treated as such a withdrawal under Section 4062(e) of ERISA; (c) a complete or partial withdrawal by the Borrower or any ERISA Affiliate from a Multiemployer Plan or notification that a Multiemployer Plan is in reorganization; (d) the filing of a notice of intent to terminate, the treatment of a Pension Plan amendment as a termination under Section 4041 or 4041A of ERISA; (e) the institution by the PBGC of proceedings to terminate a Pension Plan; (f) any event or condition which constitutes grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Pension Plan; (g) the determination that any Pension Plan is considered an at-risk plan or a plan in endangered or critical status within the meaning of Sections 430, 431 and 432 of the Code or Sections 303, 304 and 305 of ERISA; or (h) the imposition of any liability under Title IV of ERISA, other than for PBGC premiums due but not delinquent under Section 4007 of ERISA, upon the Borrower or any ERISA Affiliate.

“Erroneous Payment” has the meaning assigned to it in Section 9.13(a).

“Erroneous Payment Deficiency Assignment” has the meaning assigned to it in Section 9.13(d)(i).

“Erroneous Payment Impacted Class” has the meaning assigned to it in Section 9.13(d)(i).

“Erroneous Payment Return Deficiency” has the meaning assigned to it in Section 9.13(d)(i).

“Erroneous Payment Subrogation Rights” has the meaning assigned to it in Section 9.13(e).

“EU Bail-In Legislation Schedule” means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor person), as in effect from time to time.

“Event of Default” has the meaning specified in Section 8.01.


“Excluded Property” means, with respect to any Loan Party, (a) any owned or leased real property which is located outside of the United States, (b) any Intellectual Property, (c) the Equity Interests of or in any Excluded Subsidiary and (d) any SREC Excluded Property.

“Excluded Subsidiary” means any direct or indirect subsidiary of Sunrun (a) in which Sunrun owns Equity Interests of less than fifty-one percent (51%), (b) that is established or acquired primarily for the purpose, directly or indirectly, of acquiring, leasing, operating, maintaining, selling, hedging, owning or financing or otherwise monetizing Permitted Assets or servicing the billings and collections with respect to Permitted Assets, (c) substantially all of the assets of which consist of Equity Interests in and/or debt of other Excluded Subsidiaries, cash and cash equivalents and contractual rights related to a Permitted Asset Financing Transaction of

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any Excluded Subsidiary (it being understood that the contribution of Permitted Assets through, or assignment of Permitted Assets to, any Excluded Subsidiary of the type described in this clause (c) shall not disqualify an Excluded Subsidiary under this clause (c)) or (d) that is an Immaterial Subsidiary. For the avoidance of doubt, a subsidiary of Sunrun may constitute an Excluded Subsidiary under more than one of the clauses provided in this definition.

“Excluded Swap Obligation” means, with respect to any Guarantor, any Swap Obligation if, and to the extent that, all or a portion of the Loan Party Guarantee of such Guarantor of, or the grant by such Guarantor of a Lien to secure, such Swap Obligation (or any Guarantee thereof) is or becomes illegal under the Commodity Exchange Act (or the application or official interpretation thereof) by virtue of such Guarantor’s failure for any reason to constitute an “eligible contract participant” as defined in the Commodity Exchange Act (determined after giving effect to Section 10.11 and any other keepwell, support or other agreement for the benefit of such Guarantor and any and all guarantees of such Guarantor’s Swap Obligations by other Loan Parties) at the time the Loan Party Guarantee of such Guarantor, or grant by such Guarantor of a Lien, becomes effective with respect to such Swap Obligation. If a Swap Obligation arises under a Master Agreement governing more than one Swap Contract, such exclusion shall apply only to the portion of such Swap Obligation that is attributable to Swap Contracts for which such Loan Party Guarantee or Lien is or becomes excluded in accordance with the first sentence of this definition.

“Excluded Taxes” means any of the following Taxes imposed on or with respect to any Recipient or required to be withheld or deducted from a payment to a Recipient, (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its Lending Office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (ii) that are Other Connection Taxes; (b) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Commitment pursuant to a law in effect on the date on which (i) such Lender acquires such interest in the Loan or Commitment (other than pursuant to an assignment request by the Borrower under Section 11.13) or (ii) such Lender changes its Lending Office, except in each case to the extent that, pursuant to Sections 3.01(a)(ii), or 3.01(a)(iii) or (c), amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its Lending Office; (c) Taxes attributable to such Recipient's failure to comply with Section 3.01(e); and (d) any U.S. federal withholding Taxes imposed pursuant to FATCA.

“Existing Credit Agreement” means that certain Second Amended and Restated Credit Agreement, dated as of October 5, 2020, by and among the Borrower, AEE Solar, Inc., Sunrun South LLC, Sunrun Installation Services Inc., Clean Energy Experts LLC, KeyBank, as administrative agent, Silicon Valley Bank, as collateral agent, and the various financial institutions and lenders party thereto, as further amended, restated or otherwise modified from time to time prior to the Closing Date.

“Existing Letters of Credit” means each letter of credit set forth on Schedule 1.01(d) that was previously issued for the account of any Loan Party by Silicon Valley Bank that is outstanding on the Closing Date.

“Facility” means, at any time, the aggregate amount of the Lenders’ Commitments at such time.

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“Facility Termination Date” means the date as of which all of the following shall have occurred: (a) the Aggregate Commitments have terminated, (b) all Obligations have been paid in full (other than contingent indemnification obligations), and (c) all Letters of Credit have terminated or expired (other than Letters of Credit as to which other arrangements with respect thereto satisfactory to the Administrative Agent and the L/C Issuer shall have been made).

“FASB ASC” means the Accounting Standards Codification of the Financial Accounting Standards Board.

“FATCA” means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with) and any current or future regulations or official interpretations thereof and any agreements entered into pursuant to Section 1471(b)(1) of the Code.


“Federal Funds Rate” means, for any day, the rate per annum equal to the weighted average of the rates on overnight federal funds transactions with members of the Federal Reserve System arranged by federal funds brokers on such day, as published by the Federal Reserve Bank of New York on the Business Day next succeeding such day; provided that (a) if such day is not a Business Day, the Federal Funds Rate for such day shall be such rate on such transactions on the next preceding Business Day as so published on the next succeeding Business Day, and (b) if no such rate is so published on such next succeeding Business Day, the Federal Funds Rate for such day shall be the average rate (rounded upward, if necessary, to a whole multiple of 1/100 of 1%) charged to the Administrative Agent on such day on such transactions as determined by the Administrative Agent.

“Fee Letter” means the Administrative Agent Fee Letter, dated as of the date hereof, by and among Sunrun and the Administrative Agent.


“Flood Hazard Property” means any Mortgaged Property that is in an area designated by the Federal Emergency Management Agency as having special flood or mudslide hazards.

“Flood Laws” has the meaning set forth in Section 9.14.

“Floor” means 0.00%.

“Foreign Lender” means (a) if the Borrower is a U.S. Person, a Lender that is not a U.S. Person, and (b) if the Borrower is not a U.S. Person, a Lender that is resident or organized under the laws of a jurisdiction other than that in which the Borrower is resident for tax purposes. For purposes of this definition, the United States, each State thereof and the District of Columbia shall be deemed to constitute a single jurisdiction.

“FPA” means the Federal Power Act, as amended, and FERC’s regulations promulgated thereunder.

“FRB” means the Board of Governors of the Federal Reserve System of the United States.
“Fronting Exposure” means, with respect to the L/C Issuer, at any time there is a Lender that is a Defaulting Lender, the aggregate amount of such Defaulting Lender’s respective Applicable Percentage of each outstanding L/C Obligation other than L/C Obligations as to which such Defaulting Lender’s participation obligation has been reallocated to other Lenders or Cash Collateralized in accordance with the terms hereof.

“Fund” means any Person (other than a natural Person) that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its activities.

“GAAP” means generally accepted accounting principles in the United States set forth from time to time in the opinions and pronouncements of the Accounting Principles Board and the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board (or agencies with similar functions of comparable stature and authority within the accounting profession) including, without limitation, the FASB ASC, that are applicable to the circumstances as of the date of determination, consistently applied and subject to Section 1.03.

“Governmental Authority” means the government of the United States or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank), including FERC and any designated regional reliability entity, a state public utilities commission or state public service commission or similar agency, or a designated regional transmission organization, independent system operator or balancing authority.

“Guarantee” means, as to any Person, (a) any obligation, contingent or otherwise, of such Person guaranteeing or having the economic effect of guaranteeing any Indebtedness of the kind described in clauses (a) through (g) of the definition thereof or other obligation payable or performable by another Person (the “primary obligor”) in any manner, whether directly or indirectly, and including any obligation of such Person, direct or indirect, (i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or other obligation, (ii) to purchase or lease property, securities or services for the purpose of assuring the obligee in respect of such Indebtedness or other obligation of the payment or performance of such Indebtedness or other obligation, (iii) to maintain working capital, equity capital or any other financial statement condition or liquidity or level of income or cash flow of the primary obligor so as to enable the primary obligor to pay such Indebtedness or other obligation, or (iv) entered into for the purpose of assuring in any other manner the obligee in respect of such Indebtedness or other obligation of the payment or performance thereof or to protect such obligee against loss in respect thereof (in whole or in part), or (b) any Lien on any assets of such Person securing any Indebtedness of the kind described in clauses (a) through (g) of the definition thereof or other obligation of any other Person, whether or not such Indebtedness or other obligation is assumed or expressly undertaken by such Person (or any right, contingent or otherwise, of any holder of such Indebtedness to obtain any such Lien). The amount of any Guarantee shall be deemed to be an amount equal to the stated or determinable amount of the related primary obligation, or portion thereof, in respect of which such Guarantee is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by the guaranteeing Person in good faith. The term “Guarantee” as a verb has a corresponding meaning.

“Guaranteed Obligations” has the meaning set forth in Section 10.01.

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“Guarantors” means, collectively, (a) each Subsidiary of Sunrun party hereto as a “Guarantor”, (b) all other existing or future acquired or formed Subsidiaries of Sunrun (other than, for the avoidance of doubt, Excluded Subsidiaries) as are or may from time to time become parties to this Agreement pursuant to Section 6.13, and (c) with respect to Additional Secured Obligations owing by any Loan Party (other than the Borrower) and any Swap Obligation of a Specified Loan Party (determined before giving effect to Sections 10.01 and 10.11) under the Loan Party Guarantee, the Borrower.

“Hawaii Tax Credit” means tax credits available under Hawaii Rev Stat. § 235-12.5 (Renewable energy technologies; income tax credit).

“Hazardous Materials” means any hazardous substances, pollutants, contaminants, wastes, or materials (including petroleum (including crude oil or any fraction thereof), petroleum wastes, radioactive material, hazardous wastes, toxic substances, or asbestos or any materials containing asbestos) designated, regulated, or defined under or with respect to which any requirement or liability may be imposed pursuant to any Environmental Law.

“Hedge Bank” means any Person in its capacity as a party to a Swap Contract that, (a) at the time it enters into a Swap Contract (other than a Permitted Call Spread Transaction) not prohibited under Article VI or VII, is a Lender or an Affiliate of a Lender, or (b) at the time it (or its Affiliate) becomes a Lender, is a party to a Swap Contract not prohibited under Article VI or VII, in each case, in its capacity as a party to such Swap Contract (even if such Person ceases to be a Lender or such Person’s Affiliate ceased to be a Lender); provided, in the case of a Secured Hedge Agreement with a Person who is no longer a Lender (or Affiliate of a Lender), such Person shall be considered a Hedge Bank only through the stated termination date (without extension or renewal) of such Secured Hedge Agreement; and provided, further, that for any of the foregoing to be included as a “Secured Hedge Agreement” on any date of determination by the Administrative Agent, the applicable Hedge Bank (other than the Administrative Agent or an Affiliate of the Administrative Agent) must have delivered a Secured Party Designation Notice to the Administrative Agent prior to such date of determination.

“Honor Date” has the meaning set forth in Section 2.03(c).

“Host Customer Agreements” means the Power Purchase Agreements and Customer Lease Agreements.

“Illinois Governmental Payments” means direct payments available under the Illinois Power Agency’s Adjustable Block/Illinois Shines Program.

“Immaterial Subsidiary” means each Subsidiary of Sunrun which at no time after the Closing Date holds more than $5,000,000 of assets in accordance with GAAP for a trailing twelve (12) month period; provided, that at no time shall the aggregate assets held by all such Subsidiaries exceed $20,000,000 in accordance with GAAP for a trailing twelve (12) month period; provided further, that the Projects in which shall have an ownership interest, in the aggregate, constituting more than [***] of the Project Value of all Projects included in Project Back-Log.

“Inactive Project” means any Project that (a) remains a CAD Project for more than 180 days after such Project was first included in the Eligible Project Back-Log as a CAD Project or (b) remains a Permitted Project for more than 180 days after such Project was first included in the Eligible Project Back-Log as a Permitted Project.

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publically disclosed.
“Indebtedness” means, as to any Person at a particular time, without duplication, all of the following, whether or not included as indebtedness or liabilities in accordance with GAAP:

(a) all obligations of such Person for borrowed money and all obligations of such Person evidenced by bonds, debentures, notes, loan agreements or other similar instruments (including Convertible Debt);

(b) the maximum amount of all direct or contingent obligations of such Person arising under letters of credit (including standby and commercial), bankers’ acceptances, bank guaranties, surety bonds and similar instruments;

(c) net obligations of such Person under any Swap Contract;

(d) all obligations (including, without limitation, earnout obligations and Supply Chain Financing) of such Person to pay the deferred purchase price of property or services (other than trade accounts payable in the ordinary course of business that are not part of a Supply Chain Financing and that do not remain unpaid for more than one-hundred twenty (120) days after the date on which such trade account was created);

(e) indebtedness (excluding prepaid interest thereon) secured by a Lien on property owned or being purchased by such Person (including indebtedness arising under conditional sales or other title retention agreements), whether or not such indebtedness shall have been assumed by such Person or is limited in recourse;

(f) all Attributable Indebtedness in respect of Capitalized Leases and Synthetic Lease Obligations of such Person and all Synthetic Debt of such Person;

(g) all obligations of such Person to purchase, redeem, retire, defease or otherwise make any payment in respect of any Equity Interest in such Person or any other Person or any warrant, right or option to acquire such Equity Interest, valued, in the case of a redeemable preferred interest, at the greater of its voluntary or involuntary liquidation preference plus accrued and unpaid dividends; and

(h) all Guarantees of such Person in respect of any of the foregoing.

For all purposes hereof, the Indebtedness of any Person shall include the Indebtedness of any partnership in which such Person is a general partner, unless such Indebtedness is expressly made non-recourse to such Person. The amount of any net obligation under any Swap Contract on any date shall be deemed to be the Swap Termination Value thereof as of such date.

“Indemnified Taxes” means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Loan Party under any Loan Document and (b) to the extent not otherwise described in clause (a), Other Taxes.

“Indemnitees” has the meaning specified in Section 11.04(b).

“Information” has the meaning specified in Section 11.07.

“Intellectual Property” has the meaning set forth in the Security Agreement.

“Intercompany Debt” has the meaning specified in Section 7.02.
“Interest Charges” means, for any period of measurement, the sum of (i) all interest, premium payments, debt discount, fees, charges and related expenses in connection with borrowed money (including capitalized interest) or in connection with the deferred purchase price of assets, in each case to the extent treated as interest in accordance with GAAP, (ii) all interest paid or payable with respect to discontinued operations, plus (iii) the portion of rent expense under Capitalized Leases that is treated as interest in accordance with GAAP which is to be paid in cash, in each case, of or by the Borrower for such period of measurement.

“Interest Coverage Ratio” means, as of the last day of any Measurement Period, the ratio of (a) to (b), where:

(a) is the Adjusted Cash Flow for such Measurement Period; and

(b) is, for such Measurement Period, the aggregate cash Interest Charges of the Borrower and its Subsidiaries (other than Excluded Subsidiaries).

“Interest Payment Date” means, (a) as to any Term SOFR Loan, the last day of each Interest Period applicable to such Loan and the Maturity Date of the Facility under which such Loan was made; provided, however, that, if any Interest Period for a Term SOFR Loan exceeds three (3) months, the respective dates that fall every three (3) months after the beginning of such Interest Period shall also be Interest Payment Dates; and (b) as to any Base Rate Loan, the last Business Day of each March, June, September and December and the Maturity Date of the Facility under which such Loan was made.

“Interest Period” means, with respect to each Term SOFR Loan, a period of one, three or six months as selected by the Borrower; provided, however, that

(i) the initial Interest Period for any Borrowing of a Term SOFR Loan shall commence on the date of such Borrowing (the date of a Borrowing resulting from a conversion or continuation shall be the date of such conversion or continuation) and each Interest Period occurring thereafter in respect of such Borrowing shall commence on the day on which the next preceding Interest Period expires;

(ii) if any Interest Period begins on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the last calendar month of such Interest Period), such Interest Period shall end on the last Business Day of the last calendar month of such Interest Period;

(iii) if any Interest Period would otherwise expire on a day that is not a Business Day, such Interest Period shall expire on the next succeeding Business Day; provided, however, that if any Interest Period would otherwise expire on a day that is not a Business Day but is a day of the month after which no further Business Day occurs in such month, such Interest Period shall expire on the next preceding Business Day;

(iv) no Interest Period for any Term SOFR Loan may be selected that would end after the Facility Termination Date; and

(v) if, upon the expiration of any Interest Period, the Borrower has failed to (or may not) elect a new Interest Period to be applicable to the respective Borrowing of Term SOFR Loans as provided above, the Borrower shall be deemed to have elected to convert such Borrowing to Base Rate Loans effective as of the expiration date of such current Interest Period.

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“Inventory” means any inventory as defined under the UCC.

“Inverted Lease Structure” means a tax equity investment structure in which Sunrun or any Subsidiary thereof contributes Projects and assigns the affiliated Host Customer Agreements to an Excluded Subsidiary, which Excluded Subsidiary then leases such Projects to a Tax Equity Investor or a partnership between an Excluded Subsidiary and a Tax Equity Investor pursuant to a lease agreement.

“Investment” means, as to any Person, any direct or indirect acquisition or investment by such Person, whether by means of (a) the purchase or other acquisition of Equity Interests of another Person, (b) a loan, advance or capital contribution to, Guarantee or assumption of Indebtedness of, or purchase or other acquisition of any other Indebtedness or interest in, another Person (including any partnership or joint venture equity interest in such other Person and any arrangement pursuant to which the investor guaranties Indebtedness of such other Person), or (c) the purchase or other acquisition (in one transaction or a series of transactions) of assets of another Person which constitute all or substantially all of the assets of such Person or of a division, line of business or other business unit of such Person. For purposes of covenant compliance, the amount of any Investment shall be the amount actually invested, without adjustment for subsequent increases or decreases in the value of such Investment.

“Investment Company Act” means the Investment Company Act of 1940, as amended.

“IRS” means the United States Internal Revenue Service.

“ISP” means the International Standby Practices, International Chamber of Commerce Publication No. 590 (or such later version thereof as may be in effect at the applicable time).

“Issuer Documents” means with respect to any Letter of Credit, the Letter of Credit Application, and any other document, agreement and instrument entered into by the L/C Issuer and the Borrower (or any Subsidiary thereof) or in favor of the L/C Issuer and relating to such Letter of Credit.

“ITC” means any investment tax credit under Title 26, Section 48 of the United States Code or any successor or other similar provision, including any similar provision concerning a refundable tax credit that replaces such investment tax credit program.

“Joinder Agreement” means a joinder agreement substantially in the form of Exhibit D executed and delivered in accordance with the provisions of Sections 6.13 and 6.14.

“KeyBank” has the meaning specified in the introductory paragraph hereto.

“Laws” means, collectively, all international, foreign, federal, state and local statutes, treaties, rules, guidelines, regulations, ordinances, codes and administrative or judicial precedents or authorities, and binding guidance, including the interpretation or administration thereof by any Governmental Authority charged with the enforcement, interpretation or administration thereof, and all applicable administrative orders, and agreements with any Governmental Authority.

“L/C Advance” means, with respect to each Lender, such Lender’s funding of its participation in any L/C Borrowing in accordance with its Applicable Revolving Percentage.
“L/C Borrowing” means an extension of credit resulting from a drawing under any Letter of Credit which has not been reimbursed on the date when made or refinanced as a Revolving Borrowing.

“L/C Credit Extension” means, with respect to any Letter of Credit, the issuance thereof or extension of the expiry date thereof, or the increase of the amount thereof.

“L/C Issuer” means, as the context may require, (a) Silicon Valley Bank, acting through any of its Affiliates or branches, in its capacity as an issuer of Letters of Credit hereunder, (b) KeyBank National Association, acting through any of its Affiliates or branches, in its capacity as an issuer of Letters of Credit hereunder, (c) Silicon Valley Bank, acting through any of its Affiliates or branches, in its capacity as the issuer of each Existing Letter of Credit, and (d) any other Lender that may become an L/C Issuer pursuant to Section 2.03(k) or 11.06(f), with respect to Letters of Credit issued by such Lender. Each L/C Issuer may, in its discretion, arrange for one or more Letters of Credit to be issued by Affiliates or branches of such L/C Issuer, in which case the term “L/C Issuer” shall include any such Affiliate or branch with respect to Letters of Credit issued by such Affiliate or branch.

“L/C Obligations” means, as at any date of determination, the aggregate amount available to be drawn under all outstanding Letters of Credit plus the aggregate of all Unreimbursed Amounts, including all L/C Borrowings. For purposes of computing the amount available to be drawn under any Letter of Credit, the amount of such Letter of Credit shall be determined in accordance with Section 1.06. For all purposes of this Agreement, if on any date of determination a Letter of Credit has expired by its terms but any amount may still be drawn thereunder by reason of the operation of Rule 3.14 of the ISP, such Letter of Credit shall be deemed to be “outstanding” in the amount so remaining available to be drawn.

“Lender” means each of the Persons identified as a “Lender” on the signature pages hereto, each other Person that becomes a “Lender” in accordance with this Agreement and their successors and assigns.

“Lending Office” means, as to any Lender, the office or offices of such Lender described as such in such Lender’s Administrative Questionnaire, or such other office or offices as a Lender may from time to time notify the Borrower and the Administrative Agent.

“Letter of Credit” means any letter of credit issued hereunder (including any Existing Letter of Credit). A Letter of Credit may be a commercial letter of credit or a standby letter of credit.

“Letter of Credit Application” means an application and agreement for the issuance or amendment of a Letter of Credit in the form from time to time in use by the L/C Issuer.

“Letter of Credit Expiration Date” means the day that is five (5) Business Days prior to the Maturity Date then in effect for the Facility (or, if such day is not a Business Day, the next preceding Business Day).

“Letter of Credit Fee” has the meaning specified in Section 2.03(h).

“Letter of Credit Notice” means a notice of a request for an L/C Credit Extension, pursuant to Section 2.03(a), which shall be substantially in the form of Exhibit S and shall include the Letter of Credit Application for such L/C Credit Extension.
“Letter of Credit Sublimit” means an amount equal to the lesser of (a) $100,000,000 and (b) the Facility. The Letter of Credit Sublimit is part of, and not in addition to, the Facility.

“Leverage Ratio” means, as of the last day of any Measurement Period, the ratio of (a) the Total Debt to (b) the Adjusted Cash Flow, in each case, for such Measurement Period.

“Lien” means any mortgage, pledge, hypothecation, assignment, deposit arrangement, encumbrance, lien (statutory or otherwise), charge, or preference, priority or other security interest or preferential arrangement in the nature of a security interest of any kind or nature whatsoever (including any conditional sale or other title retention agreement, any easement, right of way or other encumbrance on title to real property and any financing lease having substantially the same economic effect as any of the foregoing).

“Limited Recourse Obligations” means the obligations of a Loan Party in connection with a Permitted Asset Financing Transaction consisting of any of the following:

(a) limited guarantees;

(b) servicing and management obligations and other similar performance obligations;

(c) indemnification obligations;

(d) obligations to make capital contributions to (including to the extent evidenced by notes issued by a Loan Party to an Excluded Subsidiary) Excluded Subsidiaries;

(e) obligations to pay commitment fees under such Permitted Asset Financing Transaction;

(f) with respect to any Permitted Inventory Financing Transaction, any Permitted Inventory Financing Obligations; or

(g) limited recourse obligations not otherwise described above that are customary in monetization or financing transactions in which the primary recourse is to the financed assets, including the repurchase of assets of Excluded Subsidiaries;

in each case, under any Permitted Asset Financing Documents so long as, in each case, such obligations are not made in respect of any Excluded Subsidiary’s obligation to repay debt or pay debt service.

“Loan” means a Revolving Loan.

“Loan Documents” means, collectively, (a) this Agreement, (b) the Revolving Notes, (c) the Loan Party Guarantee, (d) the Collateral Documents, (e) the Fee Letter, (f) each Issuer Document, (g) each Joinder Agreement and (h) any agreement creating or perfecting rights in Cash Collateral pursuant to the provisions of Section 2.13 (but specifically excluding any Secured Hedge Agreement or any Secured Cash Management Agreement).

“Loan Notice” means a notice of (a) a Borrowing, (b) a conversion of Loans from one Type to the other, or (c) a continuation of Term SOFR Loans, pursuant to Section 2.02(a), which, if in writing, shall be substantially in the form of Exhibit E.

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“Loan Parties” means, collectively, the Borrower and each Guarantor.

“Loan Party Guarantee” means, collectively, the Guarantee made by the Guarantors under Article X in favor of the Secured Parties, together with each other guaranty delivered pursuant to Section 6.13.

“Master Agreement” has the meaning set forth in the definition of “Swap Contract.”

“Material Adverse Effect” means (a) a material adverse change in, or a material adverse effect upon, the operations, business, properties, liabilities (actual or contingent), financial condition of the Loan Parties taken as a whole; (b) a material impairment of the rights and remedies of the Administrative Agent or any Lender under any Loan Document, or of the ability of any Loan Party to perform its obligations under any Loan Document to which it is a party; (c) a material adverse effect upon the legality, validity, binding effect or enforceability against any Loan Party of any Loan Document to which it is a party; or (d) a material adverse effect on the Collateral or the Liens in favor of the Collateral Agent (for its benefit and for the benefit of the other Secured Parties) on the Collateral or the priority of such Liens, in each case of this clause (d), when taken as a whole.

“Material Contract” means, with respect to any Loan Party, each contract or agreement to which such Person would be required to disclose pursuant to reporting obligations under the Exchange Act if such person were subject to the Exchange Act, even if such Person is not currently subject to the Exchange Act.

“Maturity Date” means the date that is three (3) years after the Closing Date; provided, however, if such date is not a Business Day, the Maturity Date shall be the next succeeding Business Day.

“Measurement Period” means, as of the last day of any fiscal quarter of Sunrun, the most recent four fiscal quarters of Sunrun ending on such day.

“Milestone One” means, with respect to any Project, the day on which each of the following has occurred (in each case as certified by the Borrower in a Borrowing Base Certificate): (a) the occurrence of Sunrun Sign-Off, (b) delivery to the construction contractor for such Project of a duly executed notice to proceed, and (c) if applicable, assignment to a construction site or tagged to a specific Project in a warehouse of building materials necessary to construct the Project, including evidence (to the extent available) of the same if requested by the Collateral Agent.

“Milestone Three” means, with respect to any Project, the day on which the “permission to operate” notification for such Project is executed (as certified by the Borrower in a Borrowing Base Certificate).

“Milestone Two” means, with respect to any Project, the day on which the following has occurred (as certified by the Borrower in a Borrowing Base Certificate): the Project has reached Substantial Completion.

“Minimum Collateral Amount” means, at any time, (a) with respect to Cash Collateral consisting of cash or deposit account balances provided to reduce or eliminate Fronting Exposure during any period when a Lender constitutes a Defaulting Lender, an amount equal to 105% of the Fronting Exposure of the L/C Issuer with respect to Letters of Credit issued and outstanding at such time, (b) with respect to Cash Collateral consisting of cash or deposit account balances

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provided in accordance with the provisions of Section 2.13(a)(i), (a)(ii), (a)(iii) or (a)(iv), an amount equal to 105% of the Outstanding Amount of all L/C Obligations, and (c) otherwise, an amount determined by the Collateral Agent and the L/C Issuer in their sole discretion.

“Minimum Credit Rating Requirement” means (i) in the case of Illinois Governmental Payments the state general bond obligation rating of at least BBB- from Standard and Poor’s Rating Group, BBB- from Fitch Ratings or Baa3 from Moody’s, (ii) in the case of any other Direct Payment Obligor, the state general bond obligation rating or equivalent long term issuer credit rating of at least A- from Standard and Poor’s Rating Group, A- from Fitch Ratings or A3 from Moody’s or (iii) such other general bond obligation rating satisfactory to the Administrative Agent in its sole discretion.

“Moody’s” means Moody’s Investors Service, Inc. and any successor thereto.

“Mortgage” or “Mortgages” means, individually and collectively, as the context requires, each of the fee or leasehold mortgages, deeds of trust and deeds executed by a Loan Party that purport to grant a Lien to the Collateral Agent (or a trustee for the benefit of the Collateral Agent) for the benefit of the Secured Parties in any Mortgaged Properties, in form and substance satisfactory to the Collateral Agent.

“Mortgaged Property” means any owned property of a Loan Party listed on Schedule 5.21(g)(i) and any other owned real property of a Loan Party that is or will become encumbered by a Mortgage in favor of the Collateral Agent in accordance with the terms of this Agreement.

“Mortgaged Property Support Documents” means with respect to any real property subject to a Mortgage, the deliveries and documents described on Schedule 1.01(e) attached hereto.

“Multiemployer Plan” means any employee benefit plan of the type described in Section 4001(a)(3) of ERISA, to which the Borrower or any ERISA Affiliate makes or is obligated to make contributions, or during the preceding five (5) plan years, has made or been obligated to make contributions.

“Multiple Employer Plan” means a Plan which has two or more contributing sponsors (including the Borrower or any ERISA Affiliate) at least two of whom are not under common control, as such a plan is described in Section 4064 of ERISA.

“Net Refinancing Proceeds” means, with respect to a Refinancing Transaction, the net proceeds received by any applicable Excluded Subsidiary in connection with such Refinancing Transaction (including any swap termination payments and released reserves (other than any portion thereof that are used to fund the reserves pursuant to such Refinancing Transaction) that are received by any such Excluded Subsidiary in connection with such Refinancing Transaction) net of (a) transaction costs, fees and related expenses associated with such Refinancing Transaction, (b) amounts used to fund any applicable reserves required to be funded pursuant to such Refinancing Transaction (other than any reserves funded with proceeds of reserves released from the Permitted Asset Financing that is being refinanced pursuant to such Refinancing Transaction), (c) the amount required to repay the Permitted Asset Financing Transaction that is being refinanced pursuant to such Refinancing Transaction, (d) the amount required to make any swap termination payments required to be made in connection with such Refinancing

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Transaction and (e) any upfront payments required with the hedging strategy pursued in connection with such Refinancing Transaction.

“New Lenders” has the meaning specified in Section 2.15(c).

“Non-Consenting Lender” means any Lender that does not approve any consent, waiver or amendment that (a) requires the approval of all Lenders or all affected Lenders in accordance with the terms of Section 11.01 and (b) has been approved by the Required Lenders.

“Non-Defaulting Lender” means, at any time, each Lender that is not a Defaulting Lender at such time.

“NPL” means the National Priorities List under CERCLA.

“NYGB” means NY Green Bank, an administrative division of New York State Energy Research & Development Authority.

“NYGB Borrowing Base” means, as of any date of determination, an amount equal to the sum of (a) the Project Value of Eligible Project Back-Log attributable to NY Projects (less cash sale NY Projects in the Project Back-Log accounted for in clause (b)) and (b) the estimated final sale value of direct cash sale NY Projects in the Project Back-Log (regardless of whether the payment is made directly by the consumer or a lender or financing party on behalf of the consumer), in each case as calculated pursuant to the most recently delivered Borrowing Base Certificate as of such date of determination; provided, that, so long as the NYGB Borrowing Base as determined pursuant to the most recently delivered Borrowing Base Certificate is at least [***], the NYGB Borrowing Base as of any date of determination shall be deemed to be the highest value of the NYGB Borrowing Base calculated pursuant to any Borrowing Base Certificate delivered no more than one hundred fifty (150) days prior to such date of determination.

“NYGB Borrowing Base Availability” means, as of any date of determination, the difference of the NYGB Borrowing Base minus NYGB’s Revolving Exposure as of such date of determination.

“NYGB Borrowing Base Deficiency” means, at the time a Revolving Loan is to be made by NYGB or a participation in an L/C Credit Extension is to be purchased by NYGB, the failure of the amount of the NYGB Borrowing Base Availability as of such date of determination to equal or exceed the amount of such Revolving Loan or such participation in the L/C Credit Extension. Such determination shall be made based on NYGB’s Revolving Exposure as reflected in the Register.

“NYGB Commitment Reduction Condition” means, as of any date of determination, that the NYGB Borrowing Base (prior to giving effect to the proviso in the definition thereof) pursuant to each Borrowing Base Certificate delivered during a period of one hundred fifty (150) days prior to such date of determination, other than any Borrowing Base Certificate delivered pursuant to Section 2.05(c)(i), has been less than [***] of the Commitment of NYGB as of such date of determination.

“NY Project” means a Project (a) located in the State of New York with a PV System that has an aggregate installed footprint for solar arrays of 4,000 square feet or less or (b) located in the State of New York with a standalone energy storage device.

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“Obligations” means (a) all advances to, and debts, liabilities, obligations, covenants and duties of, any Loan Party arising under any Loan Document or otherwise with respect to any Loan or Letter of Credit, (b) all costs and expenses incurred in connection with enforcement and collection of the foregoing, including the fees, charges and disbursements of counsel, in each case whether direct or indirect (including those acquired by assumption), absolute or contingent, due or to become due, now existing or hereafter arising and including interest and fees that accrue after the commencement by or against any Loan Party or any Affiliate thereof pursuant to any proceeding under any Debtor Relief Laws naming such Person as the debtor in such proceeding, regardless of whether such interest and fees are allowed claims in such proceeding and (c) subject, in each case, to the applicable limitations and other applicable provisions of Section 9.13, the obligations of the Loan Parties to pay, discharge and satisfy the Erroneous Payment Subrogation Rights; provided that Obligations of a Guarantor shall exclude any Excluded Swap Obligations with respect to such Guarantor.

“OFAC” means the Office of Foreign Assets Control of the United States Department of the Treasury.

“Organization Documents” means, (a) with respect to any corporation, the certificate or articles of incorporation and the bylaws (or equivalent or comparable constitutive documents with respect to any non-U.S. jurisdiction); (b) with respect to any limited liability company, the certificate or articles of formation or organization and operating agreement or limited liability company agreement (or equivalent or comparable documents with respect to any non-U.S. jurisdiction); (c) with respect to any partnership, trust or other form of business entity, the partnership or other applicable agreement of formation or organization (or equivalent or comparable documents with respect to any non-U.S. jurisdiction) and (d) with respect to all entities, any agreement, instrument, filing or notice with respect thereto filed in connection with its formation or organization with the applicable Governmental Authority in the jurisdiction of its formation or organization (or equivalent or comparable documents with respect to any non-U.S. jurisdiction).

“Other Connection Taxes” means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising solely from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

“Other Taxes” means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment (other than an assignment made pursuant to Section 3.06).

“Outstanding Amount” means (a) with respect to Revolving Loans on any date, the aggregate outstanding principal amount thereof after giving effect to any borrowings and prepayments or repayments of Revolving Loans occurring on such date; and (b) with respect to any L/C Obligations on any date, the amount of such L/C Obligations on such date after giving effect to any L/C Credit Extension occurring on such date and any other changes in the aggregate amount of the L/C Obligations as of such date, including as a result of any reimbursements by the Borrower of Unreimbursed Amounts.

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“Participant” has the meaning specified in Section 11.06(d).

“Participant Register” has the meaning specified in Section 11.06(d).

“Partnership Flip Structure” means a tax equity investment structure in which the Tax Equity Partnership or a subsidiary of such Tax Equity Partnership purchases Projects and takes assignment of Host Customer Agreements from Sunrun or any of its Subsidiaries pursuant to a purchase agreement. In a Partnership Flip Structure, the percentages at which cash is distributed to the members of such Tax Equity Partnership changes (or “flips”) upon fulfillment of specified conditions in the Organization Documents of such Tax Equity Partnership.

“Patriot Act” has the meaning specified in Section 5.28.

“Payment Recipient” has the meaning assigned to it in Section 9.13(a).

“Payment Services Agreement” means any Payment Services Agreement between any Loan Party and any Payment Services Bank.

“Payment Services Bank” means any Person in its capacity as a party to a Payment Services Agreement in connection with a Supply Chain Financing, that, (a) at the time it enters into a Payment Services Agreement with a Loan Party, is a Lender or an Affiliate of a Lender, or (b) at the time it (or its Affiliate) becomes a Lender, is a party to a Payment Services Agreement with a Loan Party, in each case in its capacity as a party to such Payment Services Agreement (even if such Person ceases to be a Lender or such Person’s Affiliate ceased to be a Lender).

“PBGC” means the Pension Benefit Guaranty Corporation.

“Pension Act” means the Pension Protection Act of 2006, as amended.

“Pension Funding Rules” means the rules of the Code and ERISA regarding minimum required contributions (including any installment payment thereof) to Pension Plans and set forth in Section 412, 430, 431, 432 and 436 of the Code and Sections 302, 303, 304 and 305 of ERISA.

“Pension Plan” means any employee pension benefit plan (including a Multiple Employer Plan or a Multiemployer Plan) that is maintained or is contributed to by the Borrower and any ERISA Affiliate and is either covered by Title IV of ERISA or is subject to the minimum funding standards under Section 412 of the Code.

“Permit” means any action, approval, consent, certificate, notice, filing, registration, waiver, exemption, variance, franchise, order, permit, authorization, right or license with, by, of or from a Governmental Authority.

“Permitted Acquisition” means (x) any Acquisition of Permitted Assets or of any Person substantially all of whose direct or indirect assets are Permitted Assets or (y) (i) an Acquisition with a Cost of Acquisition of less than $10,000,000 by a Loan Party of a Target that meets the conditions set forth in clauses (a) and (c) below, (ii) an Acquisition with a Cost of Acquisition of less than $30,000,000 but greater than or equal to $10,000,000 (1) by a Loan Party of a Target that meets the conditions set forth in clauses (a), (c) and (e) below so long as the consideration given by any Loan Party or Subsidiary thereof in connection with such Acquisition is solely in...
the form of Equity Consideration or (2) by a Loan Party of a Target that meets the conditions set forth in clauses (a), (c), (d)(i), (d)(iv) and (e) below or (iii) an Acquisition with a Cost of Acquisition in excess of $30,000,000 (1) by a Loan Party of a Target that meets the conditions set forth in clauses (a), (c) and (e) below so long as the consideration given by any Loan Party or Subsidiary thereof in connection with such Acquisition is solely in the form of Equity Consideration or (2) by a Loan Party of a Target that meets all of the following conditions:

(a) no Default or Event of Default shall then exist or would exist after giving effect thereto;

(b) the Loan Parties shall demonstrate to the reasonable satisfaction of the Administrative Agent that, after giving effect to the Acquisition on a Pro Forma Basis, the Loan Parties are in compliance with (x) each of the financial covenants set forth in Section 7.11 and (y) the most recently delivered Borrowing Base Certificate;

(c) the Collateral Agent, on behalf of the Secured Parties, shall have received (or shall receive in connection with the closing of such Acquisition) a first priority perfected security interest in all property (including, without limitation, Equity Interests) acquired with respect to the Target in accordance with the terms of Section 6.14 and the Target, if a Person, shall have executed a Joinder Agreement in accordance with the terms of Section 6.13, unless, in either case, such Target becomes an Excluded Subsidiary immediate after such Acquisition;

(d) the Administrative Agent and the Lenders shall have received (i) a description of the material terms of such Acquisition, (ii) audited financial statements (or, if unavailable, management-prepared financial statements) of the Target for its two most recent fiscal years, (iii) unaudited financial statements of the Target for any fiscal quarters ended within the fiscal year to date, to extent available and (iv) not less than five (5) Business Days prior to the consummation of any Permitted Acquisition, a certificate substantially in the form of Exhibit F, executed by a Responsible Officer of the Borrower certifying that such Permitted Acquisition complies with the requirements of this Agreement; and

(e) such Acquisition shall not be a “hostile” Acquisition and shall have been duly authorized by the board of directors (or equivalent) and/or shareholders (or equivalent) of the applicable Loan Party and the Target, in each case where such authorization is required.

“Permitted Asset Financing Documents” means any agreements relating to, arising under or entered into in connection with a Permitted Asset Financing Transaction to which any Loan Party, any of its Subsidiaries and/or any Tax Equity Investor, Cash Equity Investor, lender or any other applicable counterparty or its respective agents or trustees are parties.

“Permitted Asset Financing Transaction” means any transaction entered into by an Excluded Subsidiary to monetize or otherwise finance Permitted Assets and evidenced by credit agreements, loan agreements, indentures, purchase agreements, leases, sales agreements, factoring agreements and other similar agreements or limited liability company agreements or similar agreements pursuant to which Permitted Assets are monetized or financed (including through the issuance of equity interests) or are sold (in each case, whether now existing or arising in the future), and, in each case, which may include a grant of a security interest in any such Permitted Assets (whether now existing or arising in the future), including all collateral securing such Permitted Assets, all contracts and all guarantees or other obligations in respect thereof.

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proceeds thereof and other assets that are customarily transferred, or in respect of which security interests are customarily granted, in connection with such monetizations or financings. A Permitted Asset Financing Transaction must be non-recourse to the Loan Parties (other than in respect of Limited Recourse Obligations).

“Permitted Assets” means (a) Host Customer Agreements, Inventory, equipment, Projects and all components thereof, receivables, notes, customer loans, home electric appliances (including electric vehicle chargers, electric water heaters and electric heating and cooling devices) and service agreements and hardware financing agreements related thereto, environmental attributes (including SRECs) and Equity Interests in related Excluded Subsidiaries (in each case, including all rights to payments with respect thereto), (b) any other assets or rights related to or reasonably necessary or useful for transactions with respect to any of the assets described in clause (a) and (c) all proceeds of the foregoing.

“Permitted Call Spread Transaction” means (a) any call or capped call option (or substantively equivalent derivative transaction) relating to the Common Stock (or other securities or property following a merger event, reclassification or other change of the Common Stock) purchased by Sunrun in connection with the issuance of any Convertible Debt and settled in Common Stock (or such other securities or property), cash or a combination thereof (such amount of cash determined by reference to the price of the Common Stock or such other securities or property), and cash in lieu of fractional shares of Common Stock, or (b) any call option, warrant or right to purchase (or substantively equivalent derivative transaction) relating to the Common Stock (or other securities or property following a merger event, reclassification or other change of the Common Stock) sold by Sunrun substantially concurrently with any purchase by Sunrun of an option described in clause (a) and settled in Common Stock (or such other securities or property), cash or a combination thereof (such amount of cash determined by reference to the price of the Common Stock or such other securities or property), and cash in lieu of fractional shares of Common Stock; provided that the terms, conditions and covenants of each such transaction described in clause (a) or clause (b) shall be such as are customary for transactions of such type (as determined by Sunrun in good faith).

“Permitted Dispositions” means (a) Dispositions of Permitted Assets, including Tranching of any Permitted Assets (including any related manufacturer’s warranty) (i) to an Excluded Subsidiary or, in the case of an Inverted Lease Structure, a Tax Equity Investor in connection with a Permitted Asset Financing Transaction or (ii) to the Loan Parties’ customers or other third parties pursuant to a cash sale for fair market value or on an arm’s length basis, or sale of Projects pursuant to a customer’s purchase right under its applicable Host Customer Agreement; (b) Dispositions of property to the Borrower or any Subsidiary thereof, provided that if the transferor of such property is a Loan Party then the transferee thereof must be a Loan Party; (c) Dispositions of accounts receivable in connection with the collection or compromise thereof; (d) licenses, sublicenses, leases or subleases granted to others not interfering in any material respect with the business of the Borrower and its Subsidiaries; (e) Dispositions of Cash Equivalents for fair market value; (f) Dispositions of Equity Interests in accordance with the terms herein; and (g) Dispositions of SREC Excluded Property.

“Permitted Inventory Financing Obligations” means obligations of the Loan Parties in respect of (i) servicing and administering of any Permitted Inventory Financing Transaction and the related Excluded Subsidiaries (including reporting obligations, coordinating purchases of inventory by any applicable Excluded Subsidiary, deliveries of inventory to any applicable Excluded Subsidiary or a warehouse specified by any applicable Excluded Subsidiary, the warehousing of inventory at any such warehouse and deliveries of inventory from any applicable Excluded Subsidiary or from any such warehouse, and acting as agent of any applicable Safe
Harbor Excluded Subsidiary in order to effect the foregoing), (ii) the transfer and sale of inventory to any applicable Excluded Subsidiary (and related obligations in connection therewith) and, to the extent a Loan Party exercises the right to buy any Inventory from any applicable Excluded Subsidiary in connection with such Permitted Inventory Financing Transaction, the payment of the purchase price for such Inventory, (iii) the payment of purchase price for Inventory to the applicable equipment suppliers in excess of the amount financed under such Permitted Inventory Financing Transaction and the payment of any warehousing fees or other amounts payable to the applicable warehouse providers with respect to warehousing of the Inventory, and (iv) any Permitted Inventory Financing Utilization Covenant.

“Permitted Inventory Financing Transaction” means any Permitted Asset Financing Transaction with respect to Inventory.

“Permitted Inventory Financing Utilization Covenant” means a covenant in connection with a Permitted Inventory Financing Transaction pursuant to which a Loan Party agrees (i) that during one or more measurement periods the percentage obtained by dividing (a) the amount of megawatts of equipment acquired by such Loan Party from the applicable Excluded Subsidiary during such measurement period by (b) the amount of megawatts of Systems subject to power purchase agreements or lease agreements installed by Sunrun and its channel partners during such measurement period shall not be less than a certain percentage and (ii) to the extent a Loan Party is acquiring equipment from an Excluded Subsidiary, to use commercially reasonable efforts to acquire such equipment on a “first-in, first-out” basis.

“Permitted Liens” has the meaning specified in Section 7.01.

“Permitted Project” means, at any time, any Project (i) the System related to which has not been installed as of such time, (ii) with respect to which a Loan Party has (A) entered into a Host Customer Agreement and (B) completed a system design, in each case, at such time, (iii) with respect to which the Loan Parties have received all necessary permits from Governmental Authorities required to be obtained prior to installation of the related System and (iv) that has not been Tranché as of such time.

“Person” means any natural person, corporation, limited liability company, trust, association, company, partnership, Governmental Authority or other entity.

“Plan” means any employee benefit plan within the meaning of Section 3(3) of ERISA (including a Pension Plan), maintained for employees of the Borrower or any ERISA Affiliate or any such Plan to which the Borrower or any ERISA Affiliate is required to contribute on behalf of any of its employees.

“Platform” has the meaning specified in Section 6.02.

“Pledged Equity” has the meaning specified in the Security Agreement.

“Power Purchase Agreements” means a power purchase agreement between Sunrun or a Subsidiary thereof and a customer pursuant to which such customer agrees to purchase from such Person electricity generated or stored, as applicable, by a System installed on such customer’s property.

“Prime Rate” has the meaning specified in the definition of “Base Rate”.

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“Pro Forma Basis” and “Pro Forma Effect” means, for any Disposition of all or substantially all of a line of business, for any Acquisition or for the incurrence of any Indebtedness, in each instance whether actual or proposed, each such transaction or proposed transaction shall be deemed to have occurred on and as of the first day of the relevant measurement period, and the following pro forma adjustments shall be made:

(a) in the case of an actual or proposed Disposition, all income statement items (whether positive or negative) attributable to the line of business or the Person subject to such Disposition shall be excluded from the results of the Borrower and its Subsidiaries for such measurement period;

(b) in the case of an actual or proposed Acquisition, income statement items (whether positive or negative) attributable to the property, line of business or the Person subject to such Acquisition shall be included in the results of the Borrower and its Subsidiaries for such measurement period;

(c) interest accrued during the relevant measurement period on, and the principal of, any Indebtedness repaid or to be repaid or refinanced in such transaction shall be excluded from the results of the Borrower and its Subsidiaries for such measurement period;

(d) any Indebtedness actually or proposed to be incurred or assumed in such transaction shall be deemed to have been incurred as of the first day of the applicable measurement period, and interest thereon shall be deemed to have accrued from such day on such Indebtedness at the applicable rates provided therefor (and in the case of interest that does or would accrue at a formula or floating rate, at the rate in effect at the time of determination) and shall be included in the results of the Borrower and its Subsidiaries for such measurement period.

“Project” means a System, together with all associated real property rights, rights under the applicable Host Customer Agreement, and all other related rights to the extent applicable thereto, including without limitation, all parts and manufacturers’ warranties and rights to access customer data.

“Project Back-Log” means, as of a given date of determination, all Projects owned by a Loan Party or [***] that have achieved Sunrun Sign-off as of such date of determination, as set forth in the Back-Log Spreadsheet; provided that (i) Projects shall be removed from the Project Back-Log once that Project has been sold or contributed to an Excluded Subsidiary or a Tax Equity Investor and (ii) for so long as [***] is not a Loan Party, Project Back-Log shall include only Projects in which [***] has an ownership interest that, in the aggregate, does not constitute more than [***] of the Project Value of all Projects included in Project Back-Log as of such date of determination.

“Project Value” means (a) with respect to a Project with a related PV System, the appraised value of such PV System (based on the most recent Appraisal) or (b) with respect to a Project with a standalone energy storage device, the appraised value of such standalone energy storage device (based on the most recent Appraisal), or, if no Appraisal in respect of such standalone energy storage device is available, as of the date of determination, the present value of all cash flows from the Host Customer Agreement related to such standalone energy storage device on or after such date of determination based on discounting such cash flows to such date of determination at an annual rate equal to the discount rate used to calculate the most recent Contracted Net Earning Assets.

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“Public Lender” has the meaning specified in Section 6.02.

“Public Offering” means a public offering of the Equity Interests of the Borrower pursuant to an effective registration statement under the Securities Act.

[***] means [***].

“PUHCA” means the Public Utility Holding Company Act of 2005, and FERC’s regulations promulgated thereunder.

“PURPA” means the Public Utility Regulatory Policies Act of 1978, as amended, and FERC’s regulations promulgated thereunder.

“PV Systems” means a photovoltaic system, including photovoltaic panels, racks, wiring and other electrical devices, conduit, weatherproof housings, hardware, one or more inverters, remote monitoring equipment, energy storage devices, connectors, meters, disconnects and over current devices.

“QF” means a qualifying small power production facility pursuant to PURPA and FERC’s regulations thereunder, including at 18 C.F.R. §§ 292.203(a) and 292.204.

“QFC” has the meaning assigned to the term “qualified financial contract” in, and shall be interpreted in accordance with, 12 U.S.C. 5390(c)(8)(D).

“QFC Credit Support” has the meaning specified in Section 11.22.

“Qualified ECP Guarantor” means, at any time, each Loan Party with total assets exceeding $10,000,000 or that qualifies at such time as an “eligible contract participant” under the Commodity Exchange Act and can cause another Person to qualify as an “eligible contract participant” at such time under Section 1a(18)(A)(v)(II) of the Commodity Exchange Act.

“Qualifying Control Agreement” means an agreement, among a Loan Party, a depository institution or securities intermediary and the Collateral Agent, which agreement is in form and substance acceptable to the Collateral Agent and which provides the Collateral Agent with “control” (as such term is used in Article 9 of the UCC) over the deposit account(s) or securities account(s) described therein.

“Quarter-End Liquidity” means, with respect to each fiscal quarter, the sum of the Loan Parties’ cash and Cash Equivalents (determined as of the last day of the applicable fiscal quarter based on the balances thereof on such date) held in deposit accounts and securities accounts maintained at a bank reasonably acceptable to the Administrative Agent, in which the Collateral Agent has obtained a perfected first priority Lien subject to no other Liens.

“Recipient” means the Administrative Agent, the Collateral Agent, any Lender, the L/C Issuer or any other recipient of any payment to be made by or on account of any obligation of any Loan Party hereunder.

“Reference Time” means, with respect to any setting of the then-current Benchmark, 6:00 a.m., New York City time, on the day that is two SOFR Business Days preceding the date of such setting.

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“Refinancing Transaction” means any Permitted Asset Financing Transaction that is a refinancing, in whole or in part, of one or more Permitted Asset Financing Transactions.

“Register” has the meaning specified in Section 11.06(c).

“Related Parties” means, with respect to any Person, such Person’s Affiliates and the partners, members, shareholders, directors, officers, employees, agents, administrators, managers, advisors and representatives of such Person and of such Person’s Affiliates.

“Release” or “Released” means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of any Hazardous Materials.

“Relevant Governmental Body” means the FRB or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the FRB or the Federal Reserve Bank of New York, or any successor thereto.

“Reportable Event” means any of the events set forth in Section 4043(c) of ERISA.

“Request for Credit Extension” means (a) with respect to a Borrowing, conversion or continuation of Revolving Loans, a Loan Notice and, (b) with respect to an L/C Credit Extension, a Letter of Credit Notice.

“Required Lenders” means, at any time, at least two (2) Lenders having Total Credit Exposures representing more than 50% of the Total Credit Exposures of all Lenders. The Total Credit Exposure of any Defaulting Lender shall be disregarded in determining Required Lenders at any time; provided that, the Unreimbursed Amounts that such Defaulting Lender has failed to fund that have not been reallocated to and funded by another Lender shall be deemed to be held by the Lender that is the L/C Issuer in making such determination.

“Reserves” has the meaning specified in the definition of “Contracted Net Earning Assets”.

“Resignation Effective Date” has the meaning set forth in Section 9.06(a).

“Responsible Officer” means the chief executive officer, chief financial officer, chief operations officer, chief revenue officer or controller of a Loan Party and, solely for purposes of the delivery of incumbency certificates pursuant to Section 4.01, the general counsel, the secretary or any assistant secretary of a Loan Party or any other officer of such Loan Party designated as a Responsible Officer on a certificate executed by one of the aforementioned individuals. Any document delivered hereunder that is signed by a Responsible Officer of a Loan Party shall be conclusively presumed to have been authorized by all necessary corporate, partnership and/or other action on the part of such Loan Party and such Responsible Officer shall be conclusively presumed to have acted on behalf of such Loan Party. To the extent requested by the Administrative Agent, each Responsible Officer will provide an incumbency certificate, in form and substance satisfactory to the Administrative Agent.

“Restricted Payment” means (a) any dividend or other distribution, direct or indirect, on account of any shares (or equivalent) of any class of Equity Interests of the Borrower or any of its Subsidiaries, now or hereafter outstanding, (b) any redemption, retirement, sinking fund or similar payment, purchase or other acquisition for value, direct or indirect, of any shares (or equivalent) of any class of Equity Interests of the Borrower or any other Loan Party, now or

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hereafter outstanding, and (c) any payment made to retire, or to obtain the surrender of, any outstanding warrants, options or other rights to acquire shares of any class of Equity Interests of any Loan Party or any of its Subsidiaries, now or hereafter outstanding.

“Revolving Borrowing” means the borrowing of Revolving Loans consisting of one Type of Revolving Loan by the Borrower from all of the Lenders having Revolving Commitments in respect thereof on a pro rata basis on a given date (or resulting from Conversions or Continuations on a given date), having in the case of any Term SOFR Loans, the same Interest Period.

“Revolving Exposure” means, as to any Lender at any time, the aggregate principal amount at such time of its outstanding Revolving Loans and such Lender’s participation in L/C Obligations at such time.

“Revolving Increase Effective Date” has the meaning specified in Section 2.15(d).

“Revolving Loan” has the meaning specified in Section 2.01(a).

“Revolving Note” means a promissory note made by the Borrower in favor of a Lender evidencing Revolving Loans made by such Lender, substantially in the form of Exhibit G.


“Sale and Leaseback Transaction” means, with respect to any Loan Party or any Subsidiary thereof, any arrangement, directly or indirectly, with any Person whereby such Loan Party or such Subsidiary shall sell or transfer any property used or useful in its business, whether now owned or hereafter acquired, and thereafter rent or lease such property or other property that it intends to use for substantially the same purpose or purposes as the property being sold or transferred.

“Sale-Leaseback Structure” means a tax equity investment structure in which the Borrower either sells Systems to a Tax Equity Investor or contributes Systems to an Excluded Subsidiary, which entity then sells such Systems to a Tax Equity Investor or a partnership between an Excluded Subsidiary and a Tax Equity Investor pursuant to a purchase agreement, which such entity subsequently leases back the same Systems to an Excluded Subsidiary.

“Sanction(s)” means any sanctions administered or enforced by OFAC, the U.S. Department of State, the United Nations Security Council, the European Union, Her Majesty’s Treasury or other relevant sanctions authority.

“SEC” means the Securities and Exchange Commission, or any Governmental Authority succeeding to any of its principal functions.

“Secured Cash Management Agreement” means any Cash Management Agreement between the any Loan Party and any Cash Management Bank.

“Secured Hedge Agreement” means any interest rate, currency, foreign exchange, or commodity Swap Contract (other than a Permitted Call Spread Transaction) permitted under Article VI or VII between any Loan Party and any Hedge Bank.

“Secured Obligations” means all Obligations and all Additional Secured Obligations.

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“Secured Parties” means, collectively, the Administrative Agent, the Collateral Agent, the Lenders, the L/C Issuer, the Hedge Banks, the Cash Management Banks, the Indemnitees, each co-agent or sub-agent appointed by the Administrative Agent or the Collateral Agent from time to time pursuant to Section 9.05.

“Secured Party Designation Notice” means a notice from any Lender or an Affiliate of a Lender substantially in the form of Exhibit H.

“Securities Act” means the Securities Act of 1933.

“Security Agreement” means the Security and Pledge Agreement, dated as of the date hereof, executed in favor of the Collateral Agent by each of the Loan Parties.

“SOFR” means, with respect to any Business Day, a rate per annum equal to the secured overnight financing rate for such Business Day published by the Federal Reserve Bank of New York (or a successor administrator of the secured overnight financing rate) on the website of the Federal Reserve Bank of New York, currently at http://www.newyorkfed.org (or any successor source for the secured overnight financing rate identified as such by the administrator of the secured overnight financing rate from time to time) on the immediately succeeding Business Day.

“SOFR Business Day” means any day except for (i) a Saturday, (ii) a Sunday or (iii) a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in United States government securities.

“Solvency Certificate” means a solvency certificate in substantially the form of Exhibit I.

“Solvent” and “Solvency” mean, with respect to any Person on any date of determination, that on such date (a) the fair value of the property of such Person is greater than the total amount of liabilities, including contingent liabilities, of such Person, (b) the present fair saleable value of the assets of such Person is not less than the amount that will be required to pay the probable liability of such Person on its debts as they become absolute and matured, (c) such Person does not intend to, and does not believe that it will, incur debts or liabilities beyond such Person’s ability to pay such debts and liabilities as they mature, (d) such Person is not engaged in business or a transaction, and is not about to engage in business or a transaction, for which such Person’s property would constitute an unreasonably small capital, and (e) such Person is able to pay its debts and liabilities, contingent obligations and other commitments as they mature in the ordinary course of business. The amount of contingent liabilities at any time shall be computed as the amount that, in the light of all the facts and circumstances existing at such time, represents the amount that can reasonably be expected to become an actual or matured liability.

“Specified Entity” means [***].

“Specified Loan Party” means any Loan Party that is not an “eligible contract participant” under the Commodity Exchange Act (determined prior to giving effect to Section 10.11 hereof).

“SREC” means Solar Renewable Energy Certificates or any other similar credit or certificate issued by a governmental entity and all associated reporting rights.

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“SREC Excluded Property” means any SREC and any contracts related to the financing or hedging of SRECs, any SREC tracking accounts or any proceeds of any of the foregoing.

“SREC Transaction” means any contract or agreement for the sale of SRECs, or for the sale or financing of any SREC Excluded Property.

“Standalone Contracted Net Earning Assets” means, as of any date of determination, with respect to any Projects,

(a) the Contracted Gross Earning Assets of such Projects as of such date of determination, less

(b) the amount of all non-recourse Indebtedness reported on the most recent (i) annual audited financial statements of Sunrun or (ii) quarterly unaudited financial statements of Sunrun and in respect of which cash flows included in clause (a) are subject, and plus

(c) cash held by any Excluded Subsidiary in maintenance reserve accounts, debt service reserve accounts or distribution suspense accounts as of such date of determination in connection with Indebtedness described in clause (b).

“Statutory Reserves” means a fraction (expressed as a decimal), the numerator of which is the number one and the denominator of which is the number one minus the aggregate of the maximum reserve percentages (including any marginal, special, emergency or supplemental reserves) expressed as a decimal established by the FRB and any other banking authority, domestic or foreign, to which the Administrative Agent or any Lender (including any branch, Affiliate or other fronting office making or holding a Loan) is subject for Eurocurrency Liabilities (as defined in Regulation D of the FRB). Term SOFR Loans shall be deemed to constitute Eurocurrency Liabilities (as defined in Regulation D of the FRB) and to be subject to such reserve requirements without benefit of or credit for proration, exemptions or offsets that may be available from time to time to any Lender under such Regulation D. Statutory Reserves shall be adjusted automatically on and as of the effective date of any change in any reserve percentage.

“Subordinated Debt” means any unsecured Indebtedness of the Borrower and its Subsidiaries under the Subordinated Debt Documents and any other Indebtedness of the Borrower and its Subsidiaries which has been subordinated in right of payment and priority to the Indebtedness arising under this Agreement and the other Loan Documents, all on terms and conditions satisfactory to the Administrative Agent.

“Subordinated Debt Documents” means and include any documents evidencing any Subordinated Debt, in each case, as the same may be amended, modified, supplemented or otherwise modified from time to time in compliance with the terms of this Agreement.

“Subsidiary” of a Person means a corporation, partnership, limited liability company or other business entity of which a majority of the shares of Voting Stock is at the time beneficially owned, or the management of which is otherwise controlled, directly, or indirectly through one or more intermediaries, or both, by such Person. Unless otherwise specified, all references herein to a “Subsidiary” or to “Subsidiaries” shall refer to a Subsidiary or Subsidiaries of the applicable Loan Parties.

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“Substantial Completion” means receipt of a closed out building permit from a local inspector and, solely with respect to a PV System, a performed meter test (pursuant to which such PV System produces electricity and communicates with a utility meter).

“Sunrun” has the meaning specified in the introductory paragraph hereof.

“Sunrun Sign-off” means, for a given Project, full execution of a Host Customer Agreement.

“Supermajority Lenders” means, as of any date of determination, Lenders having more than 66 2/3% of the Total Credit Exposures of all Lenders. The Total Credit Exposure of any Defaulting Lender shall be disregarded in determining Supermajority Lenders at any time; provided that, the Unreimbursed Amounts that such Defaulting Lender has failed to fund that have not been reallocated to and funded by another Lender shall be deemed to be held by the Lender that is the L/C Issuer in making such determination.

“Supply Chain Financing” means any transaction or arrangement under which any bank, financial institution or other Person may from time to time acquire from vendors and suppliers of the Borrower or any of its Subsidiaries (other than Excluded Subsidiaries) accounts receivable with respect to accounts payable that were incurred in the ordinary course of business and are due from the Borrower or any of such Subsidiaries pursuant to receivables purchase agreements with such vendors and suppliers (or similar arrangements), so long as (a) the obligations of the Borrower and such Subsidiaries under such transaction are unsecured (or are secured solely by the Inventory acquired by the Borrower or such Subsidiaries in connection with such accounts receivable to the extent the applicable vendors or suppliers were secured thereby), (b) the amounts of such obligations are consistent with those which the Borrower or such Subsidiaries would otherwise have been obligated to pay to its vendors or suppliers in respect of their applicable accounts receivable and (c) such obligations are payable by the Borrower or such Subsidiaries, as applicable, within one-hundred eighty (180) days after the dates on which the applicable accounts receivable were created.

“Supported QFC” has the meaning specified in Section 11.22.

“Swap Contract” means (a) any and all rate swap transactions, basis swaps, credit derivative transactions, forward rate transactions, commodity swaps, commodity options, forward commodity contracts, equity or equity index swaps or options, bond or bond price or bond index swaps or options or forward bond or forward bond price or forward bond index transactions, interest rate options, forward foreign exchange transactions, cap transactions, floor transactions, collar transactions, currency swap transactions, cross-currency rate swap transactions, currency options, spot contracts, or any other similar transactions or any combination of any of the foregoing (including any options to enter into any of the foregoing), whether or not any such transaction is governed by or subject to any master agreement (for the avoidance of doubt, this clause (a) shall include any Permitted Call Spread Transaction), and (b) any and all transactions of any kind, and the related confirmations, which are subject to the terms and conditions of, or governed by, any form of master agreement published by the International Swaps and Derivatives Association, Inc., any International Foreign Exchange Master Agreement, or any other master agreement (any such master agreement, together with any related schedules, a “Master Agreement”), including any such obligations or liabilities under any Master Agreement.
“Swap Obligations” means with respect to any Guarantor, any obligation to pay or perform under any agreement, contract or transaction that constitutes a “swap” within the meaning of Section 1a(47) of the Commodity Exchange Act.

“Swap Termination Value” means, in respect of any one or more Swap Contracts, after taking into account the effect of any legally enforceable netting agreement relating to such Swap Contracts, (a) for any date on or after the date such Swap Contracts have been closed out and termination value(s) determined in accordance therewith, such termination value(s), and (b) for any date prior to the date referenced in clause (a), the amount(s) determined as the mark-to-market value(s) for such Swap Contracts, as determined based upon one or more mid-market or other readily available quotations provided by any recognized dealer in such Swap Contracts (which may include a Lender or any Affiliate of a Lender).

“Synthetic Debt” means, with respect to any Person as of any date of determination thereof, all obligations of such Person in respect of transactions entered into by such Person that are intended to function primarily as a borrowing of funds but are not otherwise included in the definition of “Indebtedness” or as a liability on the Consolidated balance sheet of such Person and its Subsidiaries in accordance with GAAP.

“Synthetic Lease Obligation” means the monetary obligation of a Person under (a) a so-called synthetic, off-balance sheet or tax retention lease, or (b) an agreement for the use or possession of property (including Sale and Leaseback Transactions), in each case, creating obligations that do not appear on the balance sheet of such Person but which, upon the application of any Debtor Relief Laws to such Person, would be characterized as the indebtedness of such Person (without regard to accounting treatment).

“System” means, with respect to a Project, any component thereof that constitutes a PV System or standalone energy storage device.

“Take-Out Spreadsheet” means a spreadsheet for Projects, substantially in the form attached hereto as Exhibit R, providing for the amount of Available Take-Out.

“Target” means a Person or division, line of business or other business unit or asset of such Person who is to be acquired or purchased by a Loan Party.

“Tax Equity Commitment” means, with respect to a given Tax Equity Investor, such Tax Equity Investor’s (i) in the case of an Inverted Lease Structure, commitment to prepay rent, (ii) in the case of a Sale Leaseback Structure, commitment to pay the purchase price (excluding any long-term payment of a deferred purchase price or any other payment that does not constitute a payment received for Tranching), (iii) in the case of a Partnership Flip Structure, commitment to contribute to the partnership for the payment of purchase price, and (iv) in the case of any other tax structure, commitment to fund Tranching of Projects.

“Tax Equity Document” means any agreements entered into by the Borrower or its Subsidiaries and Tax Equity Investors relating to, arising under or in connection with a Tax Equity Commitment.

“Tax Equity Investor” means an investor that has an agreement with the Borrower or any of its Subsidiaries to provide a commitment to purchase, lease or otherwise finance Projects installed or to be installed pursuant to a Host Customer Agreement, which Projects are eligible for ITC or other tax benefits (such as depreciation).

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
“Tax Equity Partnership” means a special purpose entity in a Partnership Flip Structure whose membership interests are held by a Loan Party or an Excluded Subsidiary, as the managing member, and a Tax Equity Investor or a Subsidiary of such Tax Equity Investor, as the investor member, and whose members are obligated to advance capital contributions to purchase Projects from Sunrun or any of its Subsidiaries in accordance with the related Tax Equity Documents.

“Taxes” means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“Term SOFR” has the meaning provided in the definition of “Adjusted Term SOFR Rate”.

“Term SOFR Adjustment” means, for any calculation with respect to a Term SOFR Loan, a percentage per annum as set forth below for the applicable Interest Period therefor:

<table>
<thead>
<tr>
<th>Interest Period</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>One month</td>
<td>0.11448 %</td>
</tr>
<tr>
<td>Three months</td>
<td>0.26161%</td>
</tr>
<tr>
<td>Six months</td>
<td>0.42826%</td>
</tr>
</tbody>
</table>

“Term SOFR Administrator” means CBA (or a successor administrator of the forward-looking secured overnight financing rate selected by the Administrative Agent in its reasonable discretion).

“Term SOFR Loan” means each Loan bearing interest at a rate based upon the Adjusted Term SOFR Rate.

“Threshold Amount” means [***].

“Total Credit Exposure” means, as to any Lender at any time, the unused Commitments and Revolving Exposure of such Lender at such time.

“Total Debt” means, as of the last day of any Measurement Period, (a) the aggregate amount of all senior secured Indebtedness of the Loan Parties less (b) the Quarter-End Liquidity, in each case, as of the last day of such Measurement Period; provided that in no event shall Total Debt be less than zero.

“Total Outstandings” means the aggregate Outstanding Amount of all Revolving Loans and L/C Obligations.

“Tranching” means the sale, lease, assignment, contribution or other transfer of Permitted Assets by the Borrower or its Subsidiaries to an Excluded Subsidiary or Tax Equity Investor in connection with a Permitted Asset Financing Transaction. “Tranched” has a meaning correlative thereto.

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“True-Up Liability” means the Borrower’s liability to any Tax Equity Investor or Cash Equity Investor (as measured in Dollars) due to the overfunding by such Tax Equity Investor or Cash Equity Investor of its portion of the total purchase prices of Projects already Tranched, as set forth in the Borrower’s financial statements and as may be reduced from time to time by the Tranching of such Projects pursuant to the applicable Tax Equity Documents or Cash Equity Documents.

“Type” means any type of Loan determined with respect to the interest option applicable thereto, which in each case shall be a Base Rate Loan or a Term SOFR Loan.

“UCC” means the Uniform Commercial Code as in effect in the State of New York; provided that, if perfection or the effect of perfection or non-perfection or the priority of any security interest in any Collateral is governed by the Uniform Commercial Code as in effect in a jurisdiction other than the State of New York, “UCC” means the Uniform Commercial Code as in effect from time to time in such other jurisdiction for purposes of the provisions hereof relating to such perfection, effect of perfection or non-perfection or priority.

“UCP” means the Uniform Customs and Practice for Documentary Credits, International Chamber of Commerce Publication No. 600 (or such later version thereof as may be in effect at the applicable time).

“Unadjusted Applicable Percentage” means with respect to any Lender at any time, the percentage (carried out to the ninth decimal place) represented by such Lender’s Commitment at such time, subject to adjustment as provided in Sections 2.05, 2.14 and 2.15. If the Commitment of all of the Lenders to make Revolving Loans and the obligation of the L/C Issuer to make L/C Credit Extensions have been terminated pursuant to Section 8.02, or if the Commitments have expired, then the Unadjusted Applicable Percentage of each Lender shall be determined based on the Unadjusted Applicable Percentage of such Lender most recently in effect, giving effect to any subsequent assignments. The Unadjusted Applicable Percentage of each Lender is set forth opposite the name of such Lender on Schedule 1.01(b) or in the Assignment and Assumption pursuant to which such Lender becomes a party hereto, or in any documentation executed by such Lender pursuant to Section 2.15, as applicable.

“Unadjusted Benchmark Replacement” means the applicable Benchmark Replacement excluding the related Benchmark Replacement Adjustment.

“Unencumbered Liquidity” means, as of any date of determination, the sum of the Loan Parties’ cash and Cash Equivalents (determined as of the last day of the preceding calendar month) held in deposit accounts and securities accounts maintained at a bank reasonably acceptable to the Administrative Agent, in which the Collateral Agent has obtained a perfected first priority Lien subject to no other Liens.

“United States” and “U.S.” mean the United States of America.

“Unreimbursed Amount” has the meaning specified in Section 2.03(c)(i).

“U.S. Loan Party” means any Loan Party that is organized under the laws of one of the states of the United States and that is not a CFC.

“U.S. Person” means any Person that is a “United States Person” as defined in Section 7701(a)(30) of the Code.

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“U.S. Tax Compliance Certificate” has the meaning specified in Section 3.01(e)(ii)(B)(3).

“Voting Stock” means, with respect to any Person, Equity Interests issued by such Person the holders of which are ordinarily, in the absence of contingencies, entitled to vote for the election of directors (or persons performing similar functions) of such Person, even though the right to so vote has been suspended by the happening of such contingency.

“Warehouse Operating System” means, with respect to any warehouse, an electronic inventory reporting system maintained by a third party operator that records the warehouse location, serial number, SKU or other identifier of inventory at such warehouse and the owner thereof.

“Write-Down and Conversion Powers” means, (a) with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule, and (b) with respect to the United Kingdom, any powers of the applicable Resolution Authority under the Bail-In Legislation to cancel, reduce, modify or change the form of a liability of any UK Financial Institution or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers.

Section 1.02 Other Interpretive Provisions.

With reference to this Agreement and each other Loan Document, unless otherwise specified herein or in such other Loan Document:

(a) The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words “include,” “includes” and “including” shall be deemed to be followed by the phrase “without limitation.” The word “will” shall be construed to have the same meaning and effect as the word “shall.” Unless the context requires otherwise, (i) any definition of or reference to any agreement, instrument or other document (including the Loan Documents and any Organization Document) shall be construed as referring to such agreement, instrument or other document as from time to time amended, modified, extended, restated, replaced or supplemented from time to time (subject to any restrictions on such amendments, supplements or modifications set forth herein or in any other Loan Document), (ii) any reference herein to any Person shall be construed to include such Person’s successors and assigns, (iii) the words “hereto,” “herein,” “hereof” and “hereunder,” and words of similar import when used in any Loan Document, shall be construed to refer to such Loan Document in its entirety and not to any particular provision thereof, (iv) all references in a Loan Document to Articles, Sections, Preliminary Statements, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Preliminary Statements, Exhibits and Schedules to, the Loan Document in which such references appear, (v) any reference to any law shall include all statutory and regulatory rules, regulations, orders and provisions consolidating, amending, replacing or interpreting such law and any reference to any law or regulation shall, unless otherwise specified, refer to such law or regulation as amended, modified, extended, restated, replaced or supplemented from time to time, and (vi) the words “asset” and “property” shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights.
In the computation of periods of time from a specified date to a later specified date, the word “from” means “from and including;” the words “to” and “until” each mean “to but excluding;” and the word “through” means “to and including.”

Section headings herein and in the other Loan Documents are included for convenience of reference only and shall not affect the interpretation of this Agreement or any other Loan Document.

Section 1.03 Accounting Terms.

(a) Generally. All accounting terms not specifically or completely defined herein shall be construed in conformity with, and all financial data (including financial ratios and other financial calculations) required to be submitted pursuant to this Agreement shall be prepared in conformity with, GAAP applied on a consistent basis, as in effect from time to time, applied in a manner consistent with that used in preparing the annual audited financial statements of Sunrun, except as otherwise specifically prescribed herein. Notwithstanding the foregoing, for purposes of determining compliance with any covenant (including the computation of any financial covenant) contained herein, Indebtedness of the Borrower and its Subsidiaries shall be deemed to be carried at 100% of the outstanding principal amount thereof, and the effects of FASB ASC 825 on financial liabilities shall be disregarded.

(b) Changes in GAAP. If at any time any change in GAAP would affect the computation of any financial ratio or requirement set forth in any Loan Document, and either the Borrower or the Required Lenders shall so request, the Administrative Agent, the Lenders and the Borrower shall negotiate in good faith to amend such ratio or requirement to preserve the original intent thereof in light of such change in GAAP (subject to the approval of the Required Lenders); provided that, until so amended, (i) such ratio or requirement shall continue to be computed in accordance with GAAP prior to such change therein and (ii) the Borrower shall provide to the Administrative Agent and the Lenders financial statements and other documents required under this Agreement or as reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement made before and after giving effect to such change in GAAP. Without limiting the foregoing, leases shall continue to be classified and accounted for on a basis consistent with that reflected in the annual audited financial statements of Sunrun for all purposes of this Agreement, notwithstanding any change in GAAP relating thereto, unless the parties hereto shall enter into a mutually acceptable amendment addressing such changes, as provided for above.

(c) Pro Forma Treatment. Each Disposition of all or substantially all of a line of business, and each Acquisition, by the Borrower and its Subsidiaries that is consummated during any measurement period shall, for purposes of determining compliance with the financial covenants set forth in Section 7.11, be given Pro Forma Effect as of the first day of such measurement period.

(d) Convertible Debt. Notwithstanding any other provision contained herein, all terms of an accounting or financial nature used herein shall be construed, and all computations of amounts and ratios referred to herein shall be made without giving effect to any treatment of Indebtedness in respect of Convertible Debt under Accounting Standards Codification 470-20 (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) to value any such Convertible Debt in a reduced or bifurcated manner as described therein, and such Convertible Debt shall at all times be valued at the full stated principal amount thereof. For the avoidance of doubt, and without limiting the foregoing, Convertible Debt shall at all times be valued at the full stated principal amount thereof and shall

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not include any reduction or appreciation in value of the shares deliverable upon conversion thereof.

Section 1.04 Rounding.

Any financial ratios required to be maintained by the Borrower pursuant to this Agreement shall be calculated by dividing the appropriate component by the other component, carrying the result to one place more than the number of places by which such ratio is expressed herein and rounding the result up or down to the nearest number (with a rounding-up if there is no nearest number).

Section 1.05 Times of Day.

Unless otherwise specified, all references herein to times of day shall be references to Eastern time (daylight or standard, as applicable).

Section 1.06 Letter of Credit Amounts.

Unless otherwise specified herein, the amount of a Letter of Credit at any time shall be deemed to be the stated amount of such Letter of Credit in effect at such time; provided, however, that with respect to any Letter of Credit that, by its terms or the terms of any Issuer Document related thereto, provides for one or more automatic increases in the stated amount thereof, the amount of such Letter of Credit shall be deemed to be the maximum stated amount of such Letter of Credit after giving effect to all such increases, whether or not such maximum stated amount is in effect at such time.

Section 1.07 UCC Terms.

Terms defined in the UCC in effect on the Closing Date and not otherwise defined herein shall, unless the context otherwise indicates, have the meanings provided by those definitions. Subject to the foregoing, the term “UCC” refers, as of any date of determination, to the UCC then in effect.

Section 1.08 Divisions.

For all purposes under this Agreement and the other Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction’s laws) (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person, and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized on the first date of its existence by the holders of its Equity Interests at such time.

Section 1.09 Rates.

The interest rate on Loans denominated in Dollars may be determined by reference to a benchmark rate that is, or may in the future become, the subject of regulatory reform or cessation. The Administrative Agent does not warrant or accept responsibility for, and shall not have any liability with respect to (a) the administration of, submission of, calculation of or any other matter related to Term SOFR, any component definition thereof or rates referenced in the definition thereof or any alternative, comparable or successor rate thereto (including any then-current Benchmark or any Benchmark Replacement), including whether the composition or

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characteristics of any such alternative, comparable or successor rate (including any Benchmark Replacement) will be similar to, or produce the same value or economic equivalence of, or have the same volume or liquidity as, Term SOFR or any other Benchmark, or (b) the effect, implementation or composition of any Benchmark Replacement Conforming Changes.

ARTICLE II

COMMITMENTS AND CREDIT EXTENSIONS

Section 2.01 Loans

(a) Revolving Borrowings. Subject to the terms and conditions set forth herein, each Lender severally agrees to make loans (each such loan, a “Revolving Loan”) to the Borrower, in Dollars, from time to time, on any Business Day during the Availability Period, in an aggregate amount not to exceed at any time outstanding the amount of such Lender’s Commitment; provided, however, that after giving effect to any Revolving Borrowing, (i) the Total Outstandings shall not exceed the lesser of the Facility and the Borrowing Base, and (ii) the Revolving Exposure of any Lender shall not exceed such Lender’s Commitment; and provided, further, that the requested date of any Borrowing shall not be later than five (5) Business Days prior to the Maturity Date of the Facility. Within the limits of each Lender’s Commitment, and subject to the other terms and conditions hereof, the Borrower may borrow Revolving Loans, prepay such Loans under Section 2.04, and reborrow under this Section 2.01(a). Revolving Loans may be Base Rate Loans or Term SOFR Loans, as further provided herein.

(b) Eligible Project Back-Log. If at any time during the Availability Period, the Collateral Agent conducts a field examination in accordance with Section 6.10 and determines based on the results of such field examination, after consulting with the Borrower, that in the Collateral Agent’s commercially reasonable judgment, the eligibility criteria for Eligible Project Back-Log need to be revised, the Borrower shall work in good faith with the Collateral Agent to revise the components of Eligible Project Back-Log and such agreed upon revisions shall be deemed to revise the definition of Eligible Project Back-Log accordingly and the Borrowing Base shall be calculated thereafter using such revised definition.

(c) Adjustments to Applicable Percentages.

(i) Except as set forth in Section 2.01(c)(ii) and Section 2.01(c)(iii), the Applicable Percentage of each Lender with respect to a Revolving Borrowing shall be such Lender’s Unadjusted Applicable Percentage.

(ii) Except as set forth in Section 2.01(c)(iii) with respect to an Unreimbursed Amount, the obligation of NYGB to make any Revolving Loan shall not exceed the amount of NYGB Borrowing Base Availability as of the date such Revolving Loan is to be made. In the event that as a result of the preceding sentence the amount of such Revolving Loan to be made by NYGB is less than NYGB’s Unadjusted Applicable Percentage of the applicable Revolving Borrowing requested in the applicable Loan Notice:

(A) NYGB’s Applicable Percentage of such Revolving Borrowing shall be the percentage (carried out to the ninth decimal place) determined by dividing the amount of the Revolving Loan that can then be made by NYGB by the total amount of the Revolving Borrowing to be made in accordance with the provisions of this Section 2.01(c)(ii) (such percentage to be NYGB’s Adjusted Applicable Percentage with respect to such Revolving Borrowing); and

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the Applicable Percentage of each Lender other than NYGB with respect to such Revolving Borrowing shall be the percentage (carried out to the ninth decimal place) determined by dividing (1) an amount equal to such Lender’s pro rata share (determined based on the Unadjusted Applicable Percentage of such Lender divided by the sum of the Unadjusted Applicable Percentages of all Lenders other than NYGB) of (x) the amount of such Revolving Borrowing requested in the applicable Loan Notice minus (y) the amount of the Revolving Loan to be made by NYGB in accordance with the provisions of Section 2.01(c)(ii)(A) by (2) the amount of such Revolving Borrowing requested in the applicable Loan Notice; provided, however, that in no event shall the amount in clause (1) cause such Lender’s Revolving Exposure (after giving effect to such Revolving Borrowing) to exceed such Lender’s Commitment (such percentage to be such Lender’s Adjusted Applicable Percentage with respect to such Revolving Borrowing).

For purposes of Section 2.03(c), a Lender’s Applicable Percentage with respect to (x) such Lender’s risk participation in a Letter of Credit shall be a percentage equal to the Applicable Percentage of such Lender determined in accordance with Section 2.01(c)(i) or Section 2.01(c)(ii) as if a Revolving Borrowing in an amount equal to the amount available to be drawn under such Letter of Credit, determined in accordance with Section 1.06, had been requested to be made at the time of the issuance of such Letter of Credit or of the most recent L/C Credit Extension increasing the amount of such Letter of Credit, and (y) any Unreimbursed Amount with respect to a Letter of Credit shall be equal to such Lender’s Applicable Percentage determined in accordance with clause (x) of this sentence. For the avoidance of doubt, the Lenders’ Applicable Percentages under clause (x) of the preceding sentence shall be recalculated at the time of any L/C Credit Extension that increases the amount of such Letter of Credit based on the amount of the Letter of Credit as so increased.

Section 2.02 Borrowings, Conversions and Continuations of Loans.

(a) Notice of Borrowing. Each Borrowing, each conversion of Loans from one Type to the other, and each continuation of Term SOFR Loans shall be made upon the Borrower’s irrevocable notice to the Administrative Agent, which may be given by telephone; provided, that, in the case of any Borrowing, telephonic notice may be given only if the Applicable Percentage of each Lender with respect to such Borrowing will be its Unadjusted Applicable Percentage. Each such notice must be received by the Administrative Agent not later than 11:00 a.m. (i) four (4) Business Days prior to the requested date of any Borrowing of, conversion to or continuation of Term SOFR Loans or of any conversion of Term SOFR Loans to Base Rate Loans, and (ii) one (1) Business Day prior to the requested date of any Borrowing of Base Rate Loans; provided, however, that if the Borrower wishes to request Term SOFR Loans having an Interest Period other than one (1), three (3) or six (6) months in duration as provided in the definition of “Interest Period”, the applicable notice must be received by the Administrative Agent not later than 11:00 a.m. five (5) Business Days prior to the requested date of such Borrowing, conversion or continuation, whereupon the Administrative Agent shall give prompt notice to the Appropriate Lenders of such request and determine whether the requested Interest Period is acceptable to all of them. Not later than 11:00 a.m., four (4) Business Days before the requested date of such Borrowing, conversion or continuation, the Administrative Agent shall notify the Borrower (which notice may be by telephone) whether or not the requested Interest Period has been consented to by all the Lenders. Each telephonic notice by the Borrower pursuant to this Section 2.02(a) must be confirmed promptly by delivery to the Administrative Agent of a written Loan Notice, appropriately completed and signed by a Responsible Officer of the Borrower. Each Borrowing of, conversion to or continuation of Term SOFR Loans shall be in a principal amount of $5,000,000 or a whole multiple of $1,000,000 in excess thereof. Except as provided in Sections 2.03(c), each Borrowing of or conversion to Base Rate Loans shall be in a principal...
amount of $500,000 or a whole multiple of $100,000 in excess thereof. Each Loan Notice (whether telephonic or written) shall specify (A) the Facility and whether the Borrower is requesting a Borrowing, a conversion of Loans from one Type to the other, or a continuation of Loans, as the case may be, under such Facility, (B) the requested date of the Borrowing, conversion or continuation, as the case may be (which shall be a Business Day), (C) the principal amount of Loans to be borrowed, converted or continued, (D) the Type of Loans to be borrowed or to which existing Loans are to be converted, (E) if applicable, the duration of the Interest Period with respect thereto, (F) the Borrowing Base applicable to the requested Borrowing, (G) whether the Lenders will be required to fund the requested Borrowing based on the respective Unadjusted Applicable Percentage or Adjusted Applicable Percentage, (H) each Lender’s Applicable Percentage of the requested Borrowing, (I) each Lender’s Revolving Exposure after giving effect to the requested Borrowing, (J) the NYGB Borrowing Base applicable to the requested Borrowing and (K) the amount of the NYGB Borrowing Base Availability. If the Borrower fails to specify a Type of Loan in a Loan Notice or if the Borrower fails to give a timely notice requesting a conversion or continuation, then the applicable Loans shall be made as, or converted to, Base Rate Loans. Any such automatic conversion to Base Rate Loans shall be effective as of the last day of the Interest Period then in effect with respect to the applicable Term SOFR Loans. If the Borrower requests a Borrowing of, conversion to, or continuation of Term SOFR Loans in any such Loan Notice, but fail to specify an Interest Period, it will be deemed to have specified an Interest Period of one (1) month.

(b) **Advances.** Following receipt of a Loan Notice for the Facility, the Administrative Agent shall promptly notify each Appropriate Lender of the amount of its Applicable Percentage under such Facility of the applicable Loans, and if no timely notice of a conversion or continuation is provided by the Borrower, the Administrative Agent shall notify each Appropriate Lender of the details of any automatic conversion to Base Rate Loans described in Section 2.02(a). In the case of a Borrowing, each Appropriate Lender shall make the amount of its Loan available to the Administrative Agent in immediately available funds at the Administrative Agent’s Office not later than 1:00 p.m. on the Business Day specified in the applicable Loan Notice. Upon satisfaction of the applicable conditions set forth in Section 4.02 (and, if such Borrowing is the initial Credit Extension to be made on the Closing Date, Section 4.01), the Administrative Agent shall make all funds so received available to the Borrower in like funds as received by the Administrative Agent either by (i) crediting the account of the Borrower on the books of a bank acceptable to the Administrative Agent with the amount of such funds or (ii) wire transfer of such funds, in each case in accordance with instructions provided to (and reasonably acceptable to) the Administrative Agent by the Borrower; provided, however, that if, on the date a Loan Notice with respect to a Revolving Borrowing is given by the Borrower, there are L/C Borrowings outstanding, then the proceeds of such Revolving Borrowing, first, shall be applied to the payment in full of any such L/C Borrowings, and second, shall be made available to the Borrower as provided above.

(c) **Term SOFR Loans.** Except as otherwise provided herein, a Term SOFR Loan may be continued or converted only on the last day of an Interest Period for such Term SOFR Loan. During the existence of a Default, no Loans may be requested as, converted to or continued as Term SOFR Loans without the consent of the Required Lenders, and the Required Lenders may demand that any or all of the outstanding Term SOFR Loans be converted immediately to Base Rate Loans.

(d) **Notice of Interest Rates.** The Administrative Agent shall promptly notify the Borrower and the Lenders of the interest rate applicable to any Interest Period for Term SOFR Loans upon determination of such interest rate. At any time that Base Rate Loans are outstanding, the Administrative Agent shall notify the Borrower and the Lenders of any change

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in the Prime Rate used in determining the Base Rate promptly following the announcement of such change.

(e) **Interest Periods.** After giving effect to all Revolving Borrowings, all conversions of Revolving Loans from one Type to the other, and all continuations of Revolving Loans as the same Type, there shall not be more than eight (8) Interest Periods in effect in respect of the Facility.

**Section 2.03 Letters of Credit**

(a) **The Letter of Credit Commitment.**

(i) Subject to the terms and conditions set forth herein, (A) the L/C Issuer agrees, in reliance upon the agreements of the Lenders set forth in this Section, (1) from time to time on any Business Day during the period from the Closing Date until thirty (30) days prior to the Maturity Date, to issue Letters of Credit in Dollars for the account of the Borrower (or at the request of the Borrower as specified in the applicable Letter of Credit Application, any other Loan Party), and to amend Letters of Credit previously issued by it, in accordance with Section 2.03(b), and (2) to honor drawings under the Letters of Credit; and (B) the Lenders severally agree to participate in Letters of Credit issued for the account of the Borrower or any other Loan Party, as applicable, and any drawings thereunder in an amount up to their respective Applicable Percentage of such Letter of Credit; provided that, after giving effect to any L/C Credit Extension with respect to any Letter of Credit, (x) the Total Outstandings shall not exceed the lesser of the Facility and the Borrowing Base, (y) the Revolving Exposure of any Lender shall not exceed such Lender’s Commitment, and (z) the Outstanding Amount of the L/C Obligations shall not exceed the Letter of Credit Sublimit.

Each request by the Borrower for the issuance or amendment of a Letter of Credit shall be deemed to be a representation by the Borrower that the L/C Credit Extension so requested complies with the conditions set forth in the proviso to the preceding sentence. Within the foregoing limits, and subject to the terms and conditions hereof, the Borrower’s ability to obtain Letters of Credit shall be fully revolving, and accordingly the Borrower may, during the foregoing period, obtain Letters of Credit to replace Letters of Credit that have expired or that have been drawn upon and reimbursed. Each Existing Letter of Credit is deemed to be a Letter of Credit issued hereunder for all purposes of this Agreement and the other Loan Documents.

(ii) The L/C Issuer shall not issue any Letter of Credit if:

(A) the initial expiry date of the requested Letter of Credit would occur more than twelve (12) months after the date of issuance, unless the Required Lenders have approved such expiry date; or

(B) the expiry date of the requested Letter of Credit would occur after the Letter of Credit Expiration Date;

in each case, provided however, that any Letter of Credit may provide for renewal thereof for additional periods of up to twelve (12) months (which in no event shall extend beyond the date referred to in clause (B) above).

(iii) Any issuance of a Letter of Credit is subject to satisfaction of the conditions set forth in Section 4.02, and the L/C Issuer shall not be under any obligation to issue any Letter of Credit if:

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
(A) any order, judgment or decree of any Governmental Authority or arbitrator shall by its terms purport to enjoin or restrain the L/C Issuer from issuing the Letter of Credit, or any Law applicable to the L/C Issuer or any request or directive (whether or not having the force of law) from any Governmental Authority with jurisdiction over the L/C Issuer shall prohibit, or request that the L/C Issuer refrain from, the issuance of letters of credit generally or the Letter of Credit in particular or shall impose upon the L/C Issuer with respect to the Letter of Credit any restriction, reserve or capital requirement (for which the L/C Issuer is not otherwise compensated hereunder) not in effect on the Closing Date, or shall impose upon the L/C Issuer any unreimbursed loss, cost or expense which was not applicable on the Closing Date and which the L/C Issuer in good faith deems material to it;

(B) the issuance of the Letter of Credit would violate one or more policies of the L/C Issuer applicable to letters of credit generally;

(C) except as otherwise agreed by the Administrative Agent and the L/C Issuer, the Letter of Credit is in an initial stated amount less than $100,000, in the case of a commercial Letter of Credit, or $100,000, in the case of a standby Letter of Credit;

(D) the Letter of Credit is to be denominated in a currency other than Dollars; or

(E) any Lender is at that time a Defaulting Lender, unless the L/C Issuer has entered into arrangements, including the delivery of Cash Collateral, satisfactory to the L/C Issuer (in its sole discretion) with the Borrower or such Lender to eliminate the L/C Issuer’s actual or potential Fronting Exposure (after giving effect to Section 2.14(a)(iv)) with respect to the Defaulting Lender arising from either the Letter of Credit then proposed to be issued or that Letter of Credit and all other L/C Obligations as to which the L/C Issuer has actual or potential Fronting Exposure, as it may elect in its sole discretion.

(iv) The L/C Issuer shall not amend any Letter of Credit if the L/C Issuer would not be permitted at such time to issue the Letter of Credit in its amended form under the terms hereof.

(v) The L/C Issuer shall be under no obligation to amend any Letter of Credit if (A) the L/C Issuer would have no obligation at such time to issue such Letter of Credit in its amended form under the terms hereof, or (B) the beneficiary of such Letter of Credit does not accept the proposed amendment to the Letter of Credit.

(vi) The L/C Issuer shall act on behalf of the Lenders with respect to any Letters of Credit issued by it and the documents associated therewith, and the L/C Issuer shall have all of the benefits and immunities (A) provided to the Administrative Agent in Article IX with respect to any acts taken or omissions suffered by the L/C Issuer in connection with Letters of Credit issued by it or proposed to be issued by it and Issuer Documents pertaining to such Letters of Credit as fully as if the term “Administrative Agent” as used in Article IX included the L/C Issuer with respect to such acts or omissions, and (B) as additionally provided herein with respect to the L/C Issuer.

(vii) In no event shall the Administrative Agent be required to issue commercial or trade Letters of Credit.

(viii) Letters of Credit shall be used solely to support payment obligations incurred in the ordinary course of business by the Borrower and its Subsidiaries.

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(b) Procedures for Issuance and Amendment of Letters of Credit; Auto Extension Letters of Credit

(i) Each Letter of Credit shall be issued or amended, as the case may be, upon the request of the Borrower delivered to the L/C Issuer (with a copy to the Administrative Agent) in the form of a Letter of Credit Notice, appropriately completed and signed by a Responsible Officer of the Borrower. Such Letter of Credit Notice may be sent by fax transmission, by United States mail, by overnight courier, by electronic transmission using the system provided by the L/C Issuer, by personal delivery or by any other means acceptable to the L/C Issuer. Such Letter of Credit Notice must be received by the L/C Issuer and the Administrative Agent not later than 11:00 a.m. at least three (3) Business Days (or such later date and time as the Administrative Agent and the L/C Issuer may agree in a particular instance in their sole discretion) prior to the proposed issuance date or date of amendment, as the case may be. In the case of a request for an initial issuance of a Letter of Credit, the Letter of Credit Application included in such Letter of Credit Notice shall specify in form and detail satisfactory to the L/C Issuer: (A) the proposed issuance date of the requested Letter of Credit (which shall be a Business Day); (B) the amount thereof; (C) the expiry date thereof; (D) the name and address of the beneficiary thereof; (E) the documents to be presented by such beneficiary in case of any drawing thereunder; (F) the full text of any certificate to be presented by such beneficiary in case of any drawing thereunder; (G) the purpose and nature of the requested Letter of Credit; and (H) such other matters as the L/C Issuer may require. In the case of a request for an amendment of any outstanding Letter of Credit, the Letter of Credit Application included in such Letter of Credit Notice shall specify in form and detail satisfactory to the L/C Issuer: (1) the Letter of Credit to be amended; (2) the proposed date of amendment thereof (which shall be a Business Day); (3) the nature of the proposed amendment; and (4) such other matters as the L/C Issuer may require. Additionally, the Borrower shall furnish to the L/C Issuer and the Administrative Agent a Letter of Credit Notice and such other documents and information pertaining to such requested Letter of Credit issuance or amendment, including any Issuer Documents, as the L/C Issuer or the Administrative Agent may require. Each Letter of Credit Notice shall specify (A) the Borrowing Base applicable to the requested Letter of Credit, (B) each Lender’s Revolving Exposure that will result after giving effect to the issuance of the requested Letter of Credit, (C) whether Lenders will be required to purchase their respective participation in the requested Letter of Credit based on their respective Unadjusted Applicable Percentage or Adjusted Applicable Percentage, (D) the amount of the participation to be purchased by each Lender in the requested Letter of Credit, (E) each Lender’s Applicable Percentage of the requested Letter of Credit and (F) the NYGB Borrowing Base applicable to the requested Letter of Credit.

(ii) Promptly after receipt of any Letter of Credit Notice, the L/C Issuer will confirm with the Administrative Agent (by telephone or in writing) that the Administrative Agent has received a copy of such Letter of Credit Notice from the Borrower and, if not, the L/C Issuer will provide the Administrative Agent with a copy thereof. Unless the L/C Issuer has received written notice from any Lender, the Administrative Agent or any Loan Party, at least two (2) Business Days prior to the requested date of issuance or amendment of the applicable Letter of Credit, that one or more applicable conditions contained in Article IV shall not then be satisfied, then, subject to the terms and conditions hereof, the L/C Issuer shall, on the requested date, issue a Letter of Credit for the account of the Borrower (or at the request of the Borrower as specified in the applicable Letter of Credit Application, any other Loan Party) or enter into the applicable amendment, as the case may be, in each case in accordance with the L/C Issuer’s usual and customary business practices. Immediately upon the issuance of each Letter of Credit, each Lender shall be deemed to, and hereby irrevocably and unconditionally agrees to, purchase from the L/C Issuer a risk participation in such Letter of Credit in an amount equal to the product of such Lender’s Applicable Revolving Percentage times the amount of such Letter of Credit.

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Promptly after its delivery of any Letter of Credit or any amendment to a Letter of Credit to an advising bank with respect thereto or to the beneficiary thereof, the L/C Issuer will also deliver to the Borrower and the Administrative Agent a true and complete copy of such Letter of Credit or amendment.

If the Borrower so requests in the Letter of Credit Application included in any applicable Letter of Credit Notice, the L/C Issuer may, in its sole discretion, agree to issue a standby Letter of Credit that has automatic extension provisions (each, an “Auto-Extension Letter of Credit”); provided that, any such Auto-Extension Letter of Credit must permit the L/C Issuer to prevent any such extension at least once in each twelve (12) month period (commencing with the date of issuance of such Letter of Credit) by giving prior notice to the beneficiary thereof not later than a day (the “Non-Extension Notice Date”) in each such twelve (12) month period to be agreed upon at the time such Letter of Credit is issued. Unless otherwise directed by the L/C Issuer, the Borrower shall not be required to make a specific request to the L/C Issuer for any such extension. Once an Auto-Extension Letter of Credit has been issued, the Lenders shall be deemed to have authorized (but may not require) the L/C Issuer to prevent the extension of such Letter of Credit at any time to an expiry date not later than the Letter of Credit Expiration Date; provided, however, that the L/C Issuer shall not permit any such extension if (A) the L/C Issuer has determined that it would not be permitted, or would have no obligation at such time to issue such Letter of Credit in its revised form (as extended) under the terms hereof (by reason of the provisions of clause (ii) or (iii) of Section 2.03(a) or otherwise), or (B) it has received notice (which may be by telephone or in writing) on or before the day that is seven (7) Business Days before the Non-Extension Notice Date (1) from the Administrative Agent that the Required Lenders have elected not to permit such extension or (2) from the Administrative Agent, any Lender or the Borrower that one or more of the applicable conditions specified in Section 4.02 is not then satisfied, and in each such case directing the L/C Issuer not to permit such extension.

Notwithstanding the terms of any Letter of Credit Application for a commercial Letter of Credit, in no event may the Borrower extend the time for reimbursing any drawing under a commercial Letter of Credit by obtaining a bankers’ acceptance from the L/C Issuer. With respect to commercial Letters of Credit, the L/C Issuer may issue sight and/or deferred payment Letters of Credit only.

(c) Drawings and Reimbursements; Funding of Participations

(i) Upon receipt from the beneficiary of any Letter of Credit of any notice of a drawing under such Letter of Credit, the L/C Issuer shall notify the Borrower and the Administrative Agent thereof. Not later than 11:00 a.m. on the date of any payment by the L/C Issuer under a Letter of Credit (each such date, an “Honor Date”), the Borrower shall reimburse the L/C Issuer through the Administrative Agent in an amount equal to the amount of such drawing. If the Borrower fails to so reimburse the L/C Issuer by such time, the Administrative Agent shall promptly notify each Lender of the Honor Date, the amount of the unreimbursed drawing (the “Unreimbursed Amount”), and the amount of each Lender’s Applicable Revolving Percentage thereof. In such event, the Borrower shall be deemed to have requested a Revolving Borrowing of Base Rate Loans to be disbursed on the Honor Date in an amount equal to the Unreimbursed Amount, without regard to the minimum and multiples specified in Section 2.02 for the principal amount of Base Rate Loans, but subject to the conditions set forth in Section 4.02 (other than the delivery of a Loan Notice and the existence of a Borrowing Base Deficiency or a NYGB Borrowing Base Deficiency). Any notice given by the L/C Issuer or the Administrative Agent pursuant to this Section 2.03(c)(i) may be given by telephone if immediately confirmed in writing; provided that, the lack of such an immediate confirmation shall not affect the conclusiveness or binding effect of such notice.

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(ii) Each Lender shall upon any notice pursuant to Section 2.03(c)(i) make funds available (and the Administrative Agent may apply Cash Collateral provided for this purpose) for the account of the L/C Issuer at the Administrative Agent’s Office in an amount equal to its Applicable Revolving Percentage of the Unreimbursed Amount not later than 1:00 p.m. on the Business Day specified in such notice by the Administrative Agent, whereupon, subject to the provisions of Section 2.03(c)(iii), each Lender that so makes funds available shall be deemed to have made a Base Rate Loan to the Borrower in such amount. The Administrative Agent shall remit the funds so received to the L/C Issuer.

(iii) With respect to any Unreimbursed Amount that is not fully refinanced by a Revolving Borrowing of Base Rate Loans because the conditions set forth in Section 4.02 (other than the delivery of a Loan Notice and the existence of a Borrowing Base Deficiency or a NYGB Borrowing Base Deficiency) cannot be satisfied or for any other reason, the Borrower shall be deemed to have incurred from the L/C Issuer an L/C Borrowing in the amount of the Unreimbursed Amount that is not so refinanced, which L/C Borrowing shall be due and payable on demand (together with interest) and shall bear interest at the Default Rate. In such event, each Lender’s payment to the Administrative Agent for the account of the L/C Issuer pursuant to Section 2.03(c)(ii) shall be deemed payment in respect of its participation in such L/C Borrowing and shall constitute an L/C Advance from such Lender in satisfaction of its participation obligation under this Section.

(iv) Until each Lender funds its Revolving Loan or L/C Advance pursuant to this Section 2.03(c) to reimburse the L/C Issuer for any amount drawn under any Letter of Credit, interest in respect of such Lender’s Applicable Revolving Percentage of such amount shall be solely for the account of the L/C Issuer.

(v) Each Lender’s obligation to make Revolving Loans or L/C Advances to reimburse the L/C Issuer for amounts drawn under Letters of Credit, as contemplated by this Section 2.03(c), shall be absolute and unconditional and shall not be affected by any circumstance, including (A) any setoff, counterclaim, recoupment, defense or other right which such Lender may have against the L/C Issuer, the Borrower or any other Person for any reason whatsoever; (B) the occurrence or continuance of a Default; or (C) any other occurrence, event or condition, whether or not similar to any of the foregoing; provided, however, that each Lender’s obligation to make Revolving Loans pursuant to this Section 2.03(c) is subject to the conditions set forth in Section 4.02 (other than delivery by the Borrower of a Loan Notice and the existence of a Borrowing Base Deficiency or a NYGB Borrowing Base Deficiency). If, on any date of determination, a Letter of Credit has expired by its terms but any amount may still be drawn thereunder by reason of the operation of Rule 3.14 of the ISP, each Lender shall remain obligated to reimburse the L/C Issuer for any drawings made during the period after the expiry date of such Letter of Credit even if such Letter of Credit is extended beyond the Maturity Date of the Facility. No such making of an L/C Advance shall relieve or otherwise impair the obligation of the Borrower to reimburse the L/C Issuer for the amount of any payment made by the L/C Issuer under any Letter of Credit, together with interest as provided herein.

(vi) If any Lender fails to make available to the Administrative Agent for the account of the L/C Issuer any amount required to be paid by such Lender pursuant to the foregoing provisions of this Section 2.03(c) by the time specified in Section 2.03(c)(ii), then, without limiting the other provisions of this Agreement, the L/C Issuer shall be entitled to recover from such Lender (acting through the Administrative Agent), on demand, such amount with interest thereon for the period from the date such payment is required to the date on which such payment is immediately available to the L/C Issuer at a rate per annum equal to the greater of the Federal Funds Rate and a rate determined by the L/C Issuer in accordance with banking

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industry rules on interbank compensation, plus any administrative, processing or similar fees customarily charged by the L/C Issuer in connection with the foregoing. If such Lender pays such amount (with interest and fees as aforesaid), the amount so paid shall constitute such Lender’s Revolving Loan included in the relevant Revolving Borrowing or L/C Advance in respect of the relevant L/C Borrowing, as the case may be. A certificate of the L/C Issuer submitted to any Lender (through the Administrative Agent) with respect to any amounts owing under this Section 2.03(c)(vi) shall be conclusive absent manifest error.

(d) Repayment of Participations.

(i) At any time after the L/C Issuer has made a payment under any Letter of Credit and has received from any Lender such Lender’s L/C Advance in respect of such payment in accordance with Section 2.03(c), if the Administrative Agent receives for the account of the L/C Issuer any payment in respect of the related Unreimbursed Amount or interest thereon (whether directly from the Borrower or otherwise, including proceeds of Cash Collateral applied thereto by the Administrative Agent), the Administrative Agent will distribute to such Lender its Applicable Revolving Percentage thereof in the same funds as those received by the Administrative Agent.

(ii) If any payment received by the Administrative Agent for the account of the L/C Issuer pursuant to Section 2.03(c)(i) is required to be returned under any of the circumstances described in Section 11.05 (including pursuant to any settlement entered into by the L/C Issuer in its discretion), each Lender shall pay to the Administrative Agent for the account of the L/C Issuer, on demand of the Administrative Agent, such Lender’s Applicable Revolving Percentage thereof in the same funds as those received by the Administrative Agent.

(e) Obligations Absolute. The obligation of the Borrower to reimburse the L/C Issuer for each drawing under each Letter of Credit and to repay each L/C Borrowing shall be absolute, unconditional and irrevocable, and shall be paid strictly in accordance with the terms of this Agreement under all circumstances, including the following:

(i) any lack of validity or enforceability of such Letter of Credit, this Agreement, or any other Loan Document;

(ii) the existence of any claim, counterclaim, setoff, defense or other right that the Borrower or any Subsidiary thereof may have at any time against any beneficiary or any transferee of such Letter of Credit (or any Person for whom any such beneficiary or any such transferee may be acting), the L/C Issuer or any other Person, whether in connection with this Agreement or by such Letter of Credit, the transactions contemplated hereby or any agreement or instrument relating thereto, or any unrelated transaction;

(iii) any draft, demand, endorsement, certificate or other document presented under or in connection with such Letter of Credit proving to be forged, fraudulent, invalid or insufficient in any respect or any statement therein being untrue or inaccurate in any respect; or any loss or delay in the transmission or otherwise of any document required in order to make a drawing under such Letter of Credit;

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(iv) waiver by the L/C Issuer of any requirement that exists for the L/C Issuer’s protection and not the protection of the Borrower or any waiver by the L/C Issuer which does not in fact materially prejudice the Borrower;

(v) honor of a demand for payment presented electronically even if such Letter of Credit requires that demand be in the form of a draft;

(vi) any payment made by the L/C Issuer in respect of an otherwise complying item presented after the date specified as the expiration date of, or the date by which documents must be received under such Letter of Credit if presentation after such date is authorized by the UCC, the ISP or the UCP, as applicable;

(vii) any payment by the L/C Issuer under such Letter of Credit against presentation of a draft or certificate that does not strictly comply with the terms of such Letter of Credit; or any payment made by the L/C Issuer under such Letter of Credit to any Person purporting to be a trustee in bankruptcy, debtor-in-possession, assignee for the benefit of creditors, liquidator, receiver or other representative of or successor to any beneficiary or any transferee of such Letter of Credit, including any arising in connection with any proceeding under any Debtor Relief Law; or

(viii) any other circumstance or happening whatsoever, whether or not similar to any of the foregoing, including any other circumstance that might otherwise constitute a defense available to, or a discharge of, the Borrower or any of its Subsidiaries.

The Borrower shall promptly examine a copy of each Letter of Credit and each amendment thereto that is delivered to it and, in the event of any claim of noncompliance with the Borrower’s instructions or other irregularity, the Borrower will immediately notify the L/C Issuer. The Borrower shall be conclusively deemed to have waived any such claim against the L/C Issuer and its correspondents unless such notice is given as aforesaid.

(f) Role of L/C Issuer. Each Lender and the Borrower agree that, in paying any drawing under a Letter of Credit, the L/C Issuer shall not have any responsibility to obtain any document (other than any sight or time draft, certificates and documents expressly required by the Letter of Credit) or to ascertain or inquire as to the validity or accuracy of any such document or the authority of the Person executing or delivering any such document. None of the L/C Issuer, the Administrative Agent, any of their respective Related Parties nor any correspondent, participant or assignee of the L/C Issuer shall be liable to any Lender for (i) any action taken or omitted in connection herewith at the request or with the approval of the Lenders or the Required Lenders, as applicable; (ii) any action taken or omitted in the absence of gross negligence or willful misconduct; or (iii) the due execution, effectiveness, validity or enforceability of any document or instrument related to any Letter of Credit or Issuer Document. The Borrower hereby assumes all risks of the acts or omissions of any beneficiary or transferee with respect to its use of any Letter of Credit; provided, however, that this assumption is not intended to, and shall not, preclude the Borrower or any other Loan Party from pursuing such rights and remedies as any of them may have against the beneficiary or transferee at law or under any other agreement. None of the L/C Issuer, the Administrative Agent, any of their respective Related Parties nor any correspondent, participant or assignee of the L/C Issuer shall be liable or responsible for any of the matters described in Section 2.03(e); provided, however, that anything in such clauses to the contrary notwithstanding, the Borrower or any other Loan Party as the applicable account party under a Letter of Credit may have a claim against the L/C Issuer, and the L/C Issuer may be liable to the Borrower or such other Loan Party, to the extent, but only to the extent, of any direct, as opposed to consequential or exemplary, damages suffered by the

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Borrower or such other Loan Party which the Borrower or such other Loan Party proves, as determined by a final nonappealable judgment of a court of competent jurisdiction, were caused by the L/C Issuer’s willful misconduct or gross negligence or the L/C Issuer’s willful failure to pay under any Letter of Credit after the presentation to it by the beneficiary of a sight or time draft and certificate(s) strictly complying with the terms and conditions of a Letter of Credit. In furtherance and not in limitation of the foregoing, the L/C Issuer may accept documents that appear on their face to be in order, without responsibility for further investigation, regardless of any notice or information to the contrary, and the L/C Issuer shall not be responsible for the validity or sufficiency of any instrument transferring, endorsing or assigning or purporting to transfer, endorse or assign a Letter of Credit or the rights or benefits thereunder or proceeds thereof, in whole or in part, which may prove to be invalid or ineffective for any reason. The L/C Issuer may send a Letter of Credit or conduct any communication to or from the beneficiary via the Society for Worldwide Interbank Financial Telecommunication (“SWIFT”) message or overnight courier, or any other commercially reasonable means of communicating with a beneficiary.

(g) **Applicability of ISP and UCP; Limitation of Liability.** Unless otherwise expressly agreed by the L/C Issuer and the Borrower when a Letter of Credit is issued, (i) the rules of the ISP shall apply to each standby Letter of Credit, and (ii) the rules of the UCP shall apply to each commercial Letter of Credit. Notwithstanding the foregoing, the L/C Issuer shall not be responsible to the Borrower for, and the L/C Issuer’s rights and remedies against the Borrower shall not be impaired by, any action or inaction of the L/C Issuer required or permitted under any law, order, or practice that is required or permitted to be applied to any Letter of Credit or this Agreement, including the Law or any order of a jurisdiction where the L/C Issuer or the beneficiary is located, the practice stated in the ISP or UCP, as applicable, or in the decisions, opinions, practice statements, or official commentary of the International Chamber of Commerce Banking Commission, the Bankers Association for Finance and Trade - International Financial Services Association (BAFT-IFSA), or the Institute of International Banking Law & Practice, whether or not any Letter of Credit chooses such law or practice.

(h) **Letter of Credit Fees.** The Borrower shall pay to the Administrative Agent for the account of each Lender, subject to Section 2.14, in proportion to its Applicable Revolving Percentage with respect to each Letter of Credit, a Letter of Credit fee (the “**Letter of Credit Fee**”) for each Letter of Credit issued pursuant to this Section 2.03 equal to a per annum rate equal to the Applicable Margin times the aggregate face amount available to be drawn under such Letter of Credit. For purposes of computing the aggregate face amount available to be drawn under any Letter of Credit, the amount of such Letter of Credit shall be determined in accordance with Section 1.06. Letter of Credit Fees shall be due and payable quarterly in arrears on the first Business Day after the end of each March, June, September and December, commencing with the first such date to occur after the issuance of such Letter of Credit, on the Letter of Credit Expiration Date and thereafter on demand.

(i) **Fronting Fee and Documentary and Processing Charges Payable to L/C Issuer.** The Borrower shall pay directly to the L/C Issuer for its own account a fronting fee (i) with respect to each commercial Letter of Credit, at the rate equal to 0.25% per annum, computed on the amount of such Letter of Credit, and payable upon the issuance thereof, (ii) with respect to any amendment of a commercial Letter of Credit increasing the amount of such Letter of Credit, at a rate separately agreed between the Borrower and the L/C Issuer, computed on the amount of such increase, and payable upon the effectiveness of such amendment, and (iii) with respect to each standby Letter of Credit, at the rate equal to 0.25% per annum, computed on the aggregate face amount available to be drawn under such Letter of Credit on a quarterly basis in arrears. Such fronting fee shall be due and payable quarterly in arrears on the first Business Day after the
end of each March, June, September and December, commencing with the first such date to occur after the issuance of such Letter of Credit, on the Letter of Credit Expiration Date and thereafter on demand. For purposes of computing the daily amount available to be drawn under any Letter of Credit, the amount of such Letter of Credit shall be determined in accordance with Section 1.06. In addition, the Borrower shall pay directly to the L/C Issuer for its own account the customary issuance, presentation, amendment and other processing fees, and other standard costs and charges, of the L/C Issuer as from time to time in effect. Such customary fees and standard costs and charges are due and payable on demand and are nonrefundable.

(j) Conflict with Issuer Documents. In the event of any conflict between the terms hereof and the terms of any Issuer Document, the terms hereof shall control.

(k) Additional L/C Issuers. The Borrower may, at any time and from time to time with the consent of the Administrative Agent (which consent shall not be unreasonably withheld or delayed) and such Lender, designate one or more additional Lenders to act as an L/C Issuer under the terms of this Agreement, subject to reporting requirements reasonably satisfactory to the Administrative Agent with respect to issuances, amendments, extensions and terminations of Letters of Credit by such additional L/C Issuer. Any Lender designated as an L/C Issuer pursuant to this paragraph (k) shall be deemed to be an “L/C Issuer” (in addition to being a Lender) in respect of Letters of Credit issued or to be issued by such Lender, and, with respect to such Letters of Credit, such term shall thereafter apply to the other L/C Issuer and such Lender.

Section 2.04 Prepayments.

(a) Optional.

(i) The Borrower may, upon notice to the Administrative Agent, at any time or from time to time voluntarily prepay any Revolving Borrowing in whole or in part without premium or penalty; provided that, (A) such notice must be received by the Administrative Agent not later than 11:00 a.m. (1) four (4) Business Days prior to any date of prepayment of Term SOFR Loans and (2) one (1) Business Day prior to any date of prepayment of Base Rate Loans; (B) any prepayment of Term SOFR Loans shall be in a principal amount of $5,000,000 or a whole multiple of $1,000,000 in excess thereof; and (C) any prepayment of Base Rate Loans shall be in a principal amount of $500,000 or a whole multiple of $100,000 in excess thereof or, in each case, if less, the entire principal amount thereof then outstanding. Each such notice shall specify the Revolving Borrowing(s) being prepaid, the date and amount of such prepayment and the Type(s) of Loans to be prepaid and, if Term SOFR Loans are to be prepaid, the Interest Period(s) of such Loans. The Administrative Agent will promptly notify each Lender of its receipt of each such notice, and of the amount of such Lender’s ratable portion of such prepayment (determined based on such Lender’s Applicable Percentage in respect of each Revolving Borrowing (or portion thereof) being prepaid). If such notice is given by the Borrower, the Borrower shall make such prepayment and the payment amount specified in such notice shall be due and payable on the date specified therein. Any prepayment of principal shall be accompanied by all accrued interest on the amount of the Revolving Borrowing(s) being prepaid, together with any additional amounts required pursuant to Section 3.05. Subject to Section 2.14, such prepayments shall be paid to the Lenders in accordance with their respective Revolving Loans being prepaid.

(b) Mandatory.

(i) Revolving Outstandings. If for any reason a Borrowing Base Deficiency exists in an amount in excess of twenty percent (20%) of the Borrowing Base at any time of

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determination, the Borrower shall immediately on demand prepay Revolving Loans and/or L/C Borrowings (together with all accrued but unpaid interest thereon) and/or Cash Collateralize the L/C Obligations in an aggregate amount equal to such excess, and if a Borrowing Base Deficiency exists in an amount in excess of twenty percent (20%) of the Borrowing Base Collateral Agent shall have the right to have a field examination conducted on behalf of the Collateral Agent in accordance with Section 6.10 with results reasonably satisfactory to the Collateral Agent. If for any reason a Borrowing Base Deficiency exists in an amount equal to or less than twenty percent (20%) of the Borrowing Base at any time of determination, the Borrower shall, within forty-five (45) days of demand, prepay Revolving Loans and/or L/C Borrowings (together with all accrued but unpaid interest thereon) and/or Cash Collateralize the L/C Obligations in an aggregate amount equal to such excess; provided that, if such Borrowing Base Deficiency exists, at such time and at any time during which such Borrowing Base Deficiency exists, the Borrower does not have at least $100,000,000 in unrestricted cash and deposit account balances with respect to which the Collateral Agent has obtained a perfected first priority Lien subject to no other Liens, the reference to forty-five (45) days in this sentence shall be deemed to reference three (3) Business Days; and provided, further, that, at any time during which such Borrowing Base Deficiency exists, the Borrower shall notify the Administrative Agent immediately in the event that the Borrower has less than $100,000,000 in unrestricted cash. Notwithstanding the foregoing, in the event of any Borrowing Base Deficiency, the Borrower shall not be required to Cash Collateralize the L/C Obligations pursuant to this Section 2.04(b)(i) unless, after the prepayment of the Revolving Loans, a Borrowing Base Deficiency continues to exist.

(ii) Certain Indebtedness. If the Borrower is required to make a payment or contribution in connection with Indebtedness incurred pursuant to Section 7.02(i) and the conditions in clauses (x) and (y) of Section 7.02(i)(ii), after giving effect to such payment or contribution on a Pro Forma Basis, are not satisfied, the Borrower shall immediately on demand prepay Revolving Loans and/or L/C Borrowings (together with all accrued but unpaid interest thereon) and/or Cash Collateralize the L/C Obligations in an aggregate amount sufficient to cause the Loan Parties to be in compliance with such conditions.

(iii) Application of Other Payments. Except as otherwise provided in Section 2.14, prepayments of the Facility made pursuant to this Section 2.04(b), first, shall be applied ratably to the L/C Borrowings, second, shall be applied ratably to the outstanding Revolving Borrowings, and, third, shall be used to Cash Collateralize the remaining L/C Obligations. Upon the drawing of any Letter of Credit that has been Cash Collateralized, the funds held as Cash Collateral shall be applied (without any further action by or notice to or from the Borrower or any other Loan Party or any Defaulting Lender that has provided Cash Collateral) to reimburse the L/C Issuer or the Lenders, as applicable.

Within the parameters of the applications set forth above, prepayments pursuant to this Section 2.04(b) shall be applied first to Revolving Borrowings that consist of Base Rate Loans and then to Revolving Borrowings that consist of Term SOFR Loans in direct order of Interest Period maturities. All prepayments under this Section 2.04(b) shall be subject to Section 3.05, but otherwise without premium or penalty, and shall be accompanied by interest on the principal amount prepaid to the date of prepayment. Each Lender’s pro rata share of a prepayment of a Revolving Borrowing shall equal such Lender’s Applicable Revolving Percentage of such Revolving Borrowing.

Section 2.05 Termination or Reduction of Commitments.

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(a) **Optional.** The Borrower may, upon notice to the Administrative Agent, terminate the Facility or the Letter of Credit Sublimit, or from time to time permanently reduce the Facility or the Letter of Credit Sublimit; provided that (i) any such notice shall be received by the Administrative Agent not later than 11:00 a.m. five (5) Business Days prior to the date of termination or reduction, (ii) any such partial reduction shall be in an aggregate amount of $10,000,000 or any whole multiple of $1,000,000 in excess thereof and (iii) the Borrower shall not terminate or reduce (A) the Facility if, after giving effect thereto and to any concurrent prepayments hereunder, the Total Outstandings would exceed the Facility or the Revolving Exposure of any Lender would exceed such Lender’s Commitment or (B) the Letter of Credit Sublimit if, after giving effect thereto, the Outstanding Amount of L/C Obligations not fully Cash Collateralized hereunder would exceed the Letter of Credit Sublimit. If after giving effect to any reduction or termination of Commitments under this Section 2.05(a), the Letter of Credit Sublimit exceeds the Facility at such time, the Letter of Credit Sublimit shall be automatically reduced by the amount of such excess.

(b) **Application of Commitment Reductions; Payment of Fees.** The Administrative Agent will promptly notify the Lenders of any termination or reduction of the Letter of Credit Sublimit or the Commitments under Section 2.05(a). Upon any reduction of the Commitments under Section 2.05(a), the Commitment of each Lender shall be reduced by such Lender’s Unadjusted Applicable Percentage of such reduction amount, the Facility shall be reduced as to such amount and any Commitment Fees accruing with respect thereto shall be calculated based on the reduced Facility. All fees in respect of the Facility accrued until the effective date of any termination of the Facility shall be paid on the effective date of such termination.

(c) **NYGB Commitment Reduction.**

(i) So long as the NYGB Commitment Reduction Condition shall be satisfied as of the date of the proposed termination or reduction, the Borrower may, upon notice to the Administrative Agent and NYGB and delivery to the Administrative Agent of a pro forma Borrowing Base Certificate giving effect to such termination or reduction, terminate or from time to time permanently reduce the Commitment of NYGB; provided that (A) any such notice and Borrowing Base Certificate shall be received by the Administrative Agent not later than 11:00 a.m. five (5) Business Days prior to the date of termination or reduction, (B) any such partial reduction shall be in an aggregate amount of $1,000,000 or any whole multiple of $500,000 in excess thereof and (C) the Borrower shall not terminate or reduce the Commitment of NYGB if, after giving effect thereto and to any concurrent prepayments hereunder, (1) the Revolving Exposure of NYGB would exceed NYGB’s Commitment, (2) the Total Outstandings would exceed the Facility or (3) the Outstanding Amount of L/C Obligations not fully Cash Collateralized hereunder would exceed the Letter of Credit Sublimit. If after giving effect to any reduction or termination of the Commitment of NYGB under this Section 2.05(c)(i), the Letter of Credit Sublimit exceeds the Facility at such time, the Letter of Credit Sublimit shall be automatically reduced by the amount of such excess.

(ii) The Administrative Agent will promptly notify the Lenders of any termination or reduction of the Commitment of NYGB under Section 2.05(c)(i) and any related reduction of the Letter of Credit Sublimit. Upon any reduction or termination of the Commitment of NYGB under Section 2.05(c)(i), (A) the Facility shall be reduced as to such amount, (B) any Commitment Fees accruing with respect thereto shall be calculated based on the reduced Facility, (C) the Unadjusted Applicable Percentages of the Lenders shall be recalculated in

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accordance with such reductions, and (D) each Lender’s Applicable Percentage with respect to a Letter of Credit outstanding on the date of such reduction shall be recalculated in accordance with the revised Applicable Revolving Percentages. All fees in respect of the Facility accrued until the effective date of any termination in full of the Commitment of NYGB shall be paid on the effective date of such termination.

Section 2.06 Repayment of Loans

The Borrower shall repay to the Lenders on the Maturity Date for the Facility the aggregate principal amount of all Revolving Loans and all L/C Borrowings outstanding on such date.

Section 2.07 Interest and Default Rate

(a) Interest. Subject to the provisions of Section 2.07(b), (i) each Term SOFR Loan under the Facility shall bear interest on the outstanding principal amount thereof for each Interest Period from the applicable borrowing date at a rate per annum equal to the Adjusted Term SOFR Rate (or, following the Benchmark Transition Event, Benchmark) for such Interest Period plus the Applicable Margin for such Facility; and (ii) each Base Rate Loan under the Facility shall bear interest on the outstanding principal amount thereof from the applicable borrowing date at a rate per annum equal to the Base Rate plus the Applicable Margin for such Facility.

(b) Default Rate.

(i) If any amount of principal of any Loan is not paid when due, whether at stated maturity, by acceleration or otherwise, such amount shall thereafter bear interest at a fluctuating interest rate per annum at all times equal to the Default Rate to the fullest extent permitted by applicable Laws.

(ii) If any amount (other than principal of any Loan) payable by the Borrower under any Loan Document is not paid when due, whether at stated maturity, by acceleration or otherwise, then upon the request of the Required Lenders such amount shall thereafter bear interest at a fluctuating interest rate per annum at all times equal to the Default Rate to the fullest extent permitted by applicable Laws.

(iii) Upon the request of the Required Lenders, while any Event of Default exists, outstanding Obligations (including Letter of Credit Fees) may accrue at a fluctuating rate per annum at all times equal to the Default Rate to the fullest extent permitted by applicable Laws.

(iv) Accrued and unpaid interest on past due amounts (including interest on past due interest) shall be due and payable upon demand.

(c) Interest Payments. Interest on each Loan shall be due and payable in arrears on each Interest Payment Date applicable thereto and at such other times as may be specified herein. Interest hereunder shall be due and payable in accordance with the terms hereof before and after judgment, and before and after the commencement of any proceeding under any Debtor Relief Law.

Section 2.08 Fees.

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In addition to certain fees described in Section 2.03:

(a) **Commitment Fee.** The Borrower shall pay to the Administrative Agent for the account of each Lender a commitment fee (the “Commitment Fee”) equal to the Applicable Margin times the actual daily amount by which such Lender’s Commitment exceeds the sum of (i) the Outstanding Amount of such Lender’s Revolving Loans and (ii) the Outstanding Amount of such Lender’s L/C Obligations, subject to adjustment as provided in Section 2.14. The Commitment Fee shall accrue at all times during the Availability Period, including at any time during which one or more of the conditions in Article IV is not met, and shall be due and payable quarterly in arrears on the last Business Day of each March, June, September and December, commencing with the first such date to occur after the Closing Date, and on the last day of the Availability Period for the Facility.

(b) **Other Fees.**

(i) The Borrower shall pay to the Administrative Agent for its own account fees in the amounts and at the times specified in the Fee Letter. Such fees shall be fully earned when paid and shall not be refundable for any reason whatsoever.

(ii) The Borrower shall pay to the Lenders (x) an upfront fee equal to 1.00% of the Aggregate Commitments on the Closing Date and (y) such fees as shall have been separately agreed upon in writing in the amounts and at the times so specified. Such fees shall be fully earned when paid and shall not be refundable for any reason whatsoever.

**Section 2.09 Computation of Interest and Fees; Retroactive Adjustments of Applicable Margin.** All computations of interest for Base Rate Loans (including Base Rate Loans determined by reference to the Adjusted Term SOFR Rate) shall be made on the basis of a year of three hundred sixty-five (365) or three hundred sixty-six (366) days, as the case may be, and actual days elapsed. All other computations of fees and interest shall be made on the basis of a 360-day year and actual days elapsed (which results in more fees or interest, as applicable, being paid than if computed on the basis of a three hundred sixty-five (365) day year). Interest shall accrue on each Loan for the day on which the Loan is made, and shall not accrue on a Loan, or any portion thereof, for the day on which the Loan or such portion is paid, provided that, any Loan that is repaid on the same day on which it is made shall, subject to Section 2.11(a), bear interest for one (1) day. All computations of interest and fees in respect of the Facility shall be calculated on the basis of the full stated principal amount of the Facility. Each determination by the Administrative Agent of an interest rate or fee hereunder shall be conclusive and binding for all purposes, absent manifest error.

**Section 2.10 Evidence of Debt.**

(a) **Maintenance of Accounts.** The Credit Extensions made by each Lender shall be evidenced by one or more accounts or records maintained by such Lender and by the Administrative Agent in the ordinary course of business. The accounts or records maintained by the Administrative Agent and each Lender shall be conclusive absent manifest error of the amount of the Credit Extensions made by the Lenders to the Borrower and the interest and payments thereon. Any failure to so record or any error in doing so shall not, however, limit or otherwise affect the obligation of the Borrower hereunder to pay any amount owing with respect to the Obligations. In the event of any conflict between the accounts and records maintained by any Lender and the accounts and records of the Administrative Agent in respect of such matters, the accounts and records of the Administrative Agent shall control in the absence of manifest error. Upon the request of any Lender made through the Administrative Agent, the Borrower shall execute and deliver to such Lender (through the Administrative Agent) a Revolving Note.

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which shall evidence such Lender’s Loans in addition to such accounts or records. Each Lender may attach schedules to its Revolving Note and endorse thereon the date, Type (if applicable), amount and maturity of its Loans and payments with respect thereto.

(b) **Maintenance of Records.** In addition to the accounts and records referred to in Section 2.10(a), each Lender and the Administrative Agent shall maintain in accordance with its usual practice accounts or records evidencing the purchases and sales by such Lender of participations in Letters of Credit. In the event of any conflict between the accounts and records maintained by the Administrative Agent and the accounts and records of any Lender in respect of such matters, the accounts and records of the Administrative Agent shall control in the absence of manifest error.

Section 2.11 Payments Generally; Administrative Agent’s Clawback.

(a) **General.** All payments to be made by the Borrower shall be made free and clear of and without condition or deduction for any counterclaim, defense, recoupment or setoff. Except as otherwise expressly provided herein, all payments by the Borrower hereunder shall be made to the Administrative Agent, for the account of the respective Lenders to which such payment is owed, at the Administrative Agent’s Office in Dollars and in immediately available funds not later than 2:00 p.m. on the date specified herein. The Administrative Agent will promptly distribute to each Lender its ratable share of such payment in like funds as received by wire transfer to such Lender’s Lending Office. All payments received by the Administrative Agent after 2:00 p.m. shall be deemed received on the next succeeding Business Day (in the Administrative Agent’s sole discretion) and any applicable interest or fee shall continue to accrue. Subject to Section 2.06 and as otherwise specifically provided for in this Agreement, if any payment to be made by the Borrower shall come due on a day other than a Business Day, payment shall be made on the next following Business Day, and such extension of time shall be reflected in computing interest or fees, as the case may be.

(b) (i) **Funding by Lenders; Presumption by Administrative Agent.** Unless the Administrative Agent shall have received notice from a Lender prior to the proposed date of any Borrowing of Term SOFR Loans (or, in the case of any Borrowing of Base Rate Loans, prior to 12:00 noon on the date of such Borrowing) that such Lender will not make available to the Administrative Agent such Lender’s share of such Borrowing, the Administrative Agent may assume that such Lender has made such share available on such date in accordance with Section 2.02 (or, in the case of a Borrowing of Base Rate Loans, that such Lender has made such share available in accordance with and at the time required by Section 2.02) and may, in reliance upon such assumption, make available to the Borrower a corresponding amount. In such event, if a Lender has not in fact made its share of the applicable Borrowing available to the Administrative Agent, then the applicable Lender and the Borrower severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount in immediately available funds with interest thereon, for each day from and including the date such amount is made available to the Borrower to but excluding the date of payment to the Administrative Agent, at (A) in the case of a payment to be made by such Lender, the greater of the Federal Funds Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation, plus any administrative, processing or similar fees customarily charged by the Administrative Agent in connection with the foregoing, and (B) in the case of a payment to be made by the Borrower, the interest rate applicable to Base Rate Loans. If the Borrower and such Lender shall pay such interest to the Administrative Agent for the same or an overlapping period, the Administrative Agent shall promptly remit to the Borrower the amount of such interest paid by the Borrower for such period. If such Lender pays its share of the applicable Borrowing to the Administrative Agent, then the amount so paid shall constitute such Lender’s

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Loan included in such Borrowing. Any payment by the Borrower shall be without prejudice to any claim the Borrower may have against a Lender that shall have failed to make such payment to the Administrative Agent.

(ii) Payments by Borrower; Presumptions by Administrative Agent. Unless the Administrative Agent shall have received notice from the Borrower prior to the date on which any payment is due to the Administrative Agent for the account of the Lenders or the L/C Issuer hereunder that the Borrower will not make such payment, the Administrative Agent may assume that the Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Appropriate Lenders or the L/C Issuer, as the case may be, the amount due. In such event, if the Borrower has not in fact made such payment, then each of the Appropriate Lenders or the L/C Issuer, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender or the L/C Issuer, in immediately available funds with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at the greater of the Federal Funds Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation.

A notice of the Administrative Agent to any Lender or the Borrower with respect to any amount owing under this subsection (b) shall be conclusive, absent manifest error.

(c) Failure to Satisfy Conditions Precedent. If any Lender makes available to the Administrative Agent funds for any Loan to be made by such Lender as provided in the foregoing provisions of this Article II, and such funds are not made available to the Borrower by the Administrative Agent because the conditions to the applicable Credit Extension set forth in Article IV are not satisfied or waived in accordance with the terms hereof, the Administrative Agent shall return such funds (in like funds as received from such Lender) to such Lender, without interest.

(d) Obligations of Lenders Several. The obligations of the Lenders hereunder to make Revolving Loans, to fund participations in Letters of Credit and to make payments pursuant to Section 11.04(c) are several and not joint. The failure of any Lender to make any Loan, to fund any such participation or to make any payment under Section 11.04(c) on any date required hereunder shall not relieve any other Lender of its corresponding obligation to do so on such date, and no Lender shall be responsible for the failure of any other Lender to so make its Loan, to purchase its participation or to make its payment under Section 11.04(c).

(e) Funding Source. Nothing herein shall be deemed to obligate any Lender to obtain the funds for any Loan in any particular place or manner or to constitute a representation by any Lender that it has obtained or will obtain the funds for any Loan in any particular place or manner.

Section 2.12 Sharing of Payments by Lenders.

If any Lender shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of (a) Obligations in respect of any of the Facility due and payable to such Lender hereunder and under the other Loan Documents at such time in excess of its ratable share (according to the proportion of (i) the amount of such Obligations due and payable to such Lender at such time to (ii) the aggregate amount of such Obligations due and payable to all Lenders hereunder and under the other Loan Documents at such time obtained by all the Lenders at such time or (b) Obligations in

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respect of any of the Facility owing (but not due and payable) to such Lender hereunder and under the other Loan Documents at such time in excess of its ratable share (according to the proportion of (i) the amount of such Obligations owing (but not due and payable) to such Lender at such time to (ii) the aggregate amount of such Obligations owing (but not due and payable) to all Lenders hereunder and under the other Loan Documents at such time) of payments on account of the Obligations in respect of the Facility owing (but not due and payable) to all Lenders hereunder and under the other Loan Documents at such time obtained by all of the Lenders at such time, then, in each case under clauses (a) and (b) above, the Lender receiving such greater proportion shall (A) notify the Administrative Agent of such fact, and (B) purchase (for cash at face value) participations in the Loans and subparticipations in L/C Obligations of the other Lenders, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of Obligations in respect of the Facility then due and payable to the Lenders or owing (but not due and payable) to the Lenders, as the case may be, provided that:

1. if any such participations or subparticipations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations or subparticipations shall be rescinded and the purchase price restored to the extent of such recovery, without interest; and

2. the provisions of this Section shall not be construed to apply to (x) any payment made by or on behalf of the Borrower pursuant to and in accordance with the express terms of this Agreement (including the application of funds arising from the existence of a Defaulting Lender), (y) the application of Cash Collateral provided for in Section 2.13, or (z) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Loans or subparticipations in L/C Obligations to any assignee or participant, other than an assignment to any Loan Party or any Affiliate thereof (as to which the provisions of this Section shall apply).

Each Loan Party consents to the foregoing and agrees, to the extent it may effectively do so under applicable Law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against such Loan Party rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of such Loan Party in the amount of such participation.

Section 2.13 Cash Collateral

(a) Certain Credit Support Events. If (i) the L/C Issuer has honored any full or partial drawing request under any Letter of Credit and such drawing has resulted in an L/C Borrowing, (ii) as of the Letter of Credit Expiration Date, any L/C Obligation for any reason remains outstanding, (iii) the Loan Parties shall be required to provide Cash Collateral pursuant to Section 2.04 or 8.02(c), or (iv) there shall exist a Defaulting Lender, the Loan Parties shall immediately (in the case of clause (iii) above) or within one (1) Business Day (in all other cases) following any request by the Collateral Agent or the L/C Issuer, provide Cash Collateral in an amount not less than the applicable Minimum Collateral Amount (determined in the case of Cash Collateral provided pursuant to clause (iv) above, after giving effect to Section 2.14(a)(iv) and any Cash Collateral provided by the Defaulting Lender).

(b) Grant of Security Interest. The Loan Parties hereby grant to (and subjects to the control of) the Collateral Agent, for the benefit of the Secured Parties, and agrees to maintain, a first priority security interest in all such cash, deposit accounts and all balances therein, and all other property so provided as collateral pursuant hereto, and in all proceeds of the foregoing, all

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as security for the obligations to which such Cash Collateral may be applied pursuant to Section 2.13(c). If at any time the Collateral Agent determines that Cash Collateral is subject to any right or claim of any Person other than the Collateral Agent or the L/C Issuer as herein provided, or that the total amount of such Cash Collateral is less than the Minimum Collateral Amount, the Loan Parties will, promptly upon demand by the Collateral Agent, pay or provide to the Collateral Agent additional Cash Collateral in an amount sufficient to eliminate such deficiency. All Cash Collateral (other than credit support not constituting funds subject to deposit) shall be maintained in one or more Cash Collateral Accounts. The Loan Parties shall pay on demand therefor from time to time all customary account opening, activity and other administrative fees and charges in connection with the maintenance and disbursement of Cash Collateral.

(c) **Application.** Notwithstanding anything to the contrary contained in this Agreement, Cash Collateral provided under any of this Section 2.13 or Sections 2.03, 2.04, 2.14 or 8.02 in respect of Letters of Credit shall be held and applied to the satisfaction of the specific L/C Obligations, obligations to fund participations therein (including, as to Cash Collateral provided by a Lender that is a Defaulting Lender, any interest accrued on such obligation) and other obligations for which the Cash Collateral was so provided, prior to any other application of such property as may be provided for herein.

(d) **Release.** Cash Collateral (or the appropriate portion thereof) provided to reduce Fronting Exposure or to secure other obligations shall be released promptly following (i) the elimination of the applicable Fronting Exposure or other obligations giving rise thereto (including by the termination of Defaulting Lender status of the applicable Lender (or, as appropriate, its assignee following compliance with Section 11.06(b)(vi))) or (ii) the determination by the Collateral Agent and the L/C Issuer that there exists excess Cash Collateral; provided, however, (A) any such release shall be without prejudice to, and any disbursement or other transfer of Cash Collateral shall be and remain subject to, any other Lien conferred under the Loan Documents and the other applicable provisions of the Loan Documents, and (B) the Person providing Cash Collateral and the L/C Issuer may agree that Cash Collateral shall not be released but instead held to support future anticipated Fronting Exposure or other obligations.

**Section 2.14 Defaulting Lenders.**

(a) **Adjustments.** Notwithstanding anything to the contrary contained in this Agreement, if any Lender becomes a Defaulting Lender, then, until such time as that Lender is no longer a Defaulting Lender, to the extent permitted by applicable Law:

(i) **Waivers and Amendments.** Such Defaulting Lender’s right to approve or disapprove any amendment, waiver or consent with respect to this Agreement shall be restricted as set forth in the definition of “Required Lenders” and Section 11.01.

(ii) **Defaulting Lender Waterfall.** Any payment of principal, interest, fees or other amounts received by the Administrative Agent for the account of such Defaulting Lender (whether voluntary or mandatory, at maturity, pursuant to Article VIII or otherwise) or received by the Administrative Agent from a Defaulting Lender pursuant to Section 11.08 shall be applied at such time or times as may be determined by the Administrative Agent as follows: first, to the payment of any amounts owing by such Defaulting Lender to the Administrative Agent hereunder; second, to the payment on a ratable basis of any amounts owing by such Defaulting Lender to the L/C Issuer hereunder; third, to Cash Collateralize the L/C Issuer’s Fronting Exposure with respect to such Defaulting Lender in accordance with Section 2.13; fourth, as the Borrower may request (so long as no Default or Event of Default exists), to the funding of any

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Loan in respect of which such Defaulting Lender has failed to fund its portion thereof as required by this Agreement, as determined by the Administrative Agent; fifth, if so determined by the Administrative Agent and the Borrower, to be held in a deposit account and released as necessary in order to (A) satisfy such Defaulting Lender’s potential future funding obligations with respect to Loans under this Agreement and (B) Cash Collateralize the L/C Issuer’s future Fronting Exposure with respect to such Defaulting Lender with respect to future Letters of Credit issued under this Agreement, in accordance with Section 2.13; sixth, to the payment of any amounts owing to the Lenders or the L/C Issuer as a result of any judgment of a court of competent jurisdiction obtained by any Lender or the L/C Issuer against such Defaulting Lender as a result of such Defaulting Lender’s breach of its obligations under this Agreement; seventh, so long as no Default or Event of Default exists, to the payment of any amounts owing to the Borrower as a result of any judgment of a court of competent jurisdiction obtained by the Borrower against such Defaulting Lender as a result of such Defaulting Lender’s breach of its obligations under this Agreement; and eighth, to such Defaulting Lender or as otherwise may be required under the Loan Documents in connection with any Lien conferred thereunder or directed by a court of competent jurisdiction; provided that, if (1) such payment is a payment of the principal amount of any Loans or L/C Borrowings in respect of which such Defaulting Lender has not fully funded its appropriate share, and (2) such Loans were made or the related Letters of Credit were issued at a time when the conditions set forth in Section 4.02 were satisfied or waived, such payment shall be applied solely to pay the Loans of, and L/C Obligations owed to, all Non-Defaulting Lenders on a pro rata basis prior to being applied to the payment of any Loans of, or L/C Obligations owed to, such Defaulting Lender until such time as all Loans and funded and unfunded participations in L/C Obligations are held by the Lenders pro rata in accordance with their respective Applicable Percentages of such Loans and funded and unfunded participations in L/C Obligations without giving effect to Section 2.14(a)(v). Any payments, prepayments or other amounts paid or payable to a Defaulting Lender that are applied (or held) to pay amounts owed by a Defaulting Lender or to post Cash Collateral pursuant to this Section 2.14(a)(ii) shall be deemed paid to and redirected by such Defaulting Lender, and each Lender irrevocably consents hereto.

(iii) Certain Fees.

(A) Fees. No Defaulting Lender shall be entitled to receive any fee payable under Section 2.08 for any period during which that Lender is a Defaulting Lender (and the Borrower shall not be required to pay any such fee that otherwise would have been required to have been paid to that Defaulting Lender).

(B) Letter of Credit Fees. Each Defaulting Lender shall be entitled to receive Letter of Credit Fees for any period during which that Lender is a Defaulting Lender only to the extent allocable to its Applicable Revolving Percentage of the stated amount of Letters of Credit for which it has provided Cash Collateral pursuant to Section 2.13.

(C) Defaulting Lender Fees. With respect to any Letter of Credit Fee not required to be paid to any Defaulting Lender pursuant to clause (A) or (B) above, the Borrower shall (1) pay to each Non-Defaulting Lender that portion of any such fee otherwise payable to such Defaulting Lender with respect to such Defaulting Lender’s participation in L/C Obligations that has been reallocated to such Non-Defaulting Lender pursuant to clause (iv) below, (2) pay to the L/C Issuer the amount of any such fee otherwise payable to such Defaulting Lender to the extent allocable to such L/C Issuer’s Fronting Exposure to such Defaulting Lender, and (3) not be required to pay the remaining amount of any such fee.

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(iv) Reallocation of Applicable Revolving Percentages to Reduce Fronting Exposure. All or any part of such Defaulting Lender’s participation in L/C Obligations shall be reallocated among the Non-Defaulting Lenders in accordance with their respective Applicable Revolving Percentages (calculated without regard to such Defaulting Lender’s Applicable Revolving Percentage) but only to the extent that (A) the conditions set forth in Section 4.02 are satisfied at the time of such reallocation (and, unless the Borrower shall have otherwise notified the Administrative Agent at such time, the Borrower shall be deemed to have represented and warranted that such conditions are satisfied at such time), and (B) such reallocation does not cause the aggregate Revolving Exposure of any Non-Defaulting Lender to exceed such Non-Defaulting Lender’s Commitment. No reallocation hereunder shall constitute a waiver or release of any claim of any party hereunder against a Defaulting Lender arising from that Lender having become a Defaulting Lender, including any claim of a Non-Defaulting Lender as a result of such Non-Defaulting Lender’s increased Revolving Exposure following such reallocation.

(v) Cash Collateral. If the reallocation described in clause (a)(iv) above cannot, or can only partially, be effected, the Borrower shall, without prejudice to any right or remedy available to it hereunder or under applicable Law, Cash Collateralize the L/C Issuer’s Fronting Exposure in accordance with the procedures set forth in Section 2.13.

(b) Defaulting Lender Cure. If the Borrower, the Administrative Agent and the L/C Issuer agree in writing that a Lender is no longer a Defaulting Lender, the Administrative Agent will so notify the parties hereto, whereupon as of the effective date specified in such notice subject to any conditions set forth therein (which may include arrangements with respect to any Cash Collateral), that Lender will, to the extent applicable, purchase at par that portion of outstanding Loans of the other Lenders or take such other actions as the Administrative Agent may determine to be necessary to cause the Loans and funded and unfunded participations in Letters of Credit to be held on a pro rata basis by the Lenders in accordance with their Applicable Percentage of each such Loan and each such funded and unfunded participation in a Letter of Credit (without giving effect to Section 2.14(a)(iv)), whereupon such Lender will cease to be a Defaulting Lender; provided that, no adjustments will be made retroactively with respect to fees accrued or payments made by or on behalf of the Borrower while that Lender was a Defaulting Lender; and provided, further, that except to the extent otherwise expressly agreed by the affected parties, no change hereunder from Defaulting Lender to Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender’s having been a Defaulting Lender.

Section 2.15 Increase in Facility.

(a) Request for Increase. Provided there exists no Default, upon notice to the Administrative Agent (which shall promptly notify the Lenders), the Borrower may from time to time, request an increase in the Facility (“Incremental Facility”) so long as the Facility, after taking into account all such requests, does not exceed an aggregate principal amount of $600,000,000; provided that (i) any such request for an Incremental Facility shall be in a minimum aggregate principal amount of $10,000,000 and in increments of $5,000,000 in excess thereof, and (ii) the Borrower may make a maximum of two (2) such requests; provided, however, that any such request that occurs within ninety (90) days after the most recent request shall not be deemed an additional request. At the time of sending such notice, the Borrower (in consultation with the Administrative Agent) shall specify the time period within which each Lender is requested to respond.

(b) Lender Elections to Increase. Each Lender shall elect to participate in the Incremental Facility in its sole discretion and shall notify the Administrative Agent within such
time period whether or not it agrees to increase its Commitment and, if so, whether by an amount equal to, greater than, or less than its Applicable Revolving Percentage of such requested increase. Any Lender not responding within such time period shall be deemed to have declined to increase its Commitment.

(c) **Notification by Administrative Agent; Additional Lenders.** The Administrative Agent shall notify the Borrower and each Lender of the Lenders’ responses to each request made hereunder. To achieve the full amount of a requested increase, and subject to the approval of the Administrative Agent and the L/C Issuer (which approvals shall not be unreasonably withheld), the Borrower may also invite additional Eligible Assignees to become Lenders pursuant to a joinder agreement (“New Lenders”) in form and substance satisfactory to the Administrative Agent and its counsel.

(d) **Effective Date and Allocations.** If the Facility is increased in accordance with this Section, the Administrative Agent and the Borrower shall determine the effective date (the “Revolving Increase Effective Date”) and the final allocation of such increase. The Administrative Agent shall promptly notify the Borrower, the Lenders and the New Lenders of the final allocation of such increase and the Revolving Increase Effective Date. The Unadjusted Applicable Percentages shall be recalculated in accordance with the final allocation of such increase to the extent that the final allocation of such increase is nonratable among the Lenders.

(e) **Conditions to Effectiveness of Increase.** As a condition precedent to such increase, the Borrower shall deliver to the Administrative Agent a certificate of each Loan Party dated as of the Revolving Increase Effective Date (in sufficient copies for each Lender) signed by a Responsible Officer of such Loan Party (i) certifying and attaching the resolutions adopted by such Loan Party approving or consenting to such increase, and (ii) in the case of the Borrower, certifying that, immediately before and after giving effect to the Incremental Facility, (A) the representations and warranties contained in Article V and the other Loan Documents are, (x) with respect to representations and warranties that contain a materiality qualification, true and correct in all respects, and (y) with respect to representations and warranties that do not contain a materiality qualification, true and correct in all material respects, in each case, on and as of the Revolving Increase Effective Date (or if such representations and warranties expressly relate to an earlier date, as of such earlier date), and except that, for purposes of this Section 2.15, the representations and warranties contained in subsections (a) and (b) of Section 5.05 shall be deemed to refer to the most recent statements furnished pursuant to clauses (a) and (b), respectively, of Section 6.01, (B) no Default exists, (C) all financial covenants in Section 7.11 would be satisfied on a Pro Forma Basis on the Revolving Increase Effective Date and for the most recent determination period, after giving effect to any such Incremental Facility (and assuming such Incremental Facility were fully drawn), (D) the maturity date of the Loans in respect of any portion of such Incremental Facility shall be no earlier than the Maturity Date of the Facility, (E) the average life to maturity of the Loans in respect of such Incremental Facility shall be no shorter than the remaining average life to maturity of the Facility, and (F) all fees and expenses owing in respect of such increase to the Administrative Agent and the Lenders shall have been paid. The Borrower shall deliver or cause to be delivered any other customary documents (including, without limitation, legal opinions) as reasonably requested by the Administrative Agent in connection with any Incremental Facility. The Borrower shall borrow from each New Lender and from each Lender increasing its Commitment on the Revolving Increase Effective Date, and such Lenders shall make, Revolving Loans to the Borrower (in the case of Term SOFR Loans, with Adjusted Term SOFR Rate(s) applying to the Interest Period(s) ending on the date(s) of any then outstanding Interest Period(s)), and the Borrower shall prepay any Revolving Loans outstanding on the Revolving Increase Effective Date (and pay any additional amounts required pursuant to Section 3.05) to the extent necessary to keep the

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outstanding Revolving Loans ratable with any revised Applicable Revolving Percentages arising from any nonratable increase in the Commitments under this Section. Each Lender’s Applicable Percentage with respect to a Letter of Credit outstanding on the Revolving Increase Effective Date shall be recalculated in accordance with any revised Applicable Revolving Percentages arising from any nonratable increase in the Commitments under this Section.

(f) **Conflicting Provisions.** This Section shall supersede any provisions in Section 2.12 or 11.01 to the contrary.

(g) **Incremental Facility.** Except as otherwise specifically set forth herein, all of the other terms and conditions applicable to such Incremental Facility shall be identical to the terms and conditions applicable to the Facility, including, without limitation, having the same Guarantees as the Facility and being secured on a pari passu basis by the same Collateral securing the Facility.

**ARTICLE III**

**TAXES, YIELD PROTECTION AND ILLEGALITY**

**Section 3.01 Taxes.**

(a) **Payments Free of Taxes; Obligation to Withhold; Payments on Account of Taxes.**

(i) Any and all payments by or on account of any obligation of any Loan Party under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable Laws. If any applicable Laws (as determined in the good faith discretion of the Administrative Agent) require the deduction or withholding of any Tax from any such payment by the Administrative Agent or a Loan Party, then the Administrative Agent or such Loan Party shall be entitled to make such deduction or withholding, upon the basis of the information and documentation to be delivered pursuant to subsection (e) below.

(ii) If any Loan Party or the Administrative Agent shall be required by the Code to withheld or deduct any Taxes, including both United States federal backup withholding and withholding taxes, from any payment, then (A) the Administrative Agent shall withhold or make such deductions as are determined by the Administrative Agent to be required based upon the information and documentation it has received pursuant to subsection (e) below, (B) the Administrative Agent shall timely pay the full amount withheld or deducted to the relevant Governmental Authority in accordance with the Code, and (C) to the extent that the withholding or deduction is made on account of Indemnified Taxes, the sum payable by the applicable Loan Party shall be increased as necessary so that after any required withholding or the making of all required deductions (including deductions applicable to additional sums payable under this Section 3.01) the applicable Recipient receives an amount equal to the sum it would have received had no such withholding or deduction been made.

(iii) If any Loan Party or the Administrative Agent shall be required by any applicable Laws other than the Code to withhold or deduct any Taxes from any payment, then (A) such Loan Party or the Administrative Agent, as required by such Laws, shall withhold or make such deductions as are determined by it to be required based upon the information and documentation it has received pursuant to subsection (e) below, (B) such Loan Party or the Administrative Agent, to the extent required by such Laws, shall timely pay the full amount withheld or deducted to the relevant Governmental Authority in accordance with such Laws, and

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(C) to the extent that the withholding or deduction is made on account of Indemnified Taxes, the sum payable by the applicable Loan Party shall be increased as necessary so that after any required withholding or the making of all required deductions (including deductions applicable to additional sums payable under this Section 3.01) the applicable Recipient receives an amount equal to the sum it would have received had no such withholding or deduction been made.

(b) Payment of Other Taxes by the Loan Parties. Without limiting the provisions of subsection (a) above, the Loan Parties shall timely pay to the relevant Governmental Authority in accordance with applicable law, or at the option of the Administrative Agent timely reimburse it for the payment of, any Other Taxes.

(c) Tax Indemnifications.

(i) Each of the Loan Parties shall, and does hereby, jointly and severally indemnify each Recipient, and shall make payment in respect thereof within ten (10) days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section 3.01) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient, and any penalties, interest and reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to the Borrower by a Lender or the L/C Issuer (with a copy to the Administrative Agent), or by the Administrative Agent on its own behalf or on behalf of a Lender or the L/C Issuer, shall be conclusive absent manifest error.

(ii) Each Lender and the L/C Issuer shall, and does hereby, severally indemnify and shall make payment in respect thereof within ten (10) days after demand therefor, (A) the Administrative Agent against any Indemnified Taxes attributable to such Lender or the L/C Issuer (but only to the extent that any Loan Party has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of the Loan Parties to do so), (B) the Administrative Agent and the Loan Parties, as applicable, against any Taxes attributable to such Lender's failure to comply with the provisions of Section 11.06(d) relating to the maintenance of a Participant Register and (C) the Administrative Agent and the Loan Parties, as applicable, against any Excluded Taxes attributable to such Lender or the L/C Issuer, in each case, that are payable or paid by the Administrative Agent or a Loan Party in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Administrative Agent shall be conclusive absent manifest error. Each Lender and the L/C Issuer hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender or the L/C Issuer, as the case may be, under this Agreement or any other Loan Document against any amount due to the Administrative Agent under this clause (ii).

(d) Evidence of Payments. Upon request by the Borrower or the Administrative Agent, as the case may be, after any payment of Taxes by any Loan Party or by the Administrative Agent to a Governmental Authority as provided in this Section 3.01, the Borrower shall deliver to the Administrative Agent or the Administrative Agent shall deliver to

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the Borrower, as the case may be, the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of any return required by Laws to report such payment or other evidence of such payment reasonably satisfactory to the Borrower or the Administrative Agent, as the case may be.

(e) **Status of Lenders; Tax Documentation.**

(i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to the Borrower and the Administrative Agent, at the time or times reasonably requested by the Borrower or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Borrower or the Administrative Agent as will enable the Borrower or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Section 3.01(e)(ii)(A), (ii)(B) and (ii)(D) below) shall not be required if in the Lender’s reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that the Borrower is a U.S. Person,

(A) any Lender that is a U.S. Person shall deliver to the Borrower and the Administrative Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), properly completed and executed originals of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, properly completed and executed originals of IRS Form W-8BEN establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the “interest” article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, properly completed and executed originals of IRS Form W-8BEN establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the “business profits” or “other income” article of such tax treaty;

(2) properly completed and executed originals of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of

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Exhibit K-1 to the effect that such Foreign Lender is not a “bank” within the meaning of Section 881(c)(3)(A) of the Code, a “10 percent shareholder” of the Borrower within the meaning of Section 881(c)(3)(B) of the Code, or a “controlled foreign corporation” described in Section 881(c)(3)(C) of the Code (a “U.S. Tax Compliance Certificate”) and (y) properly completed and executed originals of IRS Form W-8BEN; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed originals of IRS Form W-8IMY from the Foreign Lender, accompanied by IRS Form W-8ECI, IRS Form W-8BEN, a U.S. Tax Compliance Certificate substantially in the form of Exhibit K-2 or Exhibit K-3, properly completed and executed originals of IRS Form W-9 and/or IRS Form W-8IMY, and/or other required documents from each intermediary and direct or indirect beneficial owner, as applicable; provided that, if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit K-4 on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Borrower or the Administrative Agent), executed originals of any other form prescribed by applicable Law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable Law to permit the Borrower or the Administrative Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Borrower and the Administrative Agent at the time or times prescribed by law and at such time or times reasonably requested by the Borrower or the Administrative Agent such documentation prescribed by applicable Law as may be necessary for the Borrower and the Administrative Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender’s obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (D), “FATCA” shall include any amendments made to FATCA after the date of this Agreement.

(iii) The Administrative Agent and each Lender agrees that if any form or certification it previously delivered pursuant to this Section 3.01 expires or becomes obsolete or inaccurate in any respect, it shall provide a new form or certification on or before the next Interest Payment Date or promptly notify the Borrower and the Administrative Agent, as the case may be, in writing of its legal inability to do so.

(f) Treatment of Certain Refunds. Unless required by applicable Laws, at no time shall the Administrative Agent have any obligation to file for or otherwise pursue on behalf of a Lender or the L/C Issuer, or have any obligation to pay to any Lender or the L/C Issuer, any refund of Taxes withheld or deducted from funds paid for the account of such Lender or the L/C Issuer, as the case may be. If any Recipient determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified by any Loan

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Party or with respect to which any Loan Party has paid additional amounts pursuant to this Section 3.01, it shall pay to such Loan Party an amount equal to such refund (but only to the extent of indemnity payments made, or additional amounts paid, by such Loan Party under this Section 3.01 with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) incurred by such Recipient, as the case may be, and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund); provided that, each Loan Party, upon the request of the Recipient, agrees to repay the amount paid over to such Loan Party (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) to the Recipient in the event the Recipient is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this subsection, in no event will the applicable Recipient be required to pay any amount to such Loan Party pursuant to this subsection the payment of which would place the Recipient in a less favorable net after-Tax position than such Recipient would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This subsection shall not be construed to require the Recipient to make available its tax returns (or any other information relating to its taxes that it deems confidential) to any Loan Party or any other Person.

(g) Survival. Each party’s obligations under this Section 3.01 shall survive the resignation or replacement of the Administrative Agent or the Collateral Agent or any assignment of rights by, or the replacement of, a Lender or the L/C Issuer, the termination of the Commitments and the repayment, satisfaction or discharge of all other Obligations.

Section 3.02 Illegality.

If any Lender determines that any Law has made it unlawful, or that any Governmental Authority has asserted that it is unlawful, for any Lender or its Lending Office to make, maintain or fund Loans whose interest is determined by reference to the Adjusted Term SOFR Rate, or to determine or charge interest rates based upon the Adjusted Term SOFR Rate then, on notice thereof by such Lender to the Borrower through the Administrative Agent, (a) any obligation of such Lender to make or continue Term SOFR Loans or to convert Base Rate Loans to Term SOFR Loans shall be suspended, and (b) if such notice asserts the illegality of such Lender making or maintaining Base Rate Loans the interest rate on which is determined by reference to the Adjusted Term SOFR Rate component of the Base Rate, the interest rate on which Base Rate Loans of such Lender shall, if necessary to avoid such illegality, be determined by the Administrative Agent without reference to the Adjusted Term SOFR Rate component of the Base Rate, in each case until such Lender notifies the Administrative Agent and the Borrower that the circumstances giving rise to such determination no longer exist. Upon receipt of such notice, (i) the Borrower shall, upon demand from such Lender (with a copy to the Administrative Agent), prepay or, if applicable, convert all Term SOFR Loans of such Lender to Base Rate Loans (the interest rate on which Base Rate Loans of such Lender shall, if necessary to avoid such illegality, be determined by the Administrative Agent without reference to the Adjusted Term SOFR Rate component of the Base Rate), either on the last day of the Interest Period therefor, if such Lender may lawfully continue to maintain such Term SOFR Loans to such day, or immediately, if such Lender may not lawfully continue to maintain such Term SOFR Loans, and (ii) if such notice asserts the illegality of such Lender determining or charging interest rates based upon the Adjusted Term SOFR Rate, the Administrative Agent shall during the period of such suspension compute the Base Rate applicable to such Lender without reference to the Adjusted Term SOFR Rate component thereof until the Administrative Agent is advised in writing by such Lender that it is no longer illegal for such Lender to determine or charge interest.

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rates based upon the Adjusted Term SOFR Rate. Upon any such prepayment or conversion, the Borrower shall also pay accrued interest on the amount so prepaid or converted.

Section 3.03 Inability to Determine Rates; Benchmark Replacement.

(a) Inability to Determine Rates.

(i) Temporary. Subject to Section 3.03(b), if the Administrative Agent determines (which determination shall be conclusive and binding absent manifest error) that the Adjusted Term SOFR rate cannot be determined pursuant to the definition thereof on or prior to the first day of any Interest Period, the Administrative Agent will promptly so notify the Borrower and each Lender. Upon notice thereof by the Administrative Agent to the Borrower and the Lenders, (A) any obligation of the Lenders to make or continue Term SOFR Loans or to convert Base Rate Loans to Term SOFR Loans shall be suspended (to the extent of the affected Interest Periods) until the Administrative Agent revokes such notice and (B) if such determination affects the calculation of the Base Rate, the Administrative Agent shall, during the period of such suspension, compute the Base Rate without reference to clause (c) of the definition of “Base Rate” until the Administrative Agent revokes such notice. Upon receipt of such notice, the Borrower may revoke any pending request for a Borrowing of, or conversion or continuation of, Term SOFR Loans (to the extent of the affected Term SOFR Loans or affected Interest Periods) or, failing that, the Borrower will be deemed to have converted any such request into a request for a Borrowing of or conversion to Base Rate Loans in the amount specified therein.

(b) Effect of Benchmark Transition Event.

(i) Benchmark Replacement. Notwithstanding anything to the contrary herein or in any other Loan Document, upon the occurrence of a Benchmark Transition Event, the Administrative Agent and the Borrower may amend this Agreement to replace the then-current Benchmark with a Benchmark Replacement. Any such amendment with respect to a Benchmark Transition Event will become effective at 5:00 p.m. (New York City time) on the fifth (5th) Business Day after the Administrative Agent has posted such proposed amendment to all affected Lenders and the Borrower has not received, by such time, written notice of objection to such amendment from Lenders comprising the Required Lenders. No replacement of a Benchmark with a Benchmark Replacement pursuant to this Section 3.03(b)(i) will occur prior to the applicable Benchmark Transition Start Date.

(ii) Benchmark Replacement Conforming Changes. In connection with the use, administration, adoption or implementation of a Benchmark Replacement, the Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement or any other Loan Document.

(iii) Notices; Standards for Decisions and Determinations. The Administrative Agent will promptly notify the Borrower and the Lenders of (i) implementation of any Benchmark Replacement and (ii) the effectiveness of any Benchmark Replacement Conforming Changes in connection with the use, administration, adoption or implementation of a Benchmark Replacement. The Administrative Agent will notify the Borrower of (x) removal or
reinstatement of any tenor of a Benchmark pursuant to Section 3.03(b)(iv) and (y) the commencement of any Benchmark Unavailability Period. Any determination, decision or election that may be made by the Administrative Agent or, if applicable, any Lender (or group of Lenders) pursuant to this Section 3.03(b), including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection, will be conclusive and binding absent manifest error and may be made in its or their sole discretion and without consent from any other party to this Agreement or any other Loan Document, except, in each case, as expressly required pursuant to this Section 3.03(b).

(iv) Unavailability of Tenor of Benchmark. Notwithstanding anything to the contrary herein or in any other Loan Document, at any time (including in connection with the implementation of a Benchmark Replacement), (i) if the then-current Benchmark is a term rate (including Term SOFR) and either (A) any tenor for such Benchmark is not displayed on a screen or other information service that publishes such rate from time to time as selected by the Administrative Agent in its reasonable discretion or (B) the regulatory supervisor for the administrator of such Benchmark has provided a public statement or publication of information announcing that any tenor for such Benchmark is or will be no longer representative, then the Administrative Agent, with the consent of the Borrower, may modify the definition of "Interest Period" (or any similar or analogous definition) for any Benchmark settings at or after such time to remove such unavailable or non-representative tenor and (ii) if a tenor that was removed pursuant to clause (i) above either (A) is subsequently displayed on a screen or information service for a Benchmark (including a Benchmark Replacement) or (B) is not, or is no longer, subject to an announcement that it is or will no longer be representative for a Benchmark (including a Benchmark Replacement), then the Administrative Agent, with the consent of the Borrower, may modify the definition of "Interest Period" (or any similar or analogous definition) for all Benchmark settings at or after such time to reinstate such previously removed tenor.

(v) Benchmark Unavailability Period. Upon the Borrower’s receipt of notice of the commencement of a Benchmark Unavailability Period, the Borrower may revoke any pending request for a Term SOFR Borrowing of, conversion to or continuation of Term SOFR Loans to be made, converted or continued during any Benchmark Unavailability Period and, failing that, the Borrower will be deemed to have converted any such request into a request for a Borrowing of or conversion to Base Rate Loans. During a Benchmark Unavailability Period or at any time that a tenor for the then-current Benchmark is not an Available Tenor, the component of Base Rate based upon the then-current Benchmark or such tenor for such Benchmark, as applicable, will not be used in any determination of Base Rate.

Section 3.04 Increased Costs; Reserves on Term SOFR Loans.

(a) Increased Costs Generally. If any Change in Law shall:

(i) impose, modify or deem applicable any reserve (including pursuant to regulations issued from time to time by the FRB for determining the maximum reserve requirement (including any emergency, special, supplemented or other marginal reserve requirement) with respect to eurocurrency funding (currently referred to as “Eurocurrency liabilities” in Regulation D)), special deposit, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in by, any Lender;
(ii) subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (b) through (d) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its loans, loan principal, letters of credit, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) impose on any Lender or the L/C Issuer any other condition, cost or expense (other than Taxes) affecting this Agreement or Term SOFR Loans made by such Lender or any Letter of Credit or participation therein;

and the result of any of the foregoing shall be to increase the cost to such Lender of making, converting to, continuing or maintaining any Loan the interest on which is determined by reference to the Adjusted Term SOFR Rate (or of maintaining its obligation to make any such Loan), or to increase the cost to such Lender or the L/C Issuer of participating in, issuing or maintaining any Letter of Credit (or of maintaining its obligation to participate in or to issue any Letter of Credit), or to reduce the amount of any sum received or receivable by such Lender or the L/C Issuer or Recipient hereunder (whether of principal, interest or any other amount) then, upon request of such Lender or the L/C Issuer or Recipient, the Borrower will pay to such Lender or the L/C Issuer or Recipient, as the case may be, such additional amount or amounts as will compensate such Lender or the L/C Issuer or Recipient, as the case may be, for such additional costs incurred or reduction suffered.

(b) Capital Requirements. If any Lender or the L/C Issuer determines that any Change in Law affecting such Lender or the L/C Issuer or any Lending Office of such Lender or such Lender’s or the L/C Issuer’s holding company, if any, regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on such Lender’s or the L/C Issuer’s capital or on the capital of such Lender’s or the L/C Issuer’s holding company, if any, as a consequence of this Agreement, the Commitments of such Lender or the Loans made by, or participations in Letters of Credit held by, such Lender, or the Letters of Credit issued by the L/C Issuer, to a level below that which such Lender or the L/C Issuer or such Lender’s or the L/C Issuer’s holding company could have achieved but for such Change in Law (taking into consideration such Lender’s or the L/C Issuer’s policies and the policies of such Lender’s or the L/C Issuer’s holding company with respect to capital adequacy), then from time to time the Borrower will pay to such Lender or such L/C Issuer, as the case may be, such additional amount or amounts as will compensate such Lender or the L/C Issuer or such Lender’s or the L/C Issuer’s holding company for any such reduction suffered.

(c) Certificates for Reimbursement. A certificate of a Lender or the L/C Issuer or Recipient setting forth the amount or amounts necessary to compensate such Lender or the L/C Issuer or Recipient or its holding company, as the case may be, as specified in subsection (a) or (b) of this Section and delivered to the Borrower shall be conclusive absent manifest error. The Borrower shall pay such Lender or the L/C Issuer or Recipient, as the case may be, the amount shown as due on any such certificate within ten (10) days after receipt thereof.

(d) Delay in Requests. Failure or delay on the part of any Lender or the L/C Issuer or Recipient to demand compensation pursuant to the foregoing provisions of this Section 3.04 shall not constitute a waiver of such Lender’s or the L/C Issuer’s or Recipient’s right to demand such compensation; provided that, the Borrower shall not be required to compensate a Lender or the L/C Issuer or Recipient pursuant to the foregoing provisions of this Section for any increased costs incurred or reductions suffered more than nine (9) months prior to the date that such Lender or the L/C Issuer or Recipient, as the case may be, notifies the Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender’s or the L/C Issuer’s or Recipient’s intention to claim compensation therefor (except that, if the Change in Law giving

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rise to such increased costs or reductions is retroactive, then the nine (9) month period referred to above shall be extended to include the period of retroactive effect thereof).

Section 3.05 Compensation for Losses.

Upon demand of any Lender (with a copy to the Administrative Agent) from time to time, the Borrower shall promptly compensate such Lender for and hold such Lender harmless from any loss, cost or expense incurred by it as a result of:

(a) any continuation, conversion, payment or prepayment of any Loan other than a Base Rate Loan on a day other than the last day of the Interest Period for such Loan (whether voluntary, mandatory, automatic, by reason of acceleration, or otherwise);

(b) any failure by the Borrower (for a reason other than the failure of such Lender to make a Loan) to prepay, borrow, continue or convert any Loan other than a Base Rate Loan on the date or in the amount notified by the Borrower; or

(c) any assignment of a Term SOFR Loan on a day other than the last day of the Interest Period therefor as a result of a request by the Borrower pursuant to Section 11.13;

including any loss of anticipated profits and any loss or expense arising from the liquidation or reemployment of funds obtained by it to maintain such Loan or from fees payable to terminate the deposits from which such funds were obtained. The Borrower shall also pay any customary administrative fees charged by such Lender in connection with the foregoing.

Section 3.06 Mitigation Obligations; Replacement of Lenders.

(a) Designation of a Different Lending Office. If any Lender requests compensation under Section 3.04, or requires the Borrower to pay any Indemnified Taxes or additional amounts to any Lender, the L/C Issuer, or any Governmental Authority for the account of any Lender or the L/C Issuer pursuant to Section 3.01, or if any Lender gives a notice pursuant to Section 3.02, then at the request of the Borrower, such Lender or the L/C Issuer shall, as applicable, use reasonable efforts to designate a different Lending Office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender or the L/C Issuer, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 3.01 or 3.04, as the case may be, in the future, or eliminate the need for the notice pursuant to Section 3.02, as applicable, and (ii) in each case, would not subject such Lender or the L/C Issuer, as the case may be, to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender or the L/C Issuer, as the case may be. The Borrower hereby agrees to pay all reasonable costs and expenses incurred by any Lender or the L/C Issuer in connection with any such designation or assignment.

(b) Replacement of Lenders. If any Lender requests compensation under Section 3.04, or if the Borrower is required to pay any Indemnified Taxes or additional amounts to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 3.01 and, in each case, such Lender has declined or is unable to designate a different lending office in accordance with Section 3.06(a), the Borrower may replace such Lender in accordance with Section 11.13.

Section 3.07 Survival.

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All of the Borrower’s obligations under this Article III shall survive termination of the Aggregate Commitments, repayment of all other Obligations hereunder, resignation of the Administrative Agent and the Facility Termination Date.

ARTICLE IV

CONDITIONS PRECEDENT TO CLOSING DATE AND CREDIT EXTENSIONS

Section 4.01 Conditions Precedent to Closing Date

The occurrence of the Closing Date and the obligation of the L/C Issuer and each Lender to make its initial Credit Extension hereunder on the Closing Date, if applicable, is subject to the prior satisfaction of the following conditions precedent (unless waived in writing by the Administrative Agent (and, if expressly indicated hereunder, the Collateral Agent) and the Lenders in their sole and absolute discretion):

(a) Execution of Credit Agreement; Loan Documents. The Administrative Agent shall have received (i) counterparts of this Agreement, executed by a Responsible Officer of each Loan Party and a duly authorized officer of each Lender, the Collateral Agent and each other party hereto, (ii) for the account of each Lender requesting a Revolving Note, a Revolving Note executed by a Responsible Officer of the Borrower, (iii) counterparts (or reaffirmations, as applicable) of the Security Agreement, each Mortgage and any related Mortgaged Property Support Document (if applicable) and each other Collateral Document, executed by a Responsible Officer of the applicable Loan Parties and a duly authorized officer of each other party thereto, as applicable, and (iv) counterparts (or reaffirmations, as applicable) of any other Loan Document, executed by a Responsible Officer of the applicable Loan Party and a duly authorized officer of each other party thereto. Each Loan Document shall be satisfactory in form and substance to the Administrative Agent, the Collateral Agent and the Lenders and shall have been duly authorized, executed and delivered by the parties thereto.

(b) Officer’s Certificate. The Administrative Agent shall have received a certificate of a Responsible Officer of each Loan Party (in substantially the form of Exhibit J attached hereto) dated the Closing Date, attaching and certifying as true, correct and complete: (i) the Organization Documents of each Loan Party (which, to the extent filed with a Governmental Authority, shall be certified as of a recent date by such Governmental Authority), (ii) the resolutions or other authorizations of the governing body of each Loan Party certified as being in full force and effect on the Closing Date, authorizing the execution, delivery and performance of this Agreement and any instruments or agreements required hereunder or thereunder, (iii) a certificate of good standing, existence or its equivalent of each Loan Party certified as of a recent date by the appropriate Governmental Authority and (iv) the incumbency (including specimen signatures) of the Responsible Officers of each Loan Party.

(c) Legal Opinions of Counsel. The Administrative Agent shall have received an opinion or opinions of counsel for the Loan Parties, dated the Closing Date and addressed to the Administrative Agent and the Lenders, in form and substance acceptable to the Administrative Agent.

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(d) **Personal Property Collateral.** The Collateral Agent shall have received, in form and substance satisfactory to the Collateral Agent and, in the case of clause (i)(C) of this Section 4.01(d), in form and substance reasonably satisfactory to the Collateral Agent:

(i) (A) searches of UCC filings of a recent date before the Closing Date in the jurisdiction of incorporation or formation, as applicable, of each Loan Party and each jurisdiction where a filing would need to be made in order to perfect the Collateral Agent’s security interest in the Collateral, copies of the financing statements on file in such jurisdictions, evidence that no Liens exist other than Permitted Liens and evidence that all Liens contemplated by the Collateral Documents to be created and perfected in favor of the Collateral Agent as of the Closing Date shall have been perfected, recorded and filed in the appropriate jurisdictions and shall have a first priority interest in such collateral, subject to Permitted Liens that, pursuant to the applicable Laws, are entitled to a higher priority than the Lien of the Collateral Agent, (B) lien and bankruptcy searches of a recent date before the Closing Date and (C) judgment searches of a recent date before the Closing Date;

(ii) Counterparts of Qualifying Control Agreements required to be delivered on or prior to the Closing Date pursuant to Section 6.14(d)(ii), executed by a Responsible Officer of the applicable Loan Parties and duly executed by each other party thereto; and

(iii) to the extent required to be delivered pursuant to the terms of the Collateral Documents, all instruments, documents and chattel paper in the possession of any of the Loan Parties, together with allonges or assignments as may be necessary or appropriate to perfect the Collateral Agent’s and the Lenders’ security interest in the Collateral.

(e) **Liability, Property, Terrorism and Business Interruption Insurance.** The Administrative Agent shall have received copies of insurance policies (with premiums, rates and other proprietary information redacted), declaration pages as they become available, certificates, and endorsements of insurance or insurance binders (with premiums, rates and other proprietary information redacted) in cases where insurance policies evidencing the Loan Parties’ most recent insurance programs are not yet available, evidencing liability, casualty, property, terrorism and business interruption insurance meeting the requirements set forth herein or in the Collateral Documents or as required by the Administrative Agent. The Loan Parties shall have delivered to the Administrative Agent and the Collateral Agent an Authorization to Share Insurance Information in substantially the form of Exhibit O (or such other form as required by each of the Loan Parties’ insurance companies).

(f) **Solvency Certificate.** The Administrative Agent shall have received a Solvency Certificate signed by a Responsible Officer that is the chief financial officer of the Borrower, or any other financial officer of the Borrower having substantially the same authority and responsibility as a chief financial officer, as to the financial condition, solvency and related matters of the Borrower and its Subsidiaries on a Consolidated basis, after giving effect to the initial borrowings under the Loan Documents and the other transactions contemplated hereby.

(g) **Financial Condition Certificate.** The Administrative Agent shall have received a certificate or certificates executed by a Responsible Officer of the Borrower as of the Closing Date, as to certain financial and other matters, substantially in the form of Exhibit N.

(h) **Material Contracts.** The Administrative Agent or its counsel shall have received true and complete copies, certified by a Responsible Officer of the Borrower as true and complete, of all Material Contracts, together with all exhibits and schedules.

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(i) **Loan Notice.** The Administrative Agent shall have received a Loan Notice with respect to any Loans to be made on the Closing Date.

(j) **Existing Indebtedness.** All of the existing Indebtedness for borrowed money of the Borrower and its Subsidiaries (other than Excluded Subsidiaries), including the Existing Credit Agreement and other than Indebtedness permitted to exist pursuant to Section 7.02, shall be repaid in full with the proceeds of the Facility, all commitments (if any) in respect thereof shall be terminated and all guarantees (if any) thereof and all security interests related thereto shall be terminated on or prior to the Closing Date, and the Administrative Agent shall have received evidence reasonably satisfactory to it of the same. After giving effect to the foregoing and the initial borrowings under this Agreement, the Borrower and its Subsidiaries (other than the Excluded Subsidiaries) shall have outstanding no Indebtedness other than (x) the Credit Extensions under the Facility and (y) other Indebtedness permitted to exist under this Agreement.

(k) **Consents.** All consents and approvals of the governing bodies and equity owners of the Loan Parties, Governmental Authorities and third parties necessary in connection with the entering into of this Agreement and the other Loan Documents shall have been obtained.

(l) **Fees and Expenses.** The Administrative Agent, the Collateral Agent, the Arrangers, the Lenders and their respective counsel and consultants shall have received all fees and expenses (including, but not limited to, the fees pursuant to the Fee Letter and Section 2.08) required to be paid to or deposited with such parties hereunder, and under any other separate agreement with such parties, and all taxes, fees and other costs payable in connection with the execution, delivery and filing of the documents and instruments required to be filed as a condition precedent pursuant to this Section 4.01, shall have been paid, or will be paid concurrently on the Closing Date, in full, or, in connection with such taxes, fees (other than fees payable to the Lenders, the Arrangers, the Administrative Agent or the Collateral Agent) and costs, the Borrower shall have made other arrangements acceptable to the Administrative Agent, the Collateral Agent or the Lenders in their respective sole discretion.

(m) **Borrowing Base Certificate.** The Administrative Agent, the Collateral Agent and the Lenders shall have received a completed Borrowing Base Certificate together with a Back-Log Spreadsheet and a Take-Out Spreadsheet and other supporting information, each prepared as of the Closing Date, duly certified by the chief executive officer, chief financial officer, treasurer or controller of the Borrower or other such Responsible Officer authorized in writing to execute the Borrowing Base Certificate by one of the aforementioned Persons.

(n) **Financial Statements.** The Administrative Agent and the Lenders shall have received (i) U.S. GAAP audited Consolidated balance sheets of Sunrun and related statements of income, stockholders’ equity and cash flows for the 2018, 2019 and 2020 fiscal years (and, to the extent available, the related unaudited consolidating financial statements) and (ii) U.S. GAAP unaudited consolidated and (to the extent available) consolidating balance sheets of Sunrun and related statements of income, stockholders’ equity and cash flows for each subsequent fiscal quarter ended at least forty-five (45) days before the Closing Date, which financial statements, in each case, shall be in form and substance satisfactory to the Administrative Agent and the Lenders and shall not be materially inconsistent with the financial statements or forecasts previously provided to the Administrative Agent.

(o) **PATRIOT Act.** The Administrative Agent and the Lenders shall have received, at least five (5) Business Days prior to the Closing Date, (i) all such documentation and information requested by each of them that is necessary (including the name and addresses of the Loan Parties, taxpayer identification forms, name of officers/board members, documents and copies of

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government-issued identification of the Loan Parties or owners thereof) for the Administrative Agent and the Lenders to identify the Loan Parties in accordance with the requirements of the PATRIOT Act (including the “know your customer” and similar regulations thereunder) and (ii) a Beneficial Ownership Certification in relation to the Borrower and each other Loan Party that qualifies as a “legal entity customer” under the Beneficial Ownership Certification.

(p) **FPA and PUHCA Litigation.** No action, suit, proceeding or investigation shall have been instituted or, to the Loan Parties’ knowledge, threatened in writing, nor shall any order, judgment or decree have been issued or, to the Loan Parties’ knowledge, proposed to be issued by any Governmental Authority that, solely as a result of entering into the Loan Documents, would cause or deem (i) the Administrative Agent, the Collateral Agent or any Lender or any Affiliate of any of them to be subject to, or not exempted from, regulation under the FPA or PUHCA, any financial, organizational or rate regulation as a “public utility” under relevant state laws, or under any other state laws and regulations respecting the rates or the financial or organizational regulation of electric utilities; or (ii) the Borrower to be subject to, or not exempted from, regulation under the FPA, any financial, organizational or rate regulation as a “public utility” under relevant state laws, under any other state laws and regulations respecting the rates or the financial or organizational regulation of electric utilities and under PUHCA, other than regulation under Section 1265 of PUHCA and regulations applicable to “exempt wholesale generators” or “foreign utility companies” under Section 1262(6) of PUHCA.

(q) **No Material Adverse Effect.** There shall not have occurred since December 31, 2020 any event or condition that has had or could be reasonably expected, either individually or in the aggregate, to have a Material Adverse Effect.

(r) **Representations and Warranties.** Each representation and warranty set forth in Article V is true and correct in all respects on the Closing Date (unless such representation or warranty relates solely to an earlier date, in which case it shall have been true and correct in all respects as of such earlier date).

(s) **No Default.** No Default has occurred and is continuing.

(t) **No Litigation.** Other than as set forth on Schedule 4.01(t), no action, suit, proceeding or investigation that could reasonably be expected to have a Material Adverse Effect shall have been instituted or, to the knowledge of the Loan Parties, threatened in writing against any of the Loan Parties in any court or before any arbitrator or Governmental Authority.

(u) **Other Documents.** Such other documents as the Administrative Agent, the Collateral Agent and the Lenders shall reasonably request, in form and substance satisfactory to the Administrative Agent, the Collateral Agent and the Lenders, if the Administrative Agent, the Collateral Agent or the Lenders have a reasonable concern that any condition precedent in this Section 4.01 has not been satisfied, including a breach of any covenant or representation and warranty in this Agreement.

Without limiting the generality of the provisions of the last paragraph of Section 9.03, for purposes of determining compliance with the conditions specified in this Section, each Lender that has signed this Agreement shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless the Administrative Agent shall have received notice from such Lender prior to the proposed Closing Date specifying its objection thereto.

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Section 4.02 Conditions to all Credit Extensions.

The obligation of each Lender and the L/C Issuer to honor any Request for Credit Extension is subject to the following conditions precedent:

(a) **Representations and Warranties.** The representations and warranties of the Borrower and each other Loan Party contained in this Agreement or any other Loan Document, shall (i) with respect to representations and warranties that contain a materiality qualification, be true and correct in all respects, and (ii) with respect to representations and warranties that do not contain a materiality qualification, be true and correct in all material respects, in each case, on and as of the date of such Credit Extension (or if such representations and warranties expressly relate to an earlier date, as of such earlier date), and except that for purposes of this Section 4.02, the representations and warranties contained in Sections 5.05(a) and (b) shall be deemed to refer to the most recent statements furnished pursuant to Sections 6.01(a) and (b), respectively. The Loan Parties shall have delivered to the Administrative Agent a Schedule (updated for changes since the last such Schedule delivered to the Administrative Agent), with any material and adverse modifications to such previously delivered Schedule subject to the approval of the Administrative Agent. For all purposes of this Agreement, including for purposes of determining whether the conditions in Article IV have been fulfilled, the Schedules shall be deemed to include only that information contained therein on the date hereof and shall be deemed to exclude all information contained in any supplement or amendment to the Schedules, but if acknowledged by the Administrative Agent, then all matters disclosed pursuant to any such supplement or amendment at the applicable date of acknowledgement shall be waived and none of the Secured Parties shall be entitled to make a claim thereon pursuant to the terms of this Agreement.

(b) **Default; Borrowing Base Deficiency; NYGB Borrowing Base Deficiency.** No Default or Borrowing Base Deficiency shall exist as of the date of such Credit Extension, or would result from such proposed Credit Extension or from the application of the proceeds thereof. Solely with respect to NYGB’s obligation to honor the applicable Request for Credit Extension, no NYGB Borrowing Base Deficiency shall exist as of the date of such Credit Extension, or would result from such proposed Credit Extension.

(c) **Request for Credit Extension.** The Administrative Agent and, if applicable, the L/C Issuer shall have received a Request for Credit Extension in accordance with the requirements hereof.

(d) **Collateral.** To the extent not previously delivered to the Collateral Agent in connection with the Closing Date or a prior Credit Extension, as the case may be, duly executed additional Collateral Documents, if any, in connection with the requested Credit Extension shall be delivered to the Collateral Agent. All Liens contemplated by such Collateral Documents to be created and perfected in favor of the Collateral Agent shall have been perfected, recorded and filed in the appropriate jurisdictions.

(e) **Material Adverse Effect.** Both immediately prior to the making of any Credit Extension and also after giving effect to, and to the intended use of, such Credit Extension, no Material Adverse Effect shall have occurred or is continuing since the date of the last annual audited financial statements of Sunrun.

Each Request for Credit Extension submitted by the Borrower shall be deemed to be a representation and warranty that the conditions specified in Sections 4.02(a) and (b) have been satisfied on and as of the date of the applicable Credit Extension.
ARTICLE V

REPRESENTATIONS AND WARRANTIES

Each Loan Party represents and warrants to the Administrative Agent, the Collateral Agent and the Lenders, as of the date made or deemed made, that:

Section 5.01 Existence, Qualification and Power.

Each Loan Party (a) is duly organized or formed, validly existing and, as applicable, in good standing under the Laws of the jurisdiction of its incorporation or organization, (b) has all requisite power and authority and all requisite governmental licenses, authorizations, consents and approvals to (i) own or lease its assets and carry on its business and (ii) execute, deliver and perform its obligations under the Loan Documents to which it is a party, and (c) is duly qualified and is licensed and, as applicable, in good standing under the Laws of each jurisdiction where its ownership, lease or operation of properties or the conduct of its business requires such qualification or license; except in each case referred to in clause (b)(i) or (c), to the extent that failure to do so could not reasonably be expected to have a Material Adverse Effect. The copy of the Organization Documents of each Loan Party provided to the Administrative Agent pursuant to the terms of this Agreement is a true and correct copy of each such document, each of which is valid and in full force and effect.

Section 5.02 Authorization; No Contravention.

The execution, delivery and performance by each Loan Party of each Loan Document to which such Person is or is to be a party have been duly authorized by all necessary corporate or other organizational action, and do not and will not (a) contravene the terms of any of such Person’s Organization Documents; (b) cause conflict with, or result in any breach or contravention of, any Contractual Obligation to which such Person is a party or affecting such Person or the properties of such Person or any of its Subsidiaries that could reasonably be expected to have a Material Adverse Effect; (c) result in the creation of any Lien under, or require any payment to be made under, (i) any Contractual Obligation to which such Person is a party or affecting such Person or any of its Subsidiaries or (ii) any order, injunction, writ or decree of any Governmental Authority or any arbitral award to which such Person or its property is subject; or (d) violate any Law.

Section 5.03 Governmental Authorization; Other Consents.

No approval, consent, exemption, authorization, or other action by, or notice to, or filing with, any Governmental Authority or any other Person is necessary or required in connection with (a) the execution, delivery or performance by, or enforcement against, any Loan Party of this Agreement or any other Loan Document, (b) the grant by any Loan Party of the Liens granted by it pursuant to the Collateral Documents, (c) the perfection or maintenance of the Liens created under the Collateral Documents (including the first priority nature thereof) or (d) the exercise by the Administrative Agent or any Lender of its rights under the Loan Documents or the remedies in respect of the Collateral pursuant to the Collateral Documents, other than (i) authorizations, approvals, actions, notices and filings which have been duly obtained and (ii) filings to perfect the Liens created by the Collateral Documents.
Section 5.04 **Binding Effect.**

This Agreement has been, and each other Loan Document, when delivered hereunder, will have been, duly executed and delivered by each Loan Party that is party thereto. This Agreement constitutes, and each other Loan Document when so delivered will constitute, a legal, valid and binding obligation of such Loan Party, enforceable against each Loan Party that is party thereto in accordance with its terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors’ rights generally and subject to general principals of equity.

Section 5.05 **Financial Statements; No Material Adverse Effect.**

(a) **Audited Financial Statements.** The most recent annual audited financial statements of Sunrun delivered in accordance with Section 6.01(a) (i) were prepared in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein; (ii) fairly present the financial condition of the Borrower and its Subsidiaries as of the date thereof and their results of operations for the period covered thereby in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein; and (iii) show all material indebtedness and other liabilities, direct or contingent, of the Borrower and its Subsidiaries as of the date thereof, including liabilities for taxes, material commitments and Indebtedness.

(b) **Quarterly Financial Statements.** The most recently delivered unaudited Consolidated balance sheet of Sunrun, and the related Consolidated statements of income or operations and cash flows for the fiscal quarter ended on that date (i) were prepared in accordance with GAAP consistently applied throughout the period covered thereby, except as otherwise expressly noted therein, and (ii) fairly present the financial condition of the Borrower and its Subsidiaries as of the date thereof and their results of operations for the period covered thereby, subject, in the case of clauses (i) and (ii), to the absence of footnotes and to normal year-end audit adjustments.

(c) **Undisclosed Liabilities.** Neither the Borrower nor any Subsidiary thereof has any direct or contingent material liabilities that are required to be disclosed pursuant to GAAP, except as has been disclosed in the financial statements described in this Section 5.05(a) and (b) or otherwise disclosed in writing to the Administrative Agent prior to the Closing Date.

(d) **Material Adverse Effect.** Since the date of the Audited Financial Statements (and, in addition, after delivery of the most recent annual audited financial statements of Sunrun in accordance with Section 6.01(a), since the date of such annual audited financial statements), there has been no event or circumstance, either individually or in the aggregate, that has had or could reasonably be expected to have a Material Adverse Effect.

Section 5.06 **Litigation.**

Except as set forth on Schedule 5.06, there are no actions, suits, proceedings, claims or disputes pending or, to the knowledge of the Loan Parties after due inquiry, threatened or contemplated, at law, in equity, in court or arbitration or before any Governmental Authority, by or against the Borrower or any Subsidiary thereof or against any of their properties or revenues that (a) purport to materially affect this Agreement or any other Loan Document or any of the transactions contemplated hereby, or (b) either individually or in the aggregate could reasonably be expected to have a Material Adverse Effect.

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Section 5.07 No Default, Borrowing Base Deficiency or NYGB Borrowing Base Deficiency.

Neither the Borrower nor any Subsidiary thereof is in default under or with respect to, or a party to, any Contractual Obligation that could, either individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. No Default has occurred and is continuing or would result from the consummation of the transactions contemplated by this Agreement or any other Loan Document. No Borrowing Base Deficiency exists or would result from the consummation of the transactions contemplated by this Agreement. Solely with respect to NYGB’s obligation to honor any Request for Credit Extension, no NYGB Borrowing Base Deficiency exists as of the date of any such proposed Credit Extension, or would result from any such proposed Credit Extension.

Section 5.08 Ownership of Property.

Each Loan Party has good record and marketable title in fee simple to, or valid leasehold interests in, all real property necessary or used in the ordinary conduct of its business, except for such defects in title as could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

Section 5.09 Environmental Compliance.

(a) The Borrower and its Subsidiaries conduct in the ordinary course of business a review of the effect of existing Environmental Laws and claims alleging potential liability or responsibility for violation of any Environmental Law on their respective businesses, operations and properties, and as a result thereof the Borrower and its Subsidiaries have concluded that such Environmental Laws and claims could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(b) (i) None of the properties currently or formerly owned or operated by the Borrower or any of its Subsidiaries is listed or proposed for listing on the NPL or on the CERCLIS or any analogous foreign, state or local list or is adjacent to any such property; (ii) there are no and never have been any underground or above-ground storage tanks or any surface impoundments, septic tanks, pits, sumps or lagoons in which Hazardous Materials are being or have been treated, stored or disposed on any property currently owned or operated by the Borrower or any of its Subsidiaries or, to the knowledge of the Loan Parties, on any property formerly owned or operated by the Borrower or any of its Subsidiaries; (iii) there is no asbestos or asbestos-containing material on any property currently owned or operated by the Borrower or any of its Subsidiaries; and (iv) Hazardous Materials have not been Released on, under, in or from any property currently or formerly owned or operated by the Borrower or any of its Subsidiaries.

(c) Neither the Borrower nor any of its Subsidiaries is undertaking, or has completed, either individually or together with other potentially responsible parties, any investigation or assessment or remedial or response action relating to any actual or threatened Release, of Hazardous Materials at any site, location or operation that would reasonably be expected to have a Material Adverse Effect; all Hazardous Materials generated, used, treated, handled or stored at, or transported to or from, any property currently or formerly owned or operated by the Borrower or any of its Subsidiaries have been disposed of in a manner not reasonably expected to result in material liability to the Borrower or any of its Subsidiaries; and the Borrower or any of its Subsidiaries have not received any request for information pursuant to Section 104(e) of CERCLA.

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Section 5.10 Insurance.

The properties of the Loan Parties are insured with an independent third-party insurer that is rated at least “A” by A.M. Best Company, in such amounts (after giving effect to any self-insurance compatible with the following standards), with such deductibles and covering such risks as are customarily carried by companies engaged in similar businesses and owning similar properties in localities where the applicable Loan Party operates. The general liability, casualty and property insurance coverage of the Loan Parties as in effect on the Closing Date, and as of the last date such Schedule was required to be updated in accordance with Section 6.07, is outlined as to carrier, policy number, expiration date, type, amount and deductibles on Schedule 5.10 and such insurance coverage complies with the requirements set forth in this Agreement and the other Loan Documents.

Section 5.11 Taxes.

Each Loan Party has filed all federal, state and other material tax returns and filings required to be filed and has paid all federal, state and other material taxes, assessments, fees and other governmental charges levied or imposed upon them or their properties, income or assets otherwise due and payable, except those which are being contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves have been provided in accordance with GAAP. There is no proposed tax assessment against any Loan Party that would, if made, have a Material Adverse Effect, nor is there any tax sharing agreement applicable to the Loan Parties that could reasonably be expected to result in a Material Adverse Effect.

Section 5.12 ERISA Compliance.

(a) Each Plan is in compliance in all material respects with the applicable provisions of ERISA, the Code and other federal or state laws. Each Plan that is intended to be a qualified plan under Section 401(a) of the Code has received a favorable determination letter or is subject to a favorable opinion letter from the IRS to the effect that the form of such Plan is qualified under Section 401(a) of the Code and the trust related thereto has been determined by the Internal Revenue Service to be exempt from federal income tax under Section 501(a) of the Code, or an application for such a letter is currently being processed by the IRS. To the knowledge of the Loan Parties, nothing has occurred that would prevent or cause the loss of such tax-qualified status.

(b) There are no pending or, to the knowledge of the Loan Parties, threatened claims, actions or lawsuits, or action by any Governmental Authority, with respect to any Plan that could reasonably be expected to have a Material Adverse Effect. There has been no prohibited transaction or violation of the fiduciary responsibility rules with respect to any Plan that has resulted or could reasonably be expected to result in a Material Adverse Effect.

(c) (i) No ERISA Event has occurred, and no Loan Party nor any ERISA Affiliate is aware of any fact, event or circumstance that could reasonably be expected to constitute or result in an ERISA Event with respect to any Pension Plan; (ii) the Loan Parties and each ERISA Affiliate have met all applicable requirements under the Pension Funding Rules in respect of each Pension Plan, and no waiver of the minimum funding standards under the Pension Funding Rules has been applied for or obtained; (iii) as of the most recent valuation date for any Pension Plan, the funding target attainment percentage (as defined in Section 430(d)(2) of the Code) is 60% or higher and no Loan Party or any ERISA Affiliate knows of any facts or circumstances that could reasonably be expected to cause the funding target attainment percentage for any such plan to drop below 60% as of the most recent valuation date; (iv) no Loan Party or any ERISA

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Affiliate has incurred any liability to the PBGC other than for the payment of premiums, and there are no premium payments which have become due that are unpaid; (v) neither the Loan Parties nor any ERISA Affiliate have engaged in a transaction that could be subject to Section 4069 or Section 4212(c) of ERISA; and (vi) no Pension Plan has been terminated by the plan administrator thereof nor by the PBGC, and no event or circumstance has occurred or exists that could reasonably be expected to cause the PBGC to institute proceedings under Title IV of ERISA to terminate any Pension Plan.

(d) Neither the Loan Parties nor any ERISA Affiliate sponsors, maintains, participates in, contributes to, or has any unsatisfied obligation to contribute to, or liability under, any active or terminated Pension Plan or Multiemployer Plan.

Section 5.13 Margin Regulations; Investment Company Act

(a) Margin Regulations. The Loan Parties are not engaged and will not engage, principally or as one of their important activities, in the business of purchasing or carrying margin stock (within the meaning of Regulations T, U or X issued by the FRB), or extending credit for the purpose of purchasing or carrying margin stock. Following the application of the proceeds of each Borrowing or drawing under each Letter of Credit, not more than 25% of the value of the assets (either of the Borrower only or of the Borrower and its Subsidiaries on a Consolidated basis) subject to the provisions of Section 7.01 or Section 7.05 or subject to any restriction contained in any agreement or instrument between any Loan Party and any Lender or any Affiliate of any Lender relating to Indebtedness and within the scope of Section 8.01(e) will be margin stock.

(b) Investment Company Act. None of the Borrower, any Person Controlling the Borrower, or any Subsidiary of the Borrower is or is required to be registered as an “investment company” under the Investment Company Act.

Section 5.14 Disclosure

The Loan Parties have disclosed to the Administrative Agent and the Lenders all agreements, instruments and corporate or other restrictions to which it or any of its Subsidiaries or any other Loan Party is subject, and all other matters known to it, that, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Effect. No report, financial statement, certificate or other information furnished (whether in writing or orally) by or on behalf of any Loan Party to the Administrative Agent or any Lender in connection with the transactions contemplated hereby and the negotiation of this Agreement or delivered hereunder or under any other Loan Document (in each case as modified or supplemented by other information so furnished) contains any material misstatement of fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, with respect to projected financial information, each Loan Party represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time.

Section 5.15 Compliance with Laws

The Borrower and each Subsidiary thereof is in compliance with the requirements of all Laws, including, without limitation, all Environmental Laws, and all orders, writs, injunctions and decrees applicable to it or to its properties, except in such instances in which (a) such requirement of Law or order, writ, injunction or decree is being contested in good faith by appropriate proceedings diligently conducted or (b) the failure to comply therewith, either

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individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect.

Section 5.16 Solvency.

The Borrower, together with its Subsidiaries, on a Consolidated basis are Solvent.

Section 5.17 Casualty, Etc.

Neither the businesses nor the properties of any Loan Party or any of its Subsidiaries are affected by any fire, explosion, accident, strike, lockout or other labor dispute, drought, storm, hail, earthquake, embargo, act of God or of the public enemy or other casualty (whether or not covered by insurance) that, either individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect.

Section 5.18 Sanctions and Anti-Corruption Concerns.

(a) None of the Borrower, any of its Subsidiaries or, to the knowledge of the Borrower, any director, officer, employee, agent or Affiliate of the Borrower or any of its Subsidiaries is an individual or entity that is, or is owned or controlled by individuals or entities that are (i) the subject of any Sanctions, or (ii) located, organized or resident in a country or territory that is the subject of Sanctions, including currently, Crimea, the “Donetsk People’s Republic”, the “Luhansk People’s Republic”, Cuba, Iran, North Korea and Syria. The Borrower, its Subsidiaries and their respective directors, officers and employees and, to the knowledge of the Borrower, the agents of the Borrower and its Subsidiaries, are in compliance with all applicable Sanctions in all material respects. The Borrower, its Subsidiaries and their respective directors, officers and employees and, to the knowledge of the Borrower, the agents of the Borrower and its Subsidiaries, are in compliance with the FCPA and any other applicable anti-corruption law in all material respects.

(b) The Borrower and its Subsidiaries have instituted and maintain policies and procedures designed to ensure compliance with applicable Sanctions, the FCPA and any other applicable anti-corruption law.

Section 5.19 Responsible Officers.

Set forth on Schedule 1.01(c) are the Responsible Officers of the Loan Parties, holding the offices indicated next to their respective names, as of the Closing Date and as updated thereafter to reflect the resignation of any Responsible Officer or the appointment of any replacement or additional Responsible Officer subsequent thereto. Such Responsible Officers are the duly elected and qualified officers of such Loan Party and are duly authorized to execute and deliver, on behalf of the respective Loan Party, this Agreement, the Revolving Notes and the other Loan Documents.

Section 5.20 Subsidiaries; Equity Interests; Loan Parties.

(a) Subsidiaries, Partnerships and Equity Investments. Set forth on Schedule 5.20(a) is the following information which is true and complete in all respects as of the Closing Date and as updated thereafter to reflect the formation or acquisition of any additional Subsidiary, Excluded Subsidiary, partnership or other equity investment of the Loan Parties subsequent

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thereof: (i) a complete and accurate list of all Subsidiaries, Excluded Subsidiaries, partnerships and other equity investments of the Loan Parties, (ii) the number of shares of each class of Equity Interests in each Subsidiary outstanding, (iii) the number and percentage of outstanding shares of each class of Equity Interests owned by the Loan Parties and their Subsidiaries and (iv) the class or nature of such Equity Interests (e.g., voting, non-voting, preferred, etc.). The outstanding Equity Interests in all Subsidiaries are validly issued, fully paid and non-assessable and are owned free and clear of all Liens. There are no outstanding subscriptions, options, warrants, calls, rights or other agreements or commitments (other than stock options granted to employees or directors and directors’ qualifying shares) of any nature relating to the Equity Interests of any Loan Party (other than Sunrun), except as contemplated in connection with the Loan Documents.

(b) Loan Parties. Set forth on Schedule 5.20(b) is a complete and accurate list of all Loan Parties, showing as of the Closing Date, and as updated thereafter to reflect the formation or acquisition of any additional Loan Party subsequent thereto, (as to each Loan Party) (i) the exact legal name, (ii) any former legal names of such Loan Party in the four (4) months prior to the Closing Date or update, as applicable, (iii) the jurisdiction of its incorporation or organization, as applicable, (iv) the type of organization, (v) the jurisdictions in which such Loan Party is qualified to do business, (vi) the address of its chief executive office, (vii) the address of its principal place of business, (viii) its U.S. federal taxpayer identification number or, in the case of any non-U.S. Loan Party that does not have a U.S. taxpayer identification number, its unique identification number issued to it by the jurisdiction of its incorporation or organization, (ix) the organization identification number, (x) ownership information (e.g., publicly held or if private or partnership, the owners and partners of each of the Loan Parties) and (xi) the industry or nature of business of such Loan Party.

Section 5.21 Collateral Representations.

(a) Collateral Documents. The provisions of the Collateral Documents and the filings of any necessary UCC filings are collectively effective to create in favor of the Collateral Agent for the benefit of the Secured Parties a legal, valid and enforceable first priority Lien (subject to Permitted Liens) on all right, title and interest of the respective Loan Parties in the Collateral described therein. Except for filings completed on or prior to the Closing Date and as contemplated hereby and by the Collateral Documents, no filing or other action will be necessary to perfect or protect such Liens to the extent such Liens can be perfected by filing of a UCC filing.

(b) [Reserved].

(c) Documents, Instrument, and Tangible Chattel Paper. Set forth on Schedule 5.21(c), as of the Closing Date and as updated thereafter to reflect the acquisition of Collateral subsequent thereto, is a description of all Documents (as defined in the UCC), Instruments (as defined in the UCC), and Tangible Chattel Paper (as defined in the UCC) of the Loan Parties (including the Loan Party owning such Document, Instrument and Tangible Chattel Paper and such other information as reasonably requested by the Administrative Agent), in each case, with a face amount in excess of $1,000,000.


(i) Set forth on Schedule 5.21(d)(i), as of the Closing Date and as updated thereafter to reflect the acquisition of Collateral subsequent thereto, is a description of all Deposit

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Accounts (as defined in the UCC) and Securities Accounts (as defined in the UCC) of the Loan Parties, including the name of (A) the applicable Loan Party, (B) in the case of a Deposit Account, the depository institution and average amount held in such Deposit Account and whether such account is a ZBA account or a payroll account, and (C) in the case of a Securities Account, the Securities Intermediary (as defined in the UCC) or issuer and the average aggregate market value held in such Securities Account, as applicable.

(ii) Set forth on Schedule 5.21(d)(ii), as of the Closing Date and as updated thereafter to reflect the acquisition of Collateral subsequent thereto, is a description of all Electronic Chattel Paper and Letter of Credit Rights of the Loan Parties, including the name of (A) the applicable Loan Party, (B) in the case of Electronic Chattel Paper, the account debtor and (C) in the case of Letter-of-Credit Rights, the issuer or nominated person, as applicable.

(e) Commercial Tort Claims. Set forth on Schedule 5.21(e), as of the Closing Date and as updated thereafter to reflect the acquisition of Collateral subsequent thereto, is a description of all Commercial Tort Claims (as defined in the UCC) for which the Loan Parties are a claimant (detailing such Commercial Tort Claim in such detail as reasonably requested by the Administrative Agent).

(f) Pledged Equity Interests. Set forth on Schedule 5.21(f), as of the Closing Date and as updated thereafter to reflect the acquisition of Collateral subsequent thereto, is a list of (i) all Pledged Equity and (ii) all other Equity Interests required to be pledged to the Collateral Agent pursuant to the Collateral Documents (in each case, detailing the Grantor (as defined in the Security Agreement), the Person whose Equity Interests are pledged, the number of shares of each class of Equity Interests, the certificate number and percentage ownership of outstanding shares of each class of Equity Interests and the class or nature of such Equity Interests (e.g., voting, non-voting, preferred, etc.).

(g) Properties. Set forth on Schedule 5.21(g)(i), as of the Closing Date and as updated thereafter to reflect the acquisition of Collateral subsequent thereto, is a list of all Mortgaged Properties (including (i) the name of the Loan Party owning such Mortgaged Property, (ii) the number of buildings located on such Mortgaged Property, (iii) the property address, and (iv) the city, county, state and zip code which such Mortgaged Property is located). Set forth on Schedule 5.21(g)(ii), as of the Closing Date and as of the last date such Schedule was required to be updated in accordance with Section 6.02, is a list of (A) each headquarter location of the Loan Parties, (B) each other location where any significant administrative or governmental functions are performed, (C) each other location where the Loan Parties maintain any books or records (electronic or otherwise) and (D) each location where any personal property Collateral is located at any premises owned or leased by a Loan Party with a Collateral value in excess of $5,000,000 (in each case, including (1) an indication if such location is leased or owned, (2), if leased, the name of the lessor, and if owned, the name of the Loan Party owning such property, (3) the address of such property (including, the city, county, state and zip code) and (4) to the extent owned, the approximate fair market value of such property).

(h) Material Contracts. Set forth on Schedule 5.21(h), as of the Closing Date and as updated thereafter to reflect the entering into of any Material Contract subsequent thereto, is a complete and accurate list of all Material Contracts of the Borrower and its Subsidiaries.

(i) Borrowing Base Certificate. All information and calculations set forth on each Borrowing Base Certificate delivered to the Administrative Agent and the Collateral Agent pursuant to Section 6.02(m) are true and correct as of the date reflected therein.

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Section 5.22 Intellectual Property; Licenses, Etc

Each Loan Party owns, or possesses the right to use, all of the trademarks, service marks, trade names, copyrights, patents, patent rights, franchises, licenses and other Intellectual Property rights that are necessary for the operation of their respective businesses, without conflict with the rights of any other Person. To the knowledge of the Loan Parties, no slogan or other advertising device, product, process, method, substance, part or other material now employed, or now contemplated to be employed, by any Loan Party infringes upon any rights held by any other Person.

Section 5.23 Labor Matters

There are no collective bargaining agreements or Multiemployer Plans covering the employees of the Borrower or any of its Subsidiaries as of the Closing Date and the Borrower and its Subsidiaries have not suffered any strikes, walkouts, work stoppages or other material labor difficulty within the last five (5) years preceding the Closing Date, which has resulted in a Material Adverse Effect.

Section 5.24 Regulation H

No Mortgage encumbers improved real property that is Flood Hazard Property and upon which a building is located in an area designated by the Federal Emergency Management Agency as having special flood hazards and in which flood insurance has not been made available under Flood Laws.

Section 5.25 Immaterial Subsidiaries

None of the Immaterial Subsidiaries has any material assets or material liabilities.

Section 5.26 Government Regulation

(a) None of the Administrative Agent, the Collateral Agent, the Lenders or any affiliate of any of them will, solely as a result of the execution, delivery and performance by them of the Loan Documents, be subject to, or not exempt from, regulation under the FPA or PUHCA, or financial, organizational or rate regulation as a “public utility,” an “electric utility,” a “holding company” or similar term(s) under any applicable state law or any other laws and regulations respecting the rates or the financial or organizational regulation of electric utilities; provided that (A) the exercise of any remedy provided for in such Loan Documents that would result in a direct or indirect change in ownership of or control over either any Loan Party or its respective FERC jurisdictional facilities may require prior approval by FERC under Section 203 of the FPA; and (B) following such change in ownership or control, an entity that directly or indirectly owns or controls such Loan Party, or owns or operates one or more of the Projects, may be subject to regulation under the FPA, PUHCA, or to state law or regulation as a “public utility” or similar term(s) under any such applicable state law or any other laws and regulations respecting the rates or the financial or organizational regulation of electric utilities.

(b) None of the Loan Parties is and will not, solely as a result of the ownership or operation of the Projects, the sale of electricity therefrom or the entering into any Loan Document or any transaction contemplated hereby or thereby, be or become subject to, or not exempt from, regulation as a (A) a “public utility” under the FPA, or (B) a “holding company” within the meaning of Section 1262(8) of PUHCA other than as a “holding company” of one or more QFs, “exempt wholesale generators” or “foreign utility companies” under Section 1262(6)

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of PUHCA. None of the Loan Parties is subject to regulation under any Law as to the issuance of securities by, or rates or financial or organizational matters of, electric utilities that would preclude the incurrence or repayment of the principal of or interest on any Loans, or the incurrence by the Loan Parties of any of the Obligations or the execution, delivery and performance by such Person of the Loan Documents to which it is party. None of the Loan Parties is subject to financial, organizational or rate regulation as a “public utility,” “electric utility,” or similar term, by public utilities commissions or similar agencies in the relevant state. No authorization, approval, certification, notice or filing is required by or with FERC or the public utility commissions or similar agencies in the relevant state for the execution and delivery of the Loan Documents, the consummation of the transactions contemplated by the Loan Documents or the performance of obligations under the Loan Documents, except for any filings with or approvals by FERC required to obtain or maintain the QF status of a Project, and except as may be required as the result of the exercise of remedies under the Loan Documents.

Section 5.27 [Reserved].

Section 5.28 PATRIOT Act.

None of the transactions contemplated hereby will violate (i) the United States Trading with the Enemy Act (12 U.S.C. 95a and 12 U.S.C. 95b, as amended), (ii) any of the foreign assets control regulations of the United States Treasury Department (31 C.F.R., Subtitle B, Chapter V, as amended) or any enabling legislation or executive order relating thereto (as amended, the “Department of Treasury Rule”), (iii) Executive Order No. 13,224, 66 Fed Reg 49,079 (2001), issued by the President of the United States (Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit or Support Terrorism) (as amended, the “Terrorism Order”) or (iv) the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001, Public Law 107-56 (October 26, 2001), as amended (the “PATRIOT Act”); (ii) none of the Borrower and its Subsidiaries and Affiliates is a “blocked person” as described in Section 1 of the Terrorism Order or a Person described in the Department of the Treasury Rule; and (iii) none of the Borrower and its Subsidiaries and Affiliates knowingly engages in any dealings or transactions, or is otherwise associated, with any such “blocked person” or any such Person described in the Department of Treasury Rule.

Section 5.29 No Ownership/Use by Disqualified Persons.

Neither the Borrower nor any of its Subsidiaries that directly or indirectly holds an interest in a Project for which an ITC or accelerated depreciation is included in the Borrowing Base is a Disqualified Person. No Project for which an ITC or accelerated depreciation is included in the Borrowing Base will be used within the meaning of Section 168(h) or Section 50 of the Code by a person described in Section 168(h)(2) of the Code (including by virtue of Section 168(h)(6)(F) of the Code) or Section 50(b)(3) or (4) of the Code.

Section 5.30 Partnerships and Joint Ventures.

None of the Loan Parties is a general partner or a limited partner in any general or limited partnership, a joint venturer in any joint venture or a member in any limited liability company other than any other Loan Party or Excluded Subsidiary.

Section 5.31 Consumer Protection.

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All required disclosures, consents, approvals, filings and permissions relating to consumer finance transactions and required of any Loan Party shall have been made or obtained with respect to each Project, except for those which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

Section 5.32 Direct Payments.

Each Eligible Direct Payment Receivable included in the Borrowing Base is in full force and effect. The related Excluded Subsidiary, Tax Equity Investor, Loan Party or other Subsidiary is the entity that is entitled to claim each applicable Eligible Direct Payment Receivable included in the Borrowing Base. There is no Law, Contractual Obligation or provision contained in any applicable constitutional document that prohibits any Excluded Subsidiary or Tax Equity Investor from directing the proceeds of any Eligible Direct Payment Receivable included in the Borrowing Base to any Loan Party (by distribution or otherwise) or, upon the occurrence and during the continuance of an Event of Default, to the Administrative Agent, and any related Account identified by a Loan Party as an Eligible Direct Payment Receivable is not (a) subject to any known defenses, disputes, offsets, contra accounts or counterclaims, (b) subject to any Lien or any transfer or other restrictions which could reasonably be expected to prohibit, hinder or delay distribution of the amounts represented by such Account to a Loan Party or (c) excluded as ineligible by virtue of one or more of the excluding criteria (other than any Administrative Agent-discretionary criteria) set forth in the definition of Eligible Direct Payment Receivables.

Section 5.33 Host Customer Agreements.

As to each Account that is identified by the Borrower as an Eligible Customer Upfront Payment Receivable in a Borrowing Base Certificate submitted to the Administrative Agent and the Collateral Agent, such Account is (a) to the knowledge of the Borrower, a bona fide existing payment obligation of the applicable Account Debtor created pursuant to an enforceable Host Customer Agreement in the ordinary course of business, (b) owed to the applicable Excluded Subsidiary without any known defenses, disputes, offsets, contra accounts, counterclaims, or rights of return or cancellation, (c) subject to no Liens and to no transfer or other restrictions which could reasonably be expected to prohibit, hinder or delay distribution of the amounts represented by such Account to the Borrower and (d) not excluded as ineligible by virtue of one or more of the excluding criteria (other than any Collateral Agent-discretionary criteria) set forth in the definition of Eligible Customer Upfront Payment Receivables, except for those which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

Section 5.34 Permits.

All Applicable Permits necessary for each Project are either (i) in full force and effect or (ii) of a type that are readily obtained before such Applicable Permit is required, except for those which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Loan Parties do not have any reason to believe that any material permit of the type referred to in clause (ii) above will not be obtained in due course before it becomes an Applicable Permit. None of the Loan Parties is in violation of any Applicable Permit which violation would reasonably be expected to (A) have a Material Adverse Effect on the Loan Parties or a Project or (B) constitute a material default under a Host Customer Agreement. To each Loan Party's knowledge, after due inquiry, each counterparty to a Host Customer Agreement possesses all permits, or rights thereto, in each case necessary to perform its duties under such Host Customer Agreement to which it is a party, other than those (x) of the type that

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are routinely granted on application and that would not normally be obtained before the commencement of a construction or reconstruction or (y) which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect, and, to each Loan Party’s knowledge, such party is not in material violation of any valid rights of others with respect to any of the foregoing.

Section 5.35 Senior Indebtedness.

The Secured Obligations constitute senior debt and sole designated senior debt under all Subordinated Debt Documents.

Section 5.36 Beneficial Ownership Certification.

As of (a) the Closing Date, the information included in the Beneficial Ownership Certification delivered pursuant to Section 4.01(o) is true and correct in all respects and (b) as of the date delivered, the information included in each Beneficial Ownership Certification delivered pursuant to Section 6.03(c) is true and correct in all respects.

ARTICLE VI

AFFIRMATIVE COVENANTS

Each of the Loan Parties hereby covenants and agrees that on the Closing Date and thereafter until the Facility Termination Date, such Loan Party shall, and shall cause each of their Subsidiaries to:

Section 6.01 Financial Statements.

Deliver to the Administrative Agent for distribution to each Lender, in form and detail satisfactory to the Administrative Agent and the Lenders:

(a) Audited Financial Statements. As soon as available, but in any event within ninety (90) days after the end of each fiscal year of Sunrun (or, if earlier, five (5) days after the date such financial statements are required to be filed with the SEC), a Consolidated balance sheet of Sunrun as at the end of such fiscal year, and the related Consolidated statements of income or operations, changes in shareholders’ equity and cash flows of Sunrun for such fiscal year, setting forth in each case in comparative form the figures for the previous fiscal year, all in reasonable detail and prepared in accordance with GAAP, such Consolidated statements to be audited and accompanied by a report and opinion of an independent certified public accountant of nationally recognized standing reasonably acceptable to the Administrative Agent, which report and opinion shall be prepared in accordance with generally accepted auditing standards and shall not be subject to any “going concern” or like qualification or exception or any qualification or exception as to the scope of such audit.

(b) Quarterly Financial Statements. As soon as available, but in any event within forty-five (45) days after the end of each of the first three fiscal quarters of each fiscal year of Sunrun (or, if earlier, five (5) days after the date such financial statements are required to be filed with the SEC), a Consolidated balance sheet and the related Consolidated statements of Sunrun, as at the end of such fiscal quarter, of income or operations and cash flows for the portion of Sunrun’s fiscal year then ended, which Consolidated statements shall also set forth in comparative form, (A) in the case of the Consolidated balance sheet, either the figures for the prior fiscal quarter of the current fiscal year or the figures for the prior fiscal year ended, (B) in

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the case of the Consolidated statement of income or operations, the figures for the corresponding fiscal quarter of the previous fiscal year and, (C) in the case of the Consolidated statement of cash flows, the corresponding portion of the previous fiscal year.

All statements shall be provided in reasonable detail and prepared in accordance with GAAP and including management discussion and analysis of operating results inclusive of operating metrics in comparative form, such Consolidated statements to be certified by the chief executive officer, chief financial officer, treasurer or controller who is a Responsible Officer of Sunrun as fairly presenting the financial condition, results of operations and cash flows of Sunrun, subject only to normal year-end audit adjustments and the absence of footnotes.

(c) **Megawatts Booked, Installed, Inspected and Terminated.** As soon as available, but in any event within sixty (60) days after the end of each of the fiscal quarters of each fiscal year of the Borrower and its Subsidiaries, (i) an internally prepared income statement, reflecting megawatts booked, installed and inspected for such fiscal quarter and (ii) a report of megawatts terminated for such fiscal quarter.

As to any information contained in materials furnished pursuant to Section 6.02(g), the Borrower shall not be separately required to furnish such information under Section 6.01(a) or (b), provided that the materials furnished pursuant to Section 6.02(g) are delivered to the Administrative Agent within the times specified in Section 6.01(a) or (b), as applicable.

**Section 6.02 Certificates; Other Information.**

Deliver to (x) in the case of Sections 6.02(c) and (m), to the Collateral Agent and the Administrative Agent for distribution to each Lender, (y) in the case of Section 6.02(f), to the Administrative Agent and the Collateral Agent (subject to the restrictions set forth in Section 6.10) and (z) in the case of any other clause of this Section 6.02, to the Administrative Agent for distribution to each Lender, and in each case, other than in the case of Section 6.02(f), in form and detail satisfactory to the Administrative Agent and the Required Lenders (and, in the case of Sections 6.02(c) and (m), the Collateral Agent):

(a) **Accountants’ Certificate.** Concurrently with the delivery of the financial statements referred to in Section 6.01(a), a certificate of its independent certified public accountants certifying such financial statements.

(b) **Compliance Certificate.** Concurrently with the delivery of the financial statements referred to in Sections 6.01(a) and (b), (i) a duly completed Compliance Certificate signed by the chief executive officer, chief financial officer, treasurer or controller which is a Responsible Officer of Sunrun, and in the event of any change in generally accepted accounting principles used in the preparation of such financial statements, Sunrun shall also provide, if necessary for the determination of compliance with Section 7.11, a statement of reconciliation conforming such financial statements to GAAP, and (ii) a copy of management’s discussion and analysis with respect to such financial statements.

(c) **Appraisals.** As soon as each Appraisal is available, a copy of each such Appraisal.

(d) **Calculations.** Concurrently with the delivery of the Compliance Certificate referred to in Section 6.02(b) required to be delivered with the financial statements referred to in Section 6.01(a), a certificate from the Borrower (which may be included in such Compliance
Certificate) including the amount of all Restricted Payments, Investments (including Permitted Acquisitions), Dispositions and Capital Expenditures that were made during the prior fiscal year.

(e) **Changes in Corporate Structure.** Concurrently with the delivery of the Compliance Certificate referred to in Section 6.02(b), the Borrower will provide notice of any change in corporate structure of any Loan Party (including by merger, consolidation, dissolution or other change in corporate structure) to the Administrative Agent, along with such other information as reasonably requested by the Administrative Agent. Provide notice to the Administrative Agent, not less than ten (10) days prior (or such extended period of time as agreed to by the Administrative Agent) of any change in any Loan Party’s legal name, state of organization, or organizational existence.

(f) **Permitted Asset Financing Transaction.** During the Availability Period, as soon as reasonably practicable upon the request of the Administrative Agent or the Collateral Agent, a copy of the operative documents of any new Permitted Asset Financing Transaction relating to Projects that is to be included in Available Take-Out.

(g) **Annual Reports; Etc.** Promptly after the same are available, copies of each annual report, proxy or financial statement or other report or communication sent to the stockholders of Sunrun, and copies of all annual, regular, periodic and special reports and registration statements which Sunrun may file or be required to file with the SEC under Section 13 or 15(d) of the Exchange Act, or with any national securities exchange, and in any case not otherwise required to be delivered to the Administrative Agent pursuant hereto.

(h) **Debt Securities Statements and Reports.** Promptly after the furnishing thereof, copies of any statement or report furnished to any holder of debt securities of any Loan Party pursuant to the terms of any indenture, loan or credit or similar agreement and not otherwise required to be furnished to the Lenders pursuant to Section 6.01 or any other clause of this Section.

(i) [Reserved].

(j) **Notices.** Not later than five (5) Business Days after receipt thereof by any Loan Party, copies of all notices, requests and other documents (including amendments, waivers and other modifications) so received under or pursuant to any instrument, indenture, loan or credit or similar agreement of any Loan Party regarding or related to any breach or default by any party thereto or any other event that could materially impair the value of the interests or the rights of any Loan Party or otherwise have a Material Adverse Effect and, from time to time upon request by the Administrative Agent, such information and reports regarding such instruments, indentures and loan and credit and similar agreements as the Administrative Agent may reasonably request.

(k) [Reserved].

(l) **Additional Information.** Subject to Section 6.10(b), promptly, (i) such additional information regarding the business, financial, legal or corporate affairs of the Borrower or any Subsidiary thereof, or compliance with the terms of the Loan Documents, as the Administrative Agent, the Collateral Agent or any Lender may from time to time reasonably request; or (ii) information and documentation reasonably requested by the Administrative Agent or any Lender for purposes of compliance with applicable “know your customer” requirements under the PATRIOT Act or other applicable anti-money laundering laws.
(m) **Borrowing Base Certificate.**

(i) As soon as available, but in any event within twenty (20) days after (x) if the Borrowing Base Threshold is satisfied, the end of the current calendar quarter and (y) if the Borrowing Base Threshold is not satisfied, the end of the current month, a Borrowing Base Certificate, together with a Back-Log Spreadsheet and a Take-Out Spreadsheet, providing, as of the end of the prior month, (A) megawatts installed, (B) megawatts added, (C) net megawatts backlog, (D) megawatts terminated, (E) the Borrowing Base, (F) the Total Outstandings, (G) the Unencumbered Liquidity, (H) any contracts included in Project Back-Log that are ineligible for Tranching of Projects under any open Tax Equity Partnership (including the number, face value and reasons for rejection), (I) the NYGB Borrowing Base, (J) the Revolving Exposure of NYGB and of each other Lender, (K) the NYGB Borrowing Base Availability and (L) such other supporting information as reasonably requested by the Administrative Agent, the Collateral Agent or the Lenders, each prepared as at the end of such month, duly certified by a Responsible Officer that is the chief executive officer, chief financial officer, treasurer or controller of the Borrower. Notwithstanding the foregoing, in the event of a Borrowing Base Deficiency, for the period during which the Borrowing Base Deficiency exists, the Loan Parties shall deliver to the Administrative Agent, the Collateral Agent and the Lenders such Borrowing Base Certificate on a bi-weekly basis.

(ii) Together with each Borrowing Base Certificate delivered pursuant to Section 6.02(m)(i) above, or more frequently as requested by the Administrative Agent, the Collateral Agent or the Required Lenders, (A) the monthly or quarterly, as applicable, aging of the accounts receivable and accounts payable of the Loan Parties, (B) an aged listing of accounts related to the Eligible Direct Payment Receivables, the Eligible Customer Upfront Payment Receivables, the Eligible Trade Accounts and the Eligible Project Back-Log and (C) an Inventory report.

Documents required to be delivered pursuant to Section 6.01(a) or (b) or Section 6.02(g) (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and, if so delivered, shall be deemed to have been delivered on the date (a) on which the Borrower posts such documents, or provide a link thereto on the Borrower’s website on the Internet at the website address listed on Schedule 1.01(a); or (b) on which such documents are posted on the Borrower’s behalf on an Internet or intranet website, if any, to which each Lender and the Administrative Agent have access (whether a commercial, third-party website, related to an SEC filing or whether sponsored by the Administrative Agent); provided that: the Borrower shall deliver paper copies of such documents to the Administrative Agent or any Lender upon its request to deliver such paper copies. The Administrative Agent shall have no obligation to request the delivery of or to maintain paper copies of the documents referred to above, and in any event shall have no responsibility to monitor compliance by the Borrower with any such request by a Lender for delivery, and each Lender shall be solely responsible for requesting delivery to it or maintaining its copies of such documents.

The Borrower and each other Loan Party hereby acknowledges that (A) the Administrative Agent and/or an Affiliate thereof may, but shall not be obligated to, make available to the Lenders and the L/C Issuer materials and/or information provided by or on behalf of the Borrower and its Subsidiaries hereunder (collectively, “Borrower Materials”) by posting the Borrower Materials on Debt Domain, IntraLinks, Syndtrak or another similar electronic system (the “Platform”) and (B) certain of the Lenders (each, a “Public Lender”) may have personnel who do not wish to receive material non-public information with respect to the Borrower or its Affiliates, or the respective securities of any of the foregoing, and who may be engaged in investment and other market-related activities with respect to such Persons’ securities. The

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Borrower hereby agrees that so long as the Borrower is the issuer of any outstanding debt or Equity Interests that are registered or issued pursuant to a private offering or is actively contemplating issuing any such securities it will use commercially reasonable efforts to identify that portion of the Borrower Materials that may be distributed to the Public Lenders and that (1) all such Borrower Materials shall be clearly and conspicuously marked “PUBLIC” which, at a minimum, shall mean that the word “PUBLIC” shall appear prominently on the first page thereof; (2) by marking Borrower Materials “PUBLIC,” the Borrower shall be deemed to have authorized the Administrative Agent, any Affiliate thereof, each Arranger, the L/C Issuer and the Lenders to treat such Borrower Materials as not containing any material non-public information (although it may be sensitive and proprietary) with respect to the Borrower or its securities for purposes of United States federal and state securities laws provided, however, that to the extent such Borrower Materials constitute Information, they shall be treated as set forth in Section 11.07); (3) all Borrower Materials marked “PUBLIC” are permitted to be made available through a portion of the Platform designated “Public Side Information;” and (4) the Administrative Agent and any Affiliate thereof and each Arranger shall treat any Borrower Materials that are not marked “PUBLIC” as being suitable only for posting on a portion of the Platform not designated “Public Side Information.” Notwithstanding the foregoing, (i) the Borrower shall be under no obligation to mark any Borrower Materials “PUBLIC” and (ii) any materials furnished pursuant to Section 6.02(g) may be treated by the Administrative Agent and the Lenders as if the same had been marked “PUBLIC” in accordance herewith.

Section 6.03 Notices.

(a) Promptly, but in any event within three (3) Business Days of obtaining knowledge thereof, notify the Administrative Agent and each Lender of the occurrence of any Default;

(b) Promptly, but in any event within four (4) Business Days of obtaining knowledge thereof, notify the Administrative Agent and each Lender of:

(i) any matter that has resulted or could reasonably be expected to result in a Material Adverse Effect; and

(ii) any time that a Loan Party or any Subsidiary has given to, or received from, a counterparty to a Permitted Asset Financing Transaction included in Available Take-Out formal written notice under the documents governing the applicable Permitted Asset Financing Transaction stating that a default or event of default has occurred and is continuing thereunder, or has knowledge of the occurrence and continuation of such default or event of default but has not given such formal written notice; provided that such counterparty would have the right to cease funding, and has not waived such right to cease funding, if such default or event of default remains uncured; and

(c) Promptly, but in any event within two (2) Business Days of the occurrence thereof, notify the Administrative Agent and each Lender of any change in the information provided in the Beneficial Ownership Certification that would result in a change to the list of beneficial owners identified in parts (c) or (d) of such certification.

Each notice pursuant to this Section 6.03 shall be accompanied by a statement of a Responsible Officer of the Borrower setting forth details of the occurrence referred to therein and to the extent applicable, stating what action the Borrower has taken and proposes to take with respect thereto. Each notice pursuant to Section 6.03(a) shall describe with particularity any and all provisions of this Agreement and any other Loan Document that have been breached.

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Section 6.04 Payment of Obligations

Pay and discharge as the same shall become due and payable, all its obligations and liabilities, including (a) all tax liabilities, assessments and governmental charges or levies upon it or its properties or assets, unless the same are being contested in good faith by appropriate proceedings diligently conducted and adequate reserves in accordance with GAAP are being maintained by the Borrower or any Subsidiary thereof; (b) all lawful claims which, if unpaid, would by law become a Lien upon any of their property; and (c) all Indebtedness, as and when due and payable, but subject to any subordination provisions contained in any instrument or agreement evidencing such Indebtedness; except, in each case, to the extent that failure to do so could not reasonably be expected to have a Material Adverse Effect.

Section 6.05 Preservation of Existence, Etc

(a) Preserve, renew and maintain in full force and effect its legal existence and good standing under the Laws of the jurisdiction of its organization except in a transaction permitted by Section 7.04 or 7.05, except to the extent that failure to do so could not reasonably be expected to adversely affect the Administrative Agent or the Secured Parties;

(b) take all reasonable action to obtain and maintain all rights, privileges, Permits, licenses and franchises necessary or desirable in the normal conduct of its business, including all Applicable Permits, except to the extent that failure to do so could not reasonably be expected to have a Material Adverse Effect; and

(c) register or cause to be registered (to the extent not already registered) those registrable Intellectual Property rights now owned or hereafter developed or acquired by the Loan Parties, to the extent that Loan Parties, in their reasonable business judgment, deem it appropriate to so protect such Intellectual Property rights, and preserve or renew all of its registered patents, trademarks, trade names, service marks and other Intellectual Property rights, the non-preservation of which could reasonably be expected to have a Material Adverse Effect.

Section 6.06 Maintenance of Properties

(a) Maintain, preserve and protect all of its material properties and equipment necessary in the operation of its business in good working order and condition, ordinary wear and tear excepted;

(b) make all necessary repairs thereto and renewals and replacements thereof except where the failure to do so could not reasonably be expected to have a Material Adverse Effect; and

(c) use the standard of care typical in the industry in the operation and maintenance of its facilities.

Section 6.07 Maintenance of Insurance

(a) Maintenance of Insurance. With respect to the Loan Parties, maintain with an independent third-party insurer that is rated at least “A” by A.M. Best Company, reasonably satisfactory insurance with respect to its properties and business against loss or damage of the kinds customarily insured against by Persons engaged in the same or similar business, of such types and in such amounts as are customarily carried under similar circumstances by such other Persons, including, without limitation, (i) property terrorism insurance and (ii) flood hazard

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insurance on all Mortgaged Properties that are Flood Hazard Properties, on such terms and in such amounts as required by the Flood Laws or as
otherwise required by the Administrative Agent.

(b) Evidence of Insurance. With respect to the Loan Parties, cause the Collateral Agent to be named as lenders’ loss payable, loss payee or mortgagee, as its interest may appear, and/or additional insured with respect of any such insurance providing liability coverage or coverage in respect of any Collateral, and cause, unless otherwise agreed to by the Administrative Agent, each provider of any such insurance to agree, by endorsement upon the policy or policies issued by it or by independent instruments furnished to the Administrative Agent that it will give the Administrative Agent thirty (30) days prior written notice before any such policy or policies shall be altered or cancelled (or ten (10) days prior notice in the case of cancellation due to the nonpayment of premiums). Annually, upon expiration of current insurance coverage, the Loan Parties shall provide, or cause to be provided, to the Administrative Agent, such evidence of insurance as required by the Administrative Agent, including, but not limited to: (i) certified copies of such insurance policies, (ii) evidence of such insurance policies (including, without limitation and as applicable, ACORD Form 28 certificates (or similar form of insurance certificate), and ACORD Form 25 certificates (or similar form of insurance certificate)), (iii) declaration pages for each insurance policy and (iv) lenders’ loss payable endorsement if the Collateral Agent for the benefit of the Secured Parties is not on the declarations page for such policy. As requested by the Administrative Agent, the Loan Parties agree to deliver to the Administrative Agent and the Collateral Agent an Authorization to Share Insurance Information in substantially the form of Exhibit O (or such other form as required by each of the Loan Parties’ insurance companies).

(c) Redesignation. Promptly notify the Administrative Agent of any Mortgaged Property that is, or becomes, a Flood Hazard Property.

Section 6.08 Compliance with Laws.

Comply with the requirements of all Laws and all orders, writs, injunctions and decrees applicable to it or to its business or property, except in such instances in which (a) such requirement of Law or order, writ, injunction or decree is being contested in good faith by appropriate proceedings diligently conducted; or (b) the failure to comply therewith could not reasonably be expected to have a Material Adverse Effect.

Section 6.09 Books and Records.

(a) Maintain proper books of record and account, in which full, true and correct entries in conformity with GAAP consistently applied shall be made of all financial transactions and matters involving the assets and business of such Loan Party or such Subsidiary thereof, as the case may be; and

(b) maintain such books of record and account in material conformity with all applicable requirements of any Governmental Authority having regulatory jurisdiction over such Loan Party or such Subsidiary thereof, as the case may be.

Section 6.10 Inspection Rights.

(a) Permit representatives of the Collateral Agent, or an independent third-party examiner acceptable to the Collateral Agent, at least once a calendar year to conduct a field examination and to visit and inspect any of the Loan Parties’ properties, to examine its and their

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Subsidiaries’ corporate, financial and operating records, and make copies thereof or abstracts therefrom (subject to the limitation set forth in clause (b) below), and to discuss its affairs, finances and accounts with its directors, officers, and independent public accountants, all at the expense of the Loan Parties and at such reasonable times during normal business hours and as often as may be reasonably desired, upon reasonable advance notice to the Loan Parties; provided, however, subject to clause (c) below, prior to an Event of Default, the Collateral Agent shall not conduct more than one such inspection (including a field examination) during any calendar year; and provided, further, however, that when an Event of Default exists the Collateral Agent (or any of its representatives or independent third-party examiners) may do any of the foregoing at the expense of the Loan Parties at any time during normal business hours and without advance notice.

(b) Each inspection shall include a review of the Loan Parties’ books and records and other documentation to such extent as determined by the Collateral Agent to be adequate to confirm contract compliance, Tranching criteria for Projects, Project Back-Log eligibility, Available Take-Out eligibility and other information requested by the Collateral Agent. In connection with any field examination or inspection with respect to Eligible Inventory, the Collateral Agent shall be provided information maintained in any applicable Warehouse Operating System to such extent as determined by the Collateral Agent to be adequate to confirm compliance with respect to the requirements set forth in Section 6.14(e). Any inspection of the Material Contracts or any other agreement affiliated with a Permitted Asset Financing Transaction shall be limited to review by the counsel of the Administrative Agent and the Collateral Agent. Such Material Contracts will not be copied, sent by mail, fax, e-mail or any other transmission, or distributed to any Lender or its counsel without the express written consent of the Borrower.

(c) Subject to the second proviso in clause (a) above and in addition to any field examinations, the Collateral Agent may (and at the direction of a Lender shall) conduct an additional inspection during any calendar year beyond the inspection set forth in the first proviso in clause (a) above so long as (i) the results of such inspection will not result in the exercise of the Collateral Agent’s discretion as set forth in Sections 2.01(b), (ii) such inspection shall be at the cost and expense of Lenders if at the time of such inspection no Event of Default exists, and (iii) the Collateral Agent designates such inspection as an “Additional Inspection”.

Section 6.11 Use of Proceeds.

Use the proceeds of the Credit Extensions for general corporate purposes not in contravention of any Law or of any Loan Document.

Section 6.12 [Reserved].

Section 6.13 Covenant to Guarantee Obligations.

The Loan Parties will cause each of their Subsidiaries whether newly formed, after acquired or otherwise existing to promptly (and in any event within thirty (30) days after such Subsidiary is formed or acquired (or such longer period of time as agreed to by the Administrative Agent in its reasonable discretion)) become a Guarantor hereunder by way of execution of a Joinder Agreement; provided, however, no Excluded Subsidiary and no Subsidiary formed with the intent of becoming an Excluded Subsidiary that meets the requirements to be an Excluded Subsidiary shall be required to become a Guarantor. In connection therewith, the Loan Parties shall give notice to the Administrative Agent within thirty (30) days (or such longer period of time as agreed to by the Administrative Agent in its
reasonable discretion) after creating a Subsidiary or acquiring the Equity Interests of any other Person. In connection with the foregoing, the Loan Parties shall deliver to the Administrative Agent, with respect to each new Guarantor to the extent applicable, substantially the same documentation required pursuant to Sections 4.01 and 6.14 and such other documents or agreements as the Administrative Agent may reasonably request.

Section 6.14 Covenant to Give Security.

Except with respect to Excluded Property:

(a) Equity Interests and Personal Property.

(i) Each Loan Party will cause the Pledged Equity and all of its tangible and intangible personal property now owned or hereafter acquired by it to be subject at all times to a first priority, perfected Lien (subject to Permitted Liens to the extent permitted by the Loan Documents) in favor of the Collateral Agent for the benefit of the Secured Parties to secure the Secured Obligations pursuant to the terms and conditions of the Collateral Documents. Each Loan Party shall provide stock or membership certificates evidencing any Pledged Equity and undated stock or transfer powers duly executed in blank, opinions of counsel and any filings and deliveries reasonably necessary in connection with such Pledged Equity to perfect the security interests therein, all in form and substance reasonably satisfactory to the Collateral Agent.

(ii) Each Loan Party shall (A) to the extent not previously provided, provide to the Collateral Agent stock or membership certificates evidencing the Pledged Equity listed on Schedule 5.21(f) as of the Closing Date, and undated stock or transfer powers duly executed in blank in connection therewith, no later than fourteen (14) days after the Closing Date, or within such longer period of time after the Closing Date as reasonably requested by the Loan Parties and approved by the Administrative Agent, and (B) deliver to the Administrative Agent an opinion of counsel for the Loan Parties, addressed to the Administrative Agent and the Lenders, in connection with matters relating to such stock or membership certificates and in form and substance acceptable to the Administrative Agent, no later than twenty (20) days after the Closing Date, or within such longer period of time after the Closing Date as reasonably requested by the Loan Parties and approved by the Administrative Agent.

(b) Real Property. If any Loan Party intends to acquire a fee ownership interest in any real property (“Real Estate”) after the Closing Date and such Real Estate has a fair market value in excess of $5,000,000, it shall provide to the Collateral Agent within sixty (60) days (or such extended period of time as agreed to by the Collateral Agent) a Mortgage and such Mortgaged Property Support Documents as the Collateral Agent may request to cause such Real Estate to be subject at all times to a first priority, perfected Lien (subject in each case to Permitted Liens) in favor of the Collateral Agent for the benefit of the Secured Parties to secure the Secured Obligations pursuant to the terms and conditions of the Collateral Documents.

(c) Collateral Access Agreements. In the case of any personal property Collateral located at any premises containing personal property Collateral with a value in excess of $5,000,000, the Loan Parties will provide the Collateral Agent with Collateral Access Agreements within ninety (90) days of the later of the Closing Date and the date the Loan Party acquires its interest in such premises to the extent the Loan Parties are able to secure such Collateral Access Agreement, or within such longer period of time as reasonably requested by the Loan Parties and approved by the Collateral Agent.

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(d) **Account Control Agreements.**

(i) Each of the Loan Parties shall not open, maintain or otherwise have any deposit or other accounts (including securities accounts) at any bank or other financial institution, or any other account where money or securities are or may be deposited or maintained with any Person, other than (A) deposit accounts that are maintained at all times with depositary institutions as to which the Collateral Agent shall have received a Qualifying Control Agreement; (B) securities accounts that are maintained at all times with financial institutions as to which the Collateral Agent shall have received a Qualifying Control Agreement; (C) deposit accounts established solely as payroll and other zero balance accounts and such accounts are held at a bank acceptable to the Administrative Agent; (D) deposit accounts listed on Schedule 6.14(d)(i)(D) over which the Collateral Agent shall not have a Lien; (E) unpledged, segregated accounts into which monies belonging to an Excluded Subsidiary may be initially paid, temporarily held in trust by a Loan Party, and then transferred to the applicable Excluded Subsidiary, provided that such accounts shall not hold any other monies of any Loan Party; (F) deposit accounts that are maintained at a Payment Services Bank as required pursuant to the terms of a Payment Services Agreement and used solely to facilitate the payment of amounts owing under such Payment Services Agreement; and (G) other deposit accounts, so long as at any time the balance in any such account does not exceed $100,000 and the aggregate balance in all such other deposit accounts does not exceed $500,000.

(ii) The Loan Parties shall (A) to the extent not previously provided, provide the Collateral Agent with Qualifying Control Agreements satisfactory to the Collateral Agent with respect to all deposit accounts and securities accounts listed on Schedule 5.21(d)(i), but excluding accounts described in clauses (C) through (G) of Section 6.14(d)(i) over which the Collateral Agent shall not have a Lien, and (B) deliver to the Administrative Agent an opinion of counsel for the Loan Parties, addressed to the Administrative Agent and the Lenders, in connection with matters relating to such Qualifying Control Agreements and in form and substance acceptable to the Administrative Agent, in each case (x) prior to or on the Closing Date with respect to all such deposit accounts listed on Schedule 5.21(d)(i) as of the date hereof other than deposit accounts maintained with Silicon Valley Bank, (y) within two Business Days after the Closing Date with respect to all such deposit accounts listed on Schedule 5.21(d)(i) as of the date hereof, other than deposit accounts maintained with Silicon Valley Bank, and (z) with respect to any such deposit account or securities account listed on Schedule 5.21(d)(i) as updated after the date hereof, no later than twenty (20) days after the date of the opening of such deposit account or securities account, or within such longer period of time thereafter as reasonably requested by the Loan Parties and approved by the Administrative Agent.

(e) **Eligible Inventory.** To the extent any Eligible Inventory included in the Borrowing Base is stored and held in a warehouse that includes Inventory owned by any Subsidiary of Sunrun that is not a Loan Party, the Borrower shall (i) cause such Eligible Inventory to be located at a warehouse that at all times has a Warehouse Operating System, (ii) cause the operator of such warehouse to segregate such Eligible Inventory from inventory owned by any Subsidiary of Sunrun that is not a Loan Party.

**Section 6.15 Further Assurances.**
Promptly upon request by the Administrative Agent, the Collateral Agent, or any Lender through the Administrative Agent, (a) correct any material defect or error that may be discovered in any Loan Document or in the execution, acknowledgment, filing or recordation thereof, and (b) do, execute, acknowledge, deliver, record, re-record, file, re-file, register and re-register any and all such further acts, deeds, certificates, assurances and other instruments as the Administrative Agent, the Collateral Agent, or any Lender through the Administrative Agent, may reasonably require from time to time in order to (i) carry out more effectively the purposes of the Loan Documents, (ii) to the fullest extent permitted by applicable Law, subject any Loan Party’s or any of its Subsidiaries’ properties, assets, rights or interests to the Liens now or hereafter intended to be covered by any of the Collateral Documents, (iii) perfect and maintain the validity, effectiveness and priority of any of the Collateral Documents and any of the Liens intended to be created thereunder and (iv) assure, convey, grant, assign, transfer, preserve, protect and confirm more effectively unto the Secured Parties the rights granted or now or hereafter intended to be granted to the Secured Parties under any Loan Document or under any other instrument executed in connection with any Loan Document to which any Loan Party or any of its Subsidiaries is or is to be a party, and cause each of its Subsidiaries to do so.

Section 6.16 Compliance with Environmental Laws.

Comply, and cause all lessees and other Persons (other than the customer under the Host Customer Agreements) in all material respects, with all applicable Environmental Laws and Environmental Permits; obtain, maintain and renew all Environmental Permits necessary for its operations and properties; and conduct any investigation, study, sampling and testing, and undertake any cleanup, removal, remedial or other action necessary to prevent, remove and clean up all Hazardous Materials from any of its properties, in accordance with the requirements of all Environmental Laws; provided, however, that neither the Borrower nor any of its Subsidiaries shall be required to undertake any such cleanup, removal, remedial or other action to the extent that its obligation to do so is being contested in good faith and by proper proceedings and appropriate reserves are being maintained with respect to such circumstances in accordance with GAAP.

Section 6.17 Title.

The Loan Parties shall, and shall cause each of their Subsidiaries to, maintain good title to, or a valid leasehold, easement or other interest in, all of its properties and assets, including those related to each Project, subject only to Permitted Liens.

Section 6.18 Compliance with PATRIOT Act. Each Loan Party shall comply with the PATRIOT Act by promptly informing the Administrative Agent (by written notice) (i) if it is not or ceases to be the beneficiary of the Loans made or to be made hereunder and (ii) of any new beneficiary of the Loans made or to be made hereunder, which notice shall include such new beneficiary’s name and address.

Section 6.19 Sanctions; Anti-Corruption Laws.

The Borrower will maintain in effect policies and procedures designed to promote compliance by the Borrower, its Subsidiaries, and their respective directors, officers, employees, and agents with applicable Sanctions and with the FCPA and any other applicable anti-corruption laws.

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ARTICLE VII
NEGATIVE COVENANTS

The Borrower hereby covenants and agrees that on the Closing Date and thereafter until the Facility Termination Date, the Borrower shall not, and shall not permit any Loan Party or any of its other Subsidiaries to, directly or indirectly, do any of the following.

Section 7.01 Liens.

Create, incur, assume or suffer to exist any Lien upon the Collateral and any of its other property, assets or revenues, whether now owned or hereafter acquired, except for the following (the “Permitted Liens”):

(a) Liens pursuant to any Loan Document;

(b) Liens existing on the Closing Date and listed on Schedule 7.01 and any renewals or extensions thereof; provided that (i) the property, assets or revenues covered thereby is not changed, (ii) the amount secured or benefited thereby is not increased except as contemplated by Section 7.02(b), (iii) the direct or any contingent obligor with respect thereto is not changed, and (iv) any renewal or extension of the obligations secured or benefited thereby is permitted by Section 7.02(b);

(c) Liens for Taxes not yet due or which are being contested in good faith and by appropriate proceedings diligently conducted, if adequate reserves with respect thereto are maintained on the books of the applicable Person in accordance with GAAP;

(d) statutory Liens such as carriers’, warehousemen’s, mechanics’, repairmen’s or other like Liens arising in the ordinary course of business which are not overdue for a period of more than thirty (30) days or which are being contested in good faith and by appropriate proceedings diligently conducted, if adequate reserves with respect thereto are maintained on the books of the applicable Person; provided that, a reserve or other appropriate provision shall have been made therefor;

(e) pledges or deposits in the ordinary course of business in connection with workers’ compensation, unemployment insurance and other social security legislation, other than any Lien imposed by ERISA;

(f) deposits to secure the performance of bids, trade contracts and leases (other than Indebtedness) that is not Indebtedness permitted under Section 7.02, statutory obligations, surety and appeal bonds, performance bonds and other obligations of a like nature incurred in the ordinary course of business;

(g) easements, rights-of-way, restrictions and other similar encumbrances affecting real property which, in the aggregate, are not substantial in amount, and which do not in any case materially detract from the value of the property subject thereto or materially interfere with the ordinary conduct of the business of the applicable Person;

(h) Liens securing judgments for the payment of money (or appeal or other surety bonds relating to such judgments) not constituting an Event of Default under Section 8.01(h);

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(i) Liens securing Indebtedness permitted under (x) Section 7.02(c)(i), provided that (i) such Liens do not at any time encumber any property, assets or revenues other than the property, assets or revenues financed by such Indebtedness and (ii) the Indebtedness secured thereby does not exceed the cost or fair market value at the time of the acquisition, whichever is lower, of the property being acquired on the date of acquisition and (y) Section 7.02(c)(ii), provided that such Liens do not at any time encumber any property other than property, assets or revenues that are the subject of the applicable repo transaction;

(j) Liens (i) securing Indebtedness permitted under Section 7.02(g) on (x) the property, assets and revenues of, and (y) the Equity Interests in, Excluded Subsidiaries and (ii) securing obligations of Excluded Subsidiaries pursuant to the Tax Equity Documents or Cash Equity Documents, in each case so long as such Liens do not attach to the net proceeds of any Available Take-Out;

(k) Liens securing Indebtedness permitted under Section 7.02(h) so long as such Liens attach only to the vehicles or computer systems financed thereby;

(l) Liens securing Indebtedness permitted under Section 7.02(i) so long as such Liens attach only to the assets financed thereby;

(m) bankers’ Liens, rights of setoff and other similar Liens existing solely with respect to cash and Cash Equivalents on deposit in one or more accounts maintained by the Borrower or any of its Subsidiaries, in each case in the ordinary course of business in favor of the bank or banks with which such accounts are maintained, securing solely the customary amounts owing to such bank with respect to cash management and operating account arrangements; provided, that in no case shall any such Liens secure (either directly or indirectly) the repayment of any Indebtedness other than any Indebtedness permitted pursuant to Section 7.02(g);

(n) Liens arising out of judgments or awards not resulting in an Event of Default; provided the applicable Loan Party or Subsidiary shall in good faith be prosecuting an appeal or proceedings for review;

(o) any interest or title of a lessor, licensor or sublessor under any lease, license or sublease entered into by any Loan Party or any Subsidiary thereof in the ordinary course of business and covering only the assets so leased, licensed or subleased;

(p) Liens of a collection bank arising under Section 4-210 of the UCC on items in the course of collection;

(q) any zoning, building or similar laws or rights reserved to or vested in any Governmental Authority;

(r) customary Liens granted in favor of a trustee to secure fees and other amounts owing to such trustee under an indenture or other agreement pursuant to Indebtedness not otherwise prohibited under this Agreement so long as such Liens are limited to the security granted under such indenture or other agreement;

(s) Liens on SREC Excluded Property; and

(t) other Liens securing Indebtedness outstanding in an aggregate principal amount not to exceed $20,000,000; provided, that no such Lien shall extend to or cover any Collateral.

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Section 7.02 Indebtedness.

Create, incur, assume or suffer to exist, or prepay, redeem or repurchase, any Indebtedness, except:

(a) Indebtedness under the Loan Documents;

(b) Indebtedness outstanding on the Closing Date and listed on Schedule 7.02 and any refinancings, refundings, renewals or extensions thereof; provided that the amount of such Indebtedness is not increased at the time of such refinancing, refunding, renewal or extension except by an amount equal to a reasonable premium or other reasonable amount paid, and fees and expenses reasonably incurred, in connection with such refinancing and by an amount equal to any existing commitments unutilized thereunder and the direct or any contingent obligor with respect thereto is not changed, as a result of or in connection with such refinancing, refunding, renewal or extension; and, still further, that the terms relating to principal amount, amortization, maturity, collateral (if any) and subordination, standstill and related terms (if any), and other material terms taken as a whole, of any such refinancing, refunding, renewing or extending Indebtedness, and of any agreement entered into and of any instrument issued in connection therewith, are no less favorable in any material respect to the Loan Parties or the Lenders than the terms of any agreement or instrument governing the Indebtedness being refinanced, refunded, renewed or extended and the interest rate applicable to any such refinancing, refunding, renewing or extending Indebtedness does not exceed the then applicable market interest rate;

(c) Indebtedness (i) in respect of Capitalized Leases, Synthetic Lease Obligations and purchase money obligations for fixed or capital assets within the limitations set forth in Section 7.01(i) or (ii) in respect of any repo transaction with respect to Indebtedness of an Excluded Subsidiary; provided, however, that the aggregate principal amount of all Indebtedness of the Loan Parties incurred (1) in reliance on the foregoing sub-clause (c)(i) and clause (p) below at any time outstanding shall not exceed $80,000,000 and (2) in reliance on the foregoing sub-clause (c)(ii) at any time outstanding shall not exceed an amount equal to $150,000,000 minus the amount of Indebtedness outstanding pursuant to the foregoing sub-clause (c)(i) and clause (p) below;

(d) unsecured Indebtedness of a Subsidiary of the Borrower owed to the Borrower or a Subsidiary of the Borrower, which Indebtedness shall (i) to the extent required by the Administrative Agent, be evidenced by promissory notes which shall be pledged to the Collateral Agent as Collateral for the Secured Obligations in accordance with the terms of the Security Agreement, (ii) be on terms (including subordination terms) reasonably acceptable to the Administrative Agent and (iii) be otherwise permitted under the provisions of Section 7.03 (“Intercompany Debt”);

(e) Guarantees of the Borrower or any Subsidiary thereof in respect of Indebtedness otherwise permitted hereunder of the Borrower or any Guarantor;

(f) obligations (contingent or otherwise) existing or arising under any Swap Contract; provided that, except with respect to obligations under Permitted Call Spread Transactions (or any option, warrant or right to purchase comprising a portion thereof), (i) such obligations are (or were) entered into by such Person in the ordinary course of business for the purpose of directly mitigating risks associated with fluctuations in interest rates or foreign exchange rates and not for speculative purposes and (ii) such Swap Contract does not contain any provision exonerating the non-defaulting party from its obligation to make payments on outstanding transactions to the defaulting party;

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(g) (i) any Indebtedness of an Excluded Subsidiary described in clause (a) of the definition thereof and (ii) any Indebtedness of an Excluded Subsidiary described in clauses (b), (c) or (d) of the definition thereof arising from any Permitted Asset Financing Transactions;

(h) existing vehicle financing and other Indebtedness incurred for the acquisition or lease of vehicles or computer systems (so long as the amount of the Indebtedness does not exceed the purchase price of the vehicles or computer systems purchased with the proceeds thereof and sole recourse with respect to such Indebtedness is the vehicle or computer systems purchased with the proceeds thereof) and any refinancing of such other Indebtedness (so long as the amount of the Indebtedness is not increased in connection with such refinancing);

(i) any Loan Party’s Limited Recourse Obligations;

(j) (i) vendor financing for the acquisition of Inventory incurred in the ordinary course of the Borrower or any of its Subsidiaries’ business and secured solely by the Inventory purchased with the proceeds thereof and (ii) any Supply Chain Financing;

(k) obligations of reimbursement owed to the issuers of surety bonds (including, without limitation, payment and performance bonds, operation and maintenance bonds, contractor license bonds, bid bonds, energy broker bonds, prevailing wage bonds, sweepstake bonds, permit bonds, electrical license bonds, notary public bonds and other similar bonds) to the extent such surety bonds are procured in the ordinary course of business;

(l) Indebtedness evidenced by warrants issued by the Borrower in connection with its Equity Interests and stock options in the Borrower, in each case issued in the ordinary course of business, so long as such Indebtedness is not for borrowed money;

(m) Indebtedness incurred in accordance with the applicable Tax Equity Documents in the ordinary course of business;

(n) Convertible Debt; provided, however, that (i) the maturity date for any such Convertible Debt shall occur after the Maturity Date, (ii) such Convertible Debt does not require any scheduled amortization or other required payment of principal prior to, and does not permit the Borrower or any of its Subsidiaries to elect optional redemption that would be settled prior to the date that is six months after the Maturity Date in effect as the time of issuance of such Convertible Debt (it being understood that neither (x) any provision requiring an offer to purchase such Convertible Debt as a result of a Change of Control or fundamental change nor (y) any conversion of such Convertible Debt in accordance with the terms thereof shall, in either case, violate this clause (ii)), (iii) no Subsidiary of Sunrun guarantees the payment of debt service for such Convertible Debt, (iv) all financial covenants in Section 7.11 would be satisfied on a Pro Forma Basis on the date of issuance of any such Convertible Debt, after giving effect to the issuance of such Convertible Debt, (v) the aggregate principal amount of all Indebtedness of the Loan Parties incurred in reliance on this clause (n) at any time outstanding shall not exceed $500,000,000, and (vi) both immediately prior to and after giving effect to the issuance of such Convertible Debt, no Default or Event of Default shall exist or result therefrom;

(o) any arm’s length equipment or inventory purchase agreement entered into by any Loan Party, as buyer, with a Person other than an Affiliate, as seller, irrespective of whether or not such agreement is used to secure any Indebtedness of such Person; and

(p) other unsecured Indebtedness not contemplated by the above provisions, together with the aggregate principal amount of all Indebtedness incurred in reliance on clause (c)(i)

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above at any time outstanding, in an aggregate principal amount not to exceed $80,000,000 at any time outstanding.

Section 7.03 Investments.

Make or hold any Investments, except:

(a) Investments held by the Borrower and its Subsidiaries (i) in the form of cash or Cash Equivalents, and (ii) pursuant to the investment policy of the Borrower;

(b) (i) Investments by the Borrower and its Subsidiaries in their respective Subsidiaries outstanding on the Closing Date, (ii) Investments by the Borrower and its Subsidiaries in Loan Parties, (iii) Investments by Excluded Subsidiaries in other Excluded Subsidiaries that are in the same chain of ownership and (iv) the contribution of any Excluded Subsidiary to any other Excluded Subsidiary or the indebtedness of any Excluded Subsidiary to another Excluded Subsidiary;

(c) Investments consisting of extensions of credit in the nature of accounts receivable or notes receivable arising from the grant of trade credit in the ordinary course of business, and Investments received in satisfaction or partial satisfaction thereof from financially troubled account debtors to the extent reasonably necessary in order to prevent or limit loss;

(d) Guarantees and Limited Recourse Obligations permitted by Section 7.02 or any payments in respect of an amount that would constitute a Limited Recourse Obligation under clause (e) of the definition of “Limited Recourse Obligations” if a Loan Party were obligated to make the payment;

(e) Investments existing on the Closing Date (other than those referred to in Section 7.03(b)(i)) and set forth on Schedule 7.03;

(f) Permitted Acquisitions (other than of CFCs and Subsidiaries held directly or indirectly by a CFC which Investments are covered by Section 7.03(b)(iv));

(g) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of suppliers and customers and in settlement of delinquent obligations of, and other disputes with, customers and suppliers arising in the ordinary course of business;

(h) Investments (x) in Excluded Subsidiaries or in Tax Equity Investors that would meet the requirements of clause (b) of the “Excluded Subsidiaries” definition if such Tax Equity Investors were deemed Excluded Subsidiaries (including any subsidiaries of such Tax Equity Investors created in connection with any tax equity transaction), in each case, in accordance with the applicable Permitted Asset Financing Documents (including the direct or indirect funding of any exercise of a purchase option with respect to the interests of a Cash Equity Investor in the related Cash Equity Partnership pursuant to the applicable Cash Equity Documents or a Tax Equity Investor in the related Tax Equity Partnership pursuant to the applicable Tax Equity Documents, as applicable) or (y) in Excluded Subsidiaries of Systems which are in operation as collateral to secure accounts receivable financing in which the net proceeds (after deduction of reasonable fees and expenses) are distributed to any Loan Party;

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(i) Investments made with proceeds from substantially concurrent issuances of new Equity Interests in Sunrun in an aggregate amount not to exceed [***] and (ii) Investments of cash into the Specified Entity in an aggregate amount not to exceed [***];

(j) so long as no Default or Borrowing Base Deficiency shall have occurred and be continuing or would result therefrom, Investments at any time in an amount not to exceed the excess of Current Unencumbered Liquidity over Total Outstandings at such time;

(k) (i) Investments in the form of procuring the issuance of any Letters of Credit for the benefit of any Excluded Subsidiary to support payment of a Limited Recourse Obligation or an obligation that would constitute a Limited Recourse Obligation if undertaken directly by a Loan Party, and (ii) the payment of the amounts due and owing hereunder in respect of any such Letters of Credit;

(l) so long as no Default or Borrowing Base Deficiency shall have occurred and be continuing or would result therefrom, Investments in Excluded Subsidiaries, not exceeding [***], made solely for the purpose of paying in full the amounts outstanding under that certain Loan Agreement, dated as of May 27, 2020, by and among Vivint Solar Financing Holdings 2 Borrower, LLC, the financial institutions party thereto from time to time as Lenders, and BID Administrator LLC, as administrative agent and as collateral agent, provided that (i) no Default or Event of Default shall then exist or would result therefrom and (ii) the Loan Parties shall demonstrate to the reasonable satisfaction of the Administrative Agent that, after giving effect to such Investment on a Pro Forma Basis, the Loan Parties are in compliance with (x) each of the financial covenants set forth in Section 7.11 and (y) the most recently delivered Borrowing Base Certificate;

(m) the purchase by Sunrun of any Permitted Call Spread Transaction (or any option comprising a portion thereof) and the exercise of its rights and the performance of its obligations thereunder in accordance with its terms;

(n) the payment by a Loan Party of any swap breakage in connection with a full or partial refinancing of a Permitted Asset Financing Transaction; and

(o) other Investments not contemplated by the above provisions not exceeding [***] in the aggregate invested from the Closing Date.

If an Investment in a Subsidiary (the “Target Subsidiary”) is permitted pursuant to this Section 7.03, the Investment in a Subsidiary that is a direct or indirect parent of the Target Subsidiary in order to pass through such Investment to the Target Subsidiary shall also be an Investment that is permitted under this Section 7.03.

**Section 7.04 Fundamental Changes.**

Merge, dissolve, liquidate, consolidate with or into another Person, Dispose of (whether in one transaction or in a series of transactions) all or substantially all of its assets (whether now owned or hereafter acquired) to or in favor of any Person, or reorganize in a foreign jurisdiction, except:

(a) any Loan Party may Dispose of all or substantially all of its assets (upon voluntary liquidation or otherwise) to the Borrower or to another Loan Party, so long as no Default exists or would result therefrom;

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any Excluded Subsidiary may so long as no Default exists or would result therefrom, merge into or consolidate with any other Person or permit any other Person to merge into or consolidate with it, in each case so long as the Permitted Asset Financing Transactions of such Excluded Subsidiary are not included in the calculation of Available Take-Out and the exclusion of such Permitted Asset Financing Transactions from the calculation of Available Take-Out does not result in a Borrowing Base Deficiency;

in connection with any Permitted Acquisition, any Subsidiary of the Borrower may merge into or consolidate with any other Person or permit any other Person to merge into or consolidate with it; provided that (i) the Person surviving such merger shall be a wholly-owned Subsidiary of the Borrower and (ii) in the case of any such merger to which any Loan Party (other than the Borrower) is a party, such Loan Party is the surviving Person;

so long as no Default has occurred and is continuing or would result therefrom, each of the Borrower and any other Loan Party may merge into or consolidate with any other Person or permit any other Person to merge into or consolidate with it; provided, however, that in each case, immediately after giving effect thereto (i) in the case of any such merger to which the Borrower is a party, the Borrower is the surviving Person and (ii) in the case of any such merger to which any Loan Party (other than the Borrower) is a party, such Loan Party is the surviving Person; and

Dispositions permitted by Section 7.05 (other than Section 7.05(d)(i)).

Section 7.05 Dispositions.

Make any Disposition or enter into any agreement to make any Disposition, except:

(a) Permitted Dispositions;

(b) Dispositions of obsolete or worn out property, whether now owned or hereafter acquired, in the ordinary course of business;

(c) Dispositions of equipment or real property to the extent that (i) such property is exchanged for credit against the purchase price of similar replacement property or (ii) the proceeds of such Disposition are reasonably promptly applied to the purchase price of such replacement property;

(d) Dispositions permitted by (i) Section 7.04 or (ii) Section 7.13;

(e) Dispositions of Equity Interests in, or assets of, Excluded Subsidiaries so long as (i) such Disposition does not result in a Borrowing Base Deficiency and in the event that such Disposition represents more than 5% of the aggregate amount of Borrowing Base as set forth on the most recent Borrowing Base Certificate, at least five (5) Business Days prior to the effectiveness of such Disposition, the Borrower provides the Administrative Agent a pro forma Borrowing Base Certificate giving effect to such Disposition, (ii) the consideration received for any Disposition to a third party of (x) any Equity Interests in an Excluded Subsidiary or (y) all or substantially all of the assets of an Excluded Subsidiary, in each case, consists of cash or Cash Equivalents, and (iii) the net proceeds of any consideration described in clause (ii) (after deduction of reasonable fees and expenses), if any, are distributed directly to the Borrower;

(f) other Dispositions so long as (i) the consideration paid in connection therewith shall be cash or Cash Equivalents paid contemporaneously with consummation of the transaction

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and shall be in an amount not less than the fair market value of the property disposed of, (ii) such transaction does not involve the Disposition of Equity Interests in any Subsidiary, (iii) such transaction does not involve a Disposition of receivables other than receivables owned by or attributable to other property concurrently being disposed of in a transaction otherwise permitted under this Section, and (iv) the aggregate net book value of all of the assets sold or otherwise disposed of by the Loan Parties and their Subsidiaries in all such transactions in any fiscal year of the Borrower shall not exceed [***];

(g) Disposition of Equity Interests in, or assets of, an Excluded Subsidiary as a result of a foreclosure of a Permitted Lien in connection with a Permitted Asset Financing Transaction so long as such foreclosure does not result in a Borrowing Base Deficiency;

(h) Dispositions made in the ordinary course of business in accordance with the applicable Permitted Asset Financing Transaction Documents;

(i) the unwinding of Swap Contracts of any Excluded Subsidiary or any Swap Contract otherwise permitted hereunder or any Permitted Call Spread Transaction permitted hereunder; and

(j) Dispositions of Indebtedness of an Excluded Subsidiary.

Section 7.06 Restricted Payments

Declare or make, directly or indirectly, any Restricted Payment, or incur any obligation (contingent or otherwise) to do so, except:

(a) each Subsidiary may make Restricted Payments to any Person that owns Equity Interests in such Subsidiary, ratably according to their respective holdings of the type of Equity Interest in respect of which such Restricted Payment is being made;

(b) the Borrower and each Subsidiary thereof may declare and make dividend payments or other distributions payable solely in common Equity Interests of such Person;

(c) so long as no Default or Borrowing Base Deficiency shall have occurred and be continuing or would result therefrom, the exercise of stock repurchase rights of the Borrower in connection with Borrower’s right of first refusal as set forth in Borrower’s stock option plan;

(d) so long as no Default or Borrowing Base Deficiency shall have occurred and be continuing or would result therefrom, the Borrower may make other Restricted Payments (i) at any time in an amount not to exceed the excess of Current Unencumbered Liquidity over Total Outstandings at such time and (ii) otherwise in an aggregate amount during any fiscal year of the Borrower not to exceed [***] (with unused amounts in any fiscal year being carried over to succeeding fiscal years subject to a maximum of [***] in any fiscal year); provided that for purposes of determining the amount of Restricted Payments that may be made pursuant to clause (ii) of this Section 7.06(d), Restricted Payments made in reliance on clause (i) of this Section 7.06(d) shall be disregarded;

(e) Borrower may make Restricted Payments to redeem any of its Equity Interests for another class of its Equity Interests or rights to acquire its Equity Interests or with proceeds from substantially concurrent equity contributions by holders of Sunrun’s Equity Interests or issuances of new Equity Interests of Sunrun; provided that the only consideration paid for any such

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redemption is Equity Interests of Sunrun or the proceeds of any substantially concurrent equity contribution or issuance of Equity Interests of Sunrun;

(f) Borrower may make anyRestricted Payment that has been declared by it, so long as (A) such Restricted Payment would be otherwise permitted under clause (d) of this Section 7.06 at the time so declared and (B) such Restricted Payment is made within 60 days of such declaration;

(g) Borrower may (i) repurchase fractional shares of its Equity Interests arising out of stock dividends, splits or combinations, business combinations or conversions of convertible securities, exercises of warrants or options, or settlements of restricted stock units or (ii) “net exercise” or “net share settle” warrants or options;

(h) Borrower may pay the premium in respect of, make any payments of cash or deliveries in shares of Common Stock (or other securities or property following a merger event, reclassification or other change of the Common Stock) and cash in lieu of fractional shares required by, and otherwise perform its obligations under, any Permitted Call Spread Transaction in accordance with its terms (or any option, warrant or right to purchase comprising a portion thereof), including in connection with any settlement, unwind or termination thereof; and

(i) the Borrower or any other Loan Party may pay earnouts in connection with a Permitted Acquisition; provided, that, at any time a Default or Borrowing Base Deficiency exists, the Borrower or any other Loan Party may only pay earnouts in Equity Interests of the Borrower; provided, further, that, a Default set forth in Section 8.01(k) shall not be existing after giving effect to the payment of any such earnout in Equity Interests.

Section 7.07 Change in Nature of Business.

Except for any Excluded Subsidiary, engage in any material line of business substantially different from those lines of business conducted by the Borrower and its Subsidiaries on the Closing Date or any business substantially related or incidental thereto which could reasonably be expected to have a Material Adverse Effect.

Section 7.08 Transactions with Affiliates.

Enter into or permit to exist any transaction or series of transactions with any officer, director or Affiliate of such Person other than (a) advances of working capital to any Loan Party, (b) transfers of cash and assets to any Loan Party, (c) intercompany transactions expressly permitted by this Agreement, (d) normal and reasonable compensation (including grant of stock options in accordance with Borrower’s stock option plan) and reimbursement of expenses of officers and directors, (e) except as otherwise specifically limited in this Agreement, other transactions which are entered into in the ordinary course of such Person’s business (including Dispositions of Projects permitted pursuant to Section 7.05(h)), (f) transactions contemplated by any Permitted Asset Financing Transaction Documents, (g) transactions contemplated by any management, services, operation and/or maintenance agreement with respect to an Excluded Subsidiary and (h) except as otherwise specifically limited in this Agreement, any other transaction so long as such transaction is fair to, and in the best interest of, the Borrower, in each case, on fair and reasonable terms and conditions substantially as favorable to such Person as would be obtainable by it in a comparable arm’s length transaction with a Person other than an officer, director or Affiliate, in each case as reasonably determined by the Loan Parties.

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Section 7.09 Burdensome Agreements.

Enter into, or permit to exist, any Contractual Obligation (except for this Agreement and the other Loan Documents) that (a) restricts the ability of any such Loan Party or its Subsidiaries (other than Excluded Subsidiaries) to (i) act as a Loan Party, (ii) make Restricted Payments to any Loan Party, (iii) pay any Indebtedness or other obligation owed to any Loan Party, (iv) make loans or advances to any Loan Party, or (v) create any Lien upon any of their properties or assets, whether now owned or hereafter acquired, except in the case of clause (a)(v) only, for any document or instrument governing Indebtedness incurred pursuant to Section 7.02(c), provided that any such restriction contained therein relates only to the asset or assets constructed, financed or acquired in connection therewith or that is subject to a repo transaction permitted under Section 7.02(c)(ii); and except that:

(1) the foregoing shall not apply to restrictions and conditions imposed by law or by this Agreement or any other Loan Document,

(2) the foregoing shall not apply to customary restrictions and conditions contained in agreements relating to the sale of a Subsidiary or other assets pending such sale; provided that such restrictions and conditions apply only to the Subsidiary or assets to be sold, pending the closing of the sale of the Subsidiary or assets to be sold, and such sale is not prohibited hereunder,

(3) the foregoing shall not apply to any agreement or restriction or condition in effect at the time any Person becomes a Subsidiary of the Borrower via an acquisition from an unrelated third party permitted under Section 7.03(f), so long as such agreement was not entered into solely in contemplation of such Person becoming a Subsidiary of the Borrower, and

(4) the foregoing shall not apply to restrictions on cash or other deposits (including escrowed funds) imposed under contracts entered into in the ordinary course of business of the Borrower or its Subsidiary;

or (b) requires the grant of any Lien on property for any obligation if a Lien on such property is given as security for the Secured Obligations.

Section 7.10 Margin Stock.

Use the proceeds of any Credit Extension, whether directly or indirectly, and whether immediately, incidentally or ultimately, to purchase or carry margin stock (within the meaning of Regulations T, U or X of the FRB) or to extend credit to others for the purpose of purchasing or carrying margin stock or to refund Indebtedness originally incurred for such purpose, in each case in violation of Regulation U of the FRB.

Section 7.11 Financial Covenants.

(a) Current Ratio. Commencing with the fiscal quarter ending March 31, 2022, and as of the last day of any fiscal quarter thereafter, permit the Current Ratio to be less than 1.00:1.00.

(b) Minimum Interest Coverage Ratio. Commencing with the Measurement Period ending March 31, 2022, and as of the last day of any Measurement Period thereafter, permit the Interest Coverage Ratio for such Measurement Period to be below 4.50:1.00.

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(c) **Quarter-End Liquidity.** For each fiscal quarter commencing with the fiscal quarter ending March 31, 2022, permit the Quarter-End Liquidity with respect to such fiscal quarter to be less than $35,000,000 measured as of the last day of each such fiscal quarter.

(d) **Leverage Ratio.** Commencing with the Measurement Period ending March 31, 2022 and as of the last day of each Measurement Period thereafter, permit the Leverage Ratio for such Measurement Period to exceed 5.50:1.00.

Section 7.12 **Amendments of Organization Documents and Material Contracts; Fiscal Year; Legal Name, State of Formation; Form of Entity and Accounting Changes.**

(a) Amend any Organization Documents or Material Contracts of any Loan Party in a manner that could reasonably be expected to lead to a Material Adverse Effect;

(b) change the fiscal year of Sunrun or any of its Subsidiaries;

(c) without providing thirty (30) days prior written notice to the Administrative Agent (or such extended period of time as agreed to by the Administrative Agent), change the name, state of formation, form of entity or principal place of business of any Loan Party; or

(d) make any change in accounting policies or reporting practices of Sunrun or any of its Subsidiaries, except in accordance with GAAP or as required by the Loan Parties’ external auditors.

Section 7.13 **Sale and Leaseback Transactions.**

With respect to any Loan Party, enter into any Sale and Leaseback Transaction other than (i) a Sale and Leaseback Transaction of vehicles pursuant to any existing vehicle financing, (ii) a Sale and Leaseback Transaction of office equipment and furnishings and computer equipment in the ordinary course of business, and (iii) a Sale and Leaseback Transaction for the sale of Projects in the ordinary course of the Loan Parties’ business pursuant to a Sale-Leaseback Structure.

Section 7.14 **Disqualified Person.**

Permit the Borrower or any of its Subsidiaries that directly or indirectly holds an interest in an Project for which an ITC or accelerated depreciation is included in the Borrowing Base to become a Disqualified Person, or permit any Project for which an ITC or accelerated depreciation is included in the Borrowing Base to be used within the meaning of Section 168(h) or Section 50 of the Code by a person described in Section 168(h)(2) of the Code (including by virtue of Section 168(h)(6)(F) of the Code) or Section 50(b)(3) or (4) of the Code.

Section 7.15 **Amendments to Host Customer Agreements, Back-Log Spreadsheets or Take-Out Spreadsheets.**

Make any amendments to its forms of Host Customer Agreements as disclosed to the Administrative Agent on the Closing Date, except to the extent that such amendments do not contravene applicable consumer law or could not reasonably be expected to have a Material Adverse Effect, or any amendments to any Back-Log Spreadsheet or Take-Out Spreadsheet delivered with any Borrowing Base Certificate, except to the extent that such amendments could not reasonably be expected to have a Material Adverse Effect.

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**Section 7.16 Sanctions: Anti-Corruption Use of Proceeds.**

(a) Use the proceeds of the Revolving Loans or use the Letters of Credit, or lend, contribute or otherwise make available such proceeds to any Subsidiary, joint venture partner or other Person, (i) in furtherance of an offer payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of the FCPA or any other applicable anti-corruption law, or (ii) (A) to fund any activities or business of or with any Person, or in any in any country or territory, that, at the time of such funding, is the subject of, or (B) in any other manner that would result in a violation of Sanctions by any Person (including any Person participating in the Revolving Loans or Letters of Credit, whether as Administrative Agent, Arranger, L/C Issuer, Lender, underwriter, advisor, investor, or otherwise).

(b) Knowingly fund all or part of any repayment or reimbursement of the Obligations out of proceeds derived from any transaction or activity involving any Person, or in any country or territory, that, at the time of receipt of such proceeds by the Borrower or any of its Subsidiaries, is the subject of Sanctions.

**Section 7.17 Partnerships and Joint Ventures.**

Become, or cause or permit any Loan Party to become, a general or limited partner in any partnership or a joint venturer in any joint venture other than an Excluded Subsidiary.

**Section 7.18 ERISA.**

Sponsor, maintain, participate in, contribute to, or have any unsatisfied obligation to contribute to, or liability under, any active or terminated Pension Plan or Multiemployer Plan.

**Section 7.19 Secured Hedge Agreements.**

Enter into any Secured Hedge Agreements unless reasonably satisfactory to, and approved by, the Administrative Agent.

**ARTICLE VIII EVENTS OF DEFAULT AND REMEDIES**

**Section 8.01 Events of Default.**

Any of the following shall constitute an “Event of Default”:

(a) **Non-Payment.** The Borrower or any other Loan Party fails to pay (i) when and as required to be paid herein, any amount of principal of any Loan or any L/C Obligation or deposit any funds as Cash Collateral in respect of L/C Obligations, or (ii) within three (3) days after the same becomes due, any interest on any Loan or on any L/C Obligation, or any fee due hereunder, or (iii) within five (5) days after the same becomes due, any other amount payable hereunder or under any other Loan Document; or

(b) **Specific Covenants.** (i) Any Loan Party fails to perform or observe any term, covenant or agreement contained in any of Section 6.01, 6.02, 6.03(a), 6.05, 6.14(a)(ii) or
6.14(d)(ii), Article VII or Article X or (ii) any of the Loan Parties fails to perform or observe any term, covenant or agreement contained in the Security Agreement; or

(c) **Other Defaults.** Any Loan Party fails to perform or observe any other covenant or agreement (not specified in Section 8.01(a) or (b) above) contained in any Loan Document on its part to be performed or observed and such failure continues for thirty (30) days; or

(d) **Representations and Warranties.** Any representation, warranty, certification or statement of fact made or deemed made by or on behalf of the Borrower or any other Loan Party herein, in any other Loan Document, or in any document delivered in connection herewith or therewith shall be incorrect or misleading when made or deemed made; or

(e) **Cross-Default.** (i) Any Loan Party (A) fails to make any payment when due (whether by scheduled maturity, required prepayment, acceleration, demand, or otherwise) in respect of any Indebtedness or Guarantee (other than Indebtedness hereunder and Indebtedness under Swap Contracts) having an aggregate principal amount (including undrawn committed or available amounts and including amounts owing to all creditors under any combined or syndicated credit arrangement) of more than the Threshold Amount, or (B) fails to observe or perform any other agreement or condition relating to any such Indebtedness or Guarantee or contained in any instrument or agreement evidencing, securing or relating thereto, in each case having an aggregate principal amount (including undrawn committed or available amounts and including amounts owing to all creditors under any combined or syndicated credit arrangement) of more than the Threshold Amount or any other event occurs, the effect of which default or other event is to cause, or to permit the holder or holders of such Indebtedness or the beneficiary or beneficiaries of such Guarantee (or a trustee or agent on behalf of such holder or holders or beneficiary or beneficiaries) to cause, with the giving of notice if required, such Indebtedness to be demanded or to become due or to be repurchased, prepaid, defeased or redeemed (automatically or otherwise), or an offer to repurchase, prepay, defease or redeem such Indebtedness to be made, prior to its stated maturity, or such Guarantee to become payable or Cash Collateral in respect thereof to be demanded; (ii) there occurs under any Swap Contract an Early Termination Date (as defined in such Swap Contract) resulting from (A) any event of default under such Swap Contract as to which a Loan Party thereof is the Defaulting Party (as defined in such Swap Contract) or (B) any Termination Event (as so defined) under such Swap Contract as to which a Loan Party thereof is an Affected Party (as so defined) and, in either event, the Swap Termination Value owed and unpaid by such Loan Party as a result thereof is greater than the Threshold Amount; provided, that this clause (e) shall not apply to (x) any repurchase, prepayment, defeasance, redemption, conversion or settlement with respect to any Convertible Debt permitted under Section 7.02(n) pursuant to its terms, or any event that permits such repurchase, prepayment, defeasance, redemption, conversion or settlement, unless such repurchase, prepayment, defeasance, redemption, conversion or settlement, or such relevant event, results from a default thereunder or an event of the type that constitutes an Event of Default or (y) any settlement, early payment requirement or unwinding or termination with respect to any Permitted Call Spread Transaction; or

(f) **Insolvency Proceedings, Etc.** Any Loan Party institutes or consents to the institution of any proceeding under any Debtor Relief Law, or makes an assignment for the benefit of creditors; or applies for or consents to the appointment of any receiver, trustee, custodian, conservator, liquidator, rehabilitator or similar officer for it or for all or any material part of its property; or any receiver, trustee, custodian, conservator, liquidator, rehabilitator or similar officer is appointed without the application or consent of such Person and the appointment continues undischarged or unstayed for sixty (60) calendar days; or any proceeding under any Debtor Relief Law relating to any such Person or to all or any material part of its

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property is instituted without the consent of such Person and continues undismissed or unstayed for sixty (60) calendar days, or an order for relief is entered in any such proceeding; or

(g) **Inability to Pay Debts; Attachment.** (i) Any Loan Party becomes unable or admits in writing its inability or fails generally to pay its debts as they become due, or (ii) any writ or warrant of attachment or execution or similar process is issued or levied against all or any material part of the property of any such Person and is not released, vacated or fully bonded within thirty (30) days after its issue or levy; or

(h) **Judgments.** There is entered against any Loan Party (i) one or more final judgments or orders for the payment of money in an aggregate amount (as to all such judgments and orders) exceeding the Threshold Amount (to the extent not covered by independent third-party insurance as to which the insurer is rated at least “A” by A.M. Best Company, has been notified of the potential claim and does not dispute coverage), or (ii) any one or more non-monetary final judgments that have, or could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect and, in either case, (A) enforcement proceedings are commenced by any creditor upon such judgment or order, or (B) there is a period of ten (10) consecutive days during which such judgment is not satisfied or a stay of enforcement of such judgment, by reason of a pending appeal or otherwise, is not in effect; or

(i) **ERISA.** (i) An ERISA Event occurs with respect to a Pension Plan or Multiemployer Plan which has resulted or could reasonably be expected to result in liability of any Loan Party under Title IV of ERISA to the Pension Plan, Multiemployer Plan or the PBGC in an aggregate amount in excess of the Threshold Amount, or (ii) the Borrower or any ERISA Affiliate fails to pay when due, after the expiration of any applicable grace period, any installment payment with respect to its withdrawal liability under Section 4201 of ERISA under a Multiemployer Plan in an aggregate amount in excess of the Threshold Amount; or

(j) **Invalidity of Loan Documents.** Any provision of any Loan Document, at any time after its execution and delivery and for any reason other than as expressly permitted hereunder or thereunder or satisfaction in full of all Obligations arising under the Loan Documents, ceases to be in full force and effect; or any Loan Party or any other Person contests in any manner the validity or enforceability of any provision of any Loan Document; or any Loan Party denies that it has any or further liability or obligation under any provision of any Loan Document, or purports to revoke, terminate or rescind any provision of any Loan Document; or

(k) **Change of Control.** There occurs any Change of Control of the Borrower (except in connection with a Public Offering of the Borrower); or

(l) **Uninsured Loss.** Any uninsured damage to or theft or destruction of any assets of the Loan Parties or any of their Subsidiaries shall occur that is in excess of $20,000,000 (excluding customary deductible thresholds established in accordance with historical past practices); or

(m) **Subordination.** The validity, binding effect or enforceability of any subordination provisions relating to any Subordinated Debt of any Loan Party shall be contested by any Person party thereto (other than any Lender, the Administrative Agent or the Collateral Agent), or such subordination provisions shall fail to be enforceable by the Administrative Agent, the Collateral Agent and the Lenders in accordance with the terms thereof, or the Indebtedness shall for any reason not have the priority contemplated by this Agreement or such subordination provisions; or
Limited Recourse Obligations. In the event that any Loan Party is required to make a payment or contribution in connection with any Limited Recourse Obligation and after giving effect to any such payment or contribution on a Pro Forma Basis, (i) the Loan Parties shall fail to be in compliance with each of the financial covenants set forth in Section 7.11 or (ii) a Borrowing Base Deficiency shall exist.

Without limiting the provisions of Article IX, if a Default shall have occurred under the Loan Documents, then such Default will continue to exist until it either is cured (to the extent specifically permitted) in accordance with the Loan Documents or is otherwise expressly waived by Administrative Agent (with the approval of requisite Appropriate Lenders (in their sole discretion) as determined in accordance with Section 11.01; and once an Event of Default occurs under the Loan Documents, then such Event of Default will continue to exist until it is expressly waived by the requisite Appropriate Lenders or by the Administrative Agent with the approval of the requisite Appropriate Lenders, as required hereunder in Section 11.01.

Section 8.02 Remedies upon Event of Default.

If any Event of Default occurs and is continuing, the Administrative Agent shall, at the request of, or may, with the consent of, the Required Lenders, take any or all of the following actions:

(a) declare the Commitment of each Lender to make Loans and any obligation of the L/C Issuer to make L/C Credit Extensions to be terminated, whereupon such commitments and obligation shall be terminated;

(b) declare the unpaid principal amount of all outstanding Loans, all interest accrued and unpaid thereon, and all other amounts owing or payable hereunder or under any other Loan Document to be immediately due and payable, without presentment, demand, protest or other notice of any kind, all of which are hereby expressly waived by the Loan Parties;

(c) require that the Loan Parties Cash Collateralize the L/C Obligations (in an amount equal to the Minimum Collateral Amount with respect thereto); and

(d) exercise on behalf of itself, the Lenders and the L/C Issuer all rights and remedies available to it, the Lenders and the L/C Issuer under the Loan Documents or applicable Law or equity;

provided, however, that upon the occurrence of an actual or deemed entry of an order for relief with respect to the Loan Parties under the Bankruptcy Code of the United States, the obligation of each Lender to make Loans and any obligation of the L/C Issuer to make L/C Credit Extensions shall automatically terminate, the unpaid principal amount of all outstanding Loans and all interest and other amounts as aforesaid shall automatically become due and payable, and the obligation of the Loan Parties to Cash Collateralize the L/C Obligations as aforesaid shall automatically become effective, in each case without further act of the Administrative Agent or any Lender.

For the avoidance of doubt, if any Event of Default occurs and is continuing, the Collateral Agent may take any or all of the remedial actions described in the Collateral Documents.

Section 8.03 Application of Funds.

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After the exercise of remedies provided for in Section 8.02 (or after the Loans have automatically become immediately due and payable and the L/C Obligations have automatically been required to be Cash Collateralized as set forth in the proviso to Section 8.02) or if at any time insufficient funds are received by and available to the Administrative Agent to pay fully all Secured Obligations then due hereunder, any amounts received on account of the Secured Obligations shall, subject to the provisions of Sections 2.13 and 2.14, be applied by the Administrative Agent in the following order:

First, to payment of that portion of the Secured Obligations constituting fees, indemnities, expenses and other amounts (including fees, charges and disbursements of counsel to the Administrative Agent and amounts payable under Article III) payable to the Administrative Agent in its capacity as such;

Second, to payment of that portion of the Secured Obligations constituting fees, indemnities and other amounts (other than principal, interest and Letter of Credit Fees) payable to the Lenders and the L/C Issuer (including fees, charges and disbursements of counsel to the respective Lenders and the L/C Issuer arising under the Loan Documents and amounts payable under Article III, ratably among them in proportion to the respective amounts described in this clause Second payable to them;

Third, to payment of that portion of the Secured Obligations constituting accrued and unpaid Letter of Credit Fees and interest on the Loans, L/C Borrowings and other Secured Obligations arising under the Loan Documents, ratably among the Lenders and the L/C Issuer in proportion to the respective amounts described in this clause Third payable to them;

Fourth, to payment of that portion of the Secured Obligations constituting unpaid principal of the Loans, L/C Borrowings and Secured Obligations then owing under Secured Hedge Agreements and Secured Cash Management Agreements, ratably among the Lenders, the L/C Issuer, the Hedge Banks and the Cash Management Banks in proportion to the respective amounts described in this clause Fourth held by them;

Fifth, to the Administrative Agent for the account of the L/C Issuer, to Cash Collateralize that portion of L/C Obligations comprised of the aggregate undrawn amount of Letters of Credit to the extent not otherwise Cash Collateralized by the Loan Parties pursuant to Sections 2.03 and 2.13; and

Last, the balance, if any, after all of the Secured Obligations have been indefeasibly paid in full, to the Loan Parties or as otherwise required by Law.

Subject to Sections 2.03(c) and 2.13, amounts used to Cash Collateralize the aggregate undrawn amount of Letters of Credit pursuant to clause Fifth above shall be applied to satisfy drawings under such Letters of Credit as they occur. If any amount remains on deposit as Cash Collateral after all Letters of Credit have either been fully drawn or expired, such remaining amount shall be applied to the other Secured Obligations, if any, in the order set forth above. Excluded Swap Obligations with respect to any Guarantor shall not be paid with amounts received from such Guarantor or its assets, but appropriate adjustments shall be made with respect to payments from other Loan Parties to preserve the allocation to Secured Obligations otherwise set forth above in this Section.

Notwithstanding the foregoing, Secured Obligations arising under Secured Cash Management Agreements and Secured Hedge Agreements shall be excluded from the application described above if the Administrative Agent has not received a Secured Party Designation

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Notice, together with such supporting documentation as the Administrative Agent may request, from the applicable Cash Management Bank or Hedge Bank, as the case may be. Each Cash Management Bank or Hedge Bank not a party to this Agreement that has given the notice contemplated by the preceding sentence shall, by such notice, be deemed to have acknowledged and accepted the appointment of the Administrative Agent pursuant to the terms of Article IX for itself and its Affiliates as if a “Lender” party hereto.

ARTICLE IX
ADMINISTRATIVE AGENT; COLLATERAL AGENT

Section 9.01 Appointment and Authority.

Each of the Lenders and the L/C Issuer hereby irrevocably appoints, designates and authorizes KeyBank to act on its behalf as the Administrative Agent hereunder and under the other Loan Documents and authorizes the Administrative Agent to take such actions on its behalf and to exercise such powers as are delegated to the Administrative Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. Each of the Lenders, the Administrative Agent and the L/C Issuer hereby irrevocably appoints, designates and authorizes Silicon Valley Bank to act on its behalf as the Collateral Agent hereunder and under the other Loan Documents and authorizes the Collateral Agent to take such actions on its behalf and to exercise such powers as are delegated to the Collateral Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto. Without limiting the generality of the foregoing, each of the Administrative Agent and the Collateral Agent is hereby expressly authorized to (i) execute any and all documents (including releases) with respect to the Collateral and the rights of the Secured Parties with respect thereto, as contemplated by and in accordance with the provisions of this Agreement and the other Loan Documents and (ii) negotiate, enforce or the settle any claim, action or proceeding affecting the Lenders in their capacity as such, at the direction of the Required Lenders, which negotiation, enforcement or settlement will be binding upon each Lender. The provisions of this Article are solely for the benefit of the Administrative Agent, the Collateral Agent, the Lenders and the L/C Issuer, and neither the Borrower nor any other Loan Party shall have rights as a third party beneficiary of any of such provisions. It is understood and agreed that the use of the term “agent” herein or in any other Loan Documents (or any other similar term) with reference to the Administrative Agent or the Collateral Agent is not intended to connote any fiduciary or other implied (or express) obligations arising under agency doctrine of any applicable Law. Instead such term is used as a matter of market custom, and is intended to create or reflect only an administrative relationship between contracting parties.

Section 9.02 Rights as a Lender.

The Person serving as the Administrative Agent or the Collateral Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Administrative Agent or the Collateral Agent, and the term “Lender” or “Lenders” shall, unless otherwise expressly indicated or unless the context otherwise requires, include the Person serving as the Administrative Agent or the Collateral Agent hereunder in its individual capacity. Such Person and its Affiliates may accept deposits from, lend money to, own securities of, act as the financial advisor or in any other advisory capacity for and generally engage in any kind of banking, trust, financial, advisory, underwriting or other business with any Loan Party or any Subsidiary or other Affiliate thereof as if such Person were not the Administrative Agent or the Collateral Agent hereunder and without any

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duty to account therefor to the Lenders or to provide notice to or consent of the Lenders with respect thereto.

Section 9.03 Exculpatory Provisions

Neither the Administrative Agent nor the Collateral Agent shall have any duties or obligations except those expressly set forth herein and in the other Loan Documents, and its duties hereunder shall be administrative in nature. Without limiting the generality of the foregoing, none of the Administrative Agent, the Collateral Agent and their respective Related Parties:

(a) shall be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing;

(b) shall have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that the Administrative Agent or the Collateral Agent is required to exercise as directed in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be expressly provided for herein or in the other Loan Documents), provided that neither the Administrative Agent nor the Collateral Agent shall be required to take any action that, in its opinion or the opinion of its counsel, may expose the Administrative Agent or the Collateral Agent to liability or that is contrary to any Loan Document or applicable Law, including for the avoidance of doubt any action that may be in violation of the automatic stay under any Debtor Relief Law or that may effect a forfeiture, modification or termination of property of a Defaulting Lender in violation of any Debtor Relief Law;

(c) shall, except as expressly set forth herein and in the other Loan Documents, have any duty or responsibility to disclose, and shall be liable for the failure to disclose, any information relating to the Borrower or any of its Subsidiaries or Affiliates that is communicated to or obtained by the Person serving as the Administrative Agent or the Collateral Agent or any of its Affiliates in any capacity; and

(d) shall be liable for any action taken or not taken by it with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary under the circumstances as provided herein or in the other Loan Documents) or in the absence of its own gross negligence or willful misconduct.

None of the Administrative Agent, the Collateral Agent or any of their respective Related Parties shall be liable for any action taken or not taken by the Administrative Agent or the Collateral Agent under or in connection with this Agreement or any other Loan Document or the transactions contemplated hereby or thereby (i) with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary), or as the Administrative Agent or the Collateral Agent shall believe in good faith shall be necessary, under the circumstances as provided in Sections 11.01 and 8.02) or (ii) in the absence of its own gross negligence or willful misconduct as determined by a court of competent jurisdiction by final and nonappealable judgment. Any such action taken or failure to act pursuant to the foregoing shall be binding on all Lenders. Each of the Administrative Agent and the Collateral Agent shall be deemed not to have knowledge of any Default unless and until notice describing such Default is given in writing to the Administrative Agent or the Collateral Agent by the Borrower, a Lender or the L/C Issuer.

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None of the Administrative Agent, the Collateral Agent or any of their respective Related Parties shall be responsible for, or have any
duty or obligation to any Lender or any other Person to ascertain or inquire into (i) any statement, warranty or representation made in or in
connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder
or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or
conditions set forth herein or therein or the occurrence of any Default, (iv) the validity, enforceability, effectiveness or genuineness of this
Agreement, any other Loan Document or any other agreement, instrument or document, or the creation, perfection or priority of any Lien
purported to be created by the Collateral Documents, (v) the value or the sufficiency of any Collateral, or (vi) the satisfaction of any condition
set forth in Article IV or elsewhere herein or in any other Loan Document, other than to confirm receipt of items expressly required to be
delivered to the Administrative Agent or the Collateral Agent.

Section 9.04 Reliance by Administrative Agent and Collateral Agent.

Each of the Administrative Agent and the Collateral Agent shall be entitled to rely upon, and shall be fully protected in relying and shall
not incur any liability for relying upon, any notice, request, certificate, communication, consent, statement, instrument, document or other
writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have
been signed, sent or otherwise authenticated by the proper Person. Each of the Administrative Agent and the Collateral Agent also may rely
upon any statement made to it orally or by telephone and believed by it to have been made by the proper Person, and shall be fully protected in
relying and shall not incur any liability for relying thereon. In determining compliance with any condition hereunder to the making of a Loan,
or the issuance, extension, renewal or increase of a Letter of Credit, that by its terms must be fulfilled to the satisfaction of a Lender or the L/C
Issuer, the Administrative Agent may presume that such condition is satisfactory to such Lender or the L/C Issuer unless the Administrative
Agent shall have received notice to the contrary from such Lender or the L/C Issuer prior to the making of such Loan or the issuance of such
Letter of Credit. Each of the Administrative Agent and the Collateral Agent may consult with legal counsel (who may be counsel for the Loan
Parties), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance
with the advice of any such counsel, accountants or experts. For purposes of determining compliance with the conditions specified in
Section 4.01, each Lender that has signed this Agreement shall be deemed to have consented to, approved or accepted or to be satisfied with,
each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless the
Administrative Agent or the Collateral Agent shall have received notice from such Lender prior to the proposed Closing Date specifying its
objections.

Section 9.05 Delegation of Duties.

Each of the Administrative Agent and the Collateral Agent may perform any and all of its duties and exercise its rights and powers
hereunder or under any other Loan Document by or through any one or more sub-agents appointed by it. Each of the Administrative Agent, the
Collateral Agent and any such sub-agent may perform any and all of its duties and exercise its rights and powers by or through their respective
Related Parties. The exculpatory provisions of this Article shall apply to any such sub-agent and to the Related Parties of the Administrative
Agent and the Collateral Agent and any such sub-agent, and shall apply to their respective activities in connection with the syndication of the
Facility as well as activities as Administrative Agent or Collateral Agent. Neither the Administrative Agent nor the Collateral Agent shall be
responsible for the negligence or misconduct of any sub-agents except to the extent that a court

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of competent jurisdiction determines in a final and non-appealable judgment that the Administrative Agent or the Collateral Agent acted with
gross negligence or willful misconduct in the selection of such sub-agents.

Section 9.06 Resignation of Administrative Agent or Collateral Agent.

(a) Notice. Each of the Administrative Agent or the Collateral Agent may at any time give notice of its resignation to the Lenders,
the L/C Issuer and the Borrower. Upon receipt of any such notice of resignation, the Required Lenders shall have the right, in consultation with
the Borrower, to appoint a successor, which shall be a bank with an office in the United States, or an Affiliate of any such bank with an office in
the United States. If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within
thirty (30) days after the retiring Administrative Agent or the Collateral Agent gives notice of its resignation (or such earlier days as shall be
agreed by the Required Lenders) (the “Resignation Effective Date”), then the retiring Administrative Agent or the Collateral Agent may (but
shall not be obligated to) on behalf of the Lenders and the L/C Issuer, appoint a successor Administrative Agent or Collateral Agent meeting
the qualifications set forth above. Whether or not a successor has been appointed, such resignation shall become effective in accordance with
the notice on the Resignation Effective Date. If no successor Administrative Agent or Collateral Agent has been appointed by the Resignation
Effective Date, the Required Lenders shall thereafter perform all the duties of the Administrative Agent or Collateral Agent hereunder and/or
under any other Loan Document until such time, if any, as the Required Lenders appoint a successor Administrative Agent and/or Collateral
Agent, as the case may be.

(b) Defaulting Lender. If the Person serving as Administrative Agent or Collateral Agent is a Defaulting Lender pursuant to
clause (d) of the definition thereof, the Required Lenders may, to the extent permitted by applicable Law, by notice in writing to the Borrower
and such Person remove such Person as Administrative Agent or Collateral Agent and, in consultation with the Borrower, appoint a successor.
If no such successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within thirty (30) days
(or such earlier day as shall be agreed by the Required Lenders) (the “Removal Effective Date”), then such removal shall nonetheless become
effective in accordance with such notice on the Removal Effective Date.

(c) Effect of Resignation or Removal. Any such resignation by the Administrative Agent or the Collateral Agent hereunder shall
also constitute, to the extent applicable, its resignation as an L/C Issuer, in which case such resigning Administrative Agent or Collateral Agent
(x) shall not be required to issue any further Letters of Credit hereunder and (y) shall maintain all of its rights as L/C Issuer with respect to any
Letters of Credit issued by it prior to the Resignation Effective Date. With effect from the Resignation Effective Date or the Removal Effective
Date (as applicable) (i) the retiring or removed Administrative Agent or Collateral Agent shall be discharged from its duties and obligations
hereunder and under the other Loan Documents (except that in the case of any collateral security held by the Collateral Agent on behalf of the
Lenders or the L/C Issuer under any of the Loan Documents, the retiring or removed Collateral Agent shall continue to hold such collateral
security until such time as a successor Collateral Agent is appointed and shall continue to receive its current level of remuneration for such
continuation of service) and (ii) except for any indemnity payments or other amounts then owed to the retiring or removed Administrative
Agent or Collateral Agent, all payments, communications and determinations provided to be made by, to or through the Administrative Agent
or the Collateral Agent shall instead be made by or to each Lender and the L/C Issuer directly, until such time, if any, as the Required Lenders
appoint a successor Administrative Agent or Collateral Agent as provided for above. Upon the acceptance of a

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publicly disclosed.
successor’s appointment as Administrative Agent or Collateral Agent hereunder, such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring (or removed) Administrative Agent or Collateral Agent (other than as provided in Section 3.01(g) and other than any rights to indemnity payments or other amounts owed to the retiring or removed Administrative Agent or Collateral Agent as of the Resignation Effective Date or the Removal Effective Date, as applicable), and the retiring or removed Administrative Agent or Collateral Agent shall be discharged from all of its duties and obligations hereunder or under the other Loan Documents (if not already discharged therefrom as provided above in this Section). The fees payable by the Borrower to a successor Administrative Agent or Collateral Agent shall be the same as those payable to its predecessor unless otherwise agreed between the Borrower and such successor. After the retiring or removed Administrative Agent’s or Collateral Agent’s resignation or removal hereunder and under the other Loan Documents, the provisions of this Article and Section 11.04 shall continue in effect for the benefit of such retiring or removed Administrative Agent or Collateral Agent, its sub agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while the retiring or removed Administrative Agent or Collateral Agent was acting as Administrative Agent or Collateral Agent.

(d) **L/C Issuer.** Any resignation by Silicon Valley Bank as Collateral Agent pursuant to this Section shall also constitute its resignation as L/C Issuer. If Silicon Valley Bank or KeyBank National Association resigns as an L/C Issuer, it shall retain all the rights, powers, privileges and duties of the L/C Issuer hereunder with respect to all Letters of Credit issued by it outstanding as of the effective date of its resignation as L/C Issuer and all L/C Obligations with respect thereto, including the right to require the Lenders to make Base Rate Loans or fund risk participations in Unreimbursed Amounts pursuant to Section 2.03(c). Upon the appointment by the Borrower of a successor L/C Issuer hereunder (which successor shall in all cases be a Lender other than a Defaulting Lender and shall be subject to the consent of the Administrative Agent (which consent shall not be unreasonably withheld or delayed) and such Lender), (i) such successor shall succeed to and become vested with all of the rights, powers, privileges and duties of the retiring L/C Issuer, (ii) the retiring L/C Issuer shall be discharged from all of its duties and obligations hereunder or under the other Loan Documents, and (iii) the successor L/C Issuer shall issue letters of credit in substitution for the Letters of Credit issued by the retiring L/C Issuer, if any, outstanding at the time of such succession or make other arrangements satisfactory to the retiring L/C Issuer to effectively assume the obligations of the retiring L/C Issuer with respect to such Letters of Credit.

**Section 9.07 Non-Reliance on Administrative Agent and Other Lenders.**

Each Lender and the L/C Issuer acknowledges that it has, independently and without reliance upon the Administrative Agent, the Collateral Agent, any Arranger, any other Lender or any of their Related Parties and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender and the L/C Issuer also acknowledges that it will, independently and without reliance upon the Administrative Agent, the Collateral Agent, any Arranger, any other Lender or any of their Related Parties and based on such documents and information as it shall from time to time deems appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or any related agreement or any document furnished hereunder or thereunder. Each Lender and each L/C Issuer represents and warrants that (i) the Loan Documents set forth the terms of a commercial lending facility and (ii) it is engaged in making, acquiring or holding commercial loans, issuing or participating in letters of credit or providing other similar facilities in the ordinary course and is entering into this Agreement as a Lender or L/C Issuer for the purpose of making, acquiring or holding commercial loans, issuing

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
or participating in letters of credit and providing other facilities set forth herein as may be applicable to such Lender or L/C Issuer, and not for
the purpose of purchasing, acquiring or holding any other type of financial instrument, and each Lender and each L/C Issuer agrees not to assert
a claim in contravention of the foregoing. Each Lender and each L/C Issuer represents and warrants that it is sophisticated with respect to
decisions to make, acquire or hold commercial loans, issue or participate in letters of credit and to provide other facilities set forth herein, as
may be applicable to such Lender or L/C Issuer, and either it, or the Person exercising discretion in making its decision to make, acquire or
hold such commercial loans, issue or participate in letters of credit or to provide such other facilities, is experienced in making, acquiring or
holding such commercial loans, issuing or participating in letters of credit or providing such other facilities.

Section 9.08 No Other Duties, Etc.

Anything herein to the contrary notwithstanding, none of the titles listed on the cover page hereof shall have any powers, duties or
responsibilities under this Agreement or any of the other Loan Documents, except in its capacity, as applicable, as the Administrative Agent,
the Collateral Agent, a Lender or the L/C Issuer hereunder. Notwithstanding any other provision of this Agreement or any provision of any
other Loan Document, each Arranger is named as such for recognition purposes only, and in its capacity as such shall have no duties,
responsibilities or liabilities with respect to this Agreement or any other Loan Document; it being understood and agreed that each Arranger
shall be entitled to all indemnification and reimbursement rights in favor of the Administrative Agent and the Collateral Agent provided herein
and in the other Loan Documents. Without limitation of the foregoing, each Arranger in its capacity as such shall not, by reason of this
Agreement or any other Loan Document, have any fiduciary relationship in respect of any Lender, Loan Party or any other Person.

Section 9.09 Administrative Agent May File Proofs of Claim; Credit Bidding

(a) In case of the pendency of any proceeding under any Debtor Relief Law or any other judicial proceeding relative to any Loan
Party, the Administrative Agent (irrespective of whether the principal of any Loan or L/C Obligation shall then be due and payable as herein
expressed or by declaration or otherwise and irrespective of whether the Administrative Agent shall have made any demand on the Borrower)
shall be entitled and empowered, by intervention in such proceeding or otherwise:

(i) to file and prove a claim for the whole amount of the principal and interest owing and unpaid in respect of the Loans,
L/C Obligations and all other Secured Obligations that are owing and unpaid and to file such other documents as may be necessary or
advisable in order to have the claims of the Lenders, the L/C Issuer and the Administrative Agent (including any claim for the reasonable
compensation, expenses, disbursements and advances of the Lenders, the L/C Issuer and the Administrative Agent and their respective agents
and counsel and all other amounts due the Lenders, the L/C Issuer and the Administrative Agent under Sections 2.03(h) and (i), 2.08,
and 11.04) allowed in such judicial proceeding; and

(ii) to collect and receive any monies or other property payable or deliverable on any such claims and to distribute the same;
and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby
authorized by each Lender and the L/C Issuer to make such payments to the Administrative Agent and, in the event that the Administrative
Agent shall consent to the making of such payments directly to the Lenders and the L/C Issuer, to pay to the

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publicly disclosed.
Administrative Agent any amount due for the reasonable compensation, expenses, disbursements and advances of the Administrative Agent and its agents and counsel, and any other amounts due the Administrative Agent under Sections 2.08 and 11.04.

Nothing contained herein shall be deemed to authorize the Administrative Agent or the Collateral Agent to authorize or consent to or accept or adopt on behalf of any Lender or the L/C Issuer any plan of reorganization, arrangement, adjustment or composition affecting the Secured Obligations or the rights of any Lender or the L/C Issuer or to authorize the Administrative Agent or the Collateral Agent to vote in respect of the claim of any Lender or the L/C Issuer or in any such proceeding.

(b) The Loan Parties and the Secured Parties hereby irrevocably authorize the Collateral Agent, based upon the instruction of the Required Lenders, to (a) credit bid and in such manner purchase (either directly or through one or more acquisition vehicles) all or any portion of the Collateral at any sale thereof conducted under the provisions of the Bankruptcy Code of the United States, including under Section 363 of the Bankruptcy Code of the United States or any similar Laws in any other jurisdictions to which a Loan Party is subject, or (b) credit bid and in such manner purchase (either directly or through one or more acquisition vehicles) all or any portion of the Collateral at any other sale or foreclosure conducted by (or with the consent or at the direction of) the Collateral Agent (whether by judicial action or otherwise) in accordance with applicable Law. In connection with any such credit bid and purchase, the Secured Obligations owed to the Secured Parties shall be entitled to be, and shall be, credit bid on a ratable basis (with Secured Obligations with respect to contingent or unliquidated claims being estimated for such purpose if the fixing or liquidation thereof would not unduly delay the ability of the Collateral Agent to credit bid and purchase at such sale or other disposition of the Collateral and, if such claims cannot be estimated without unduly delaying the ability of the Collateral Agent to credit bid, then such claims shall be disregarded, not credit bid, and not entitled to any interest in the asset or assets purchased by means of such credit bid) and the Secured Parties whose Secured Obligations are credit bid shall be entitled to receive interests (ratably based upon the proportion of their Secured Obligations credit bid in relation to the aggregate amount of Secured Obligations so credit bid) in the asset or assets so purchased (or in the Equity Interests of the acquisition vehicle or vehicles that are used to consummate such purchase). Except as provided above and otherwise expressly provided for herein or in the other Collateral Documents, the Collateral Agent will not execute and deliver a release of any Lien on any Collateral. Upon request by the Collateral Agent or the Borrower at any time, the Secured Parties will confirm in writing the Collateral Agent’s authority to release any such Liens on particular types or items of Collateral pursuant to this Section 9.09.

Section 9.10 Collateral and Loan Party Guarantee Matters

Each of the Lenders (including in its capacities as a potential Cash Management Bank and a potential Hedge Bank) and the L/C Issuer irrevocably authorize the Collateral Agent, at its option and in its discretion,

(a) to release any Lien on any property granted to or held by the Collateral Agent under any Loan Document (i) upon the Facility Termination Date, (ii) that is sold or otherwise disposed of or to be sold or otherwise disposed of as part of or in connection with any sale or other disposition permitted hereunder or under any other Loan Document, or (iii) if approved, authorized or ratified in writing by the Required Lenders in accordance with Section 11.01;

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(b) to subordinate any Lien on any property granted to or held by the Collateral Agent under any Loan Document to the holder of any Lien on such property that is permitted by Section 7.01(i);

(c) to release any Guarantor from its obligations under the Loan Party Guarantee if such Person ceases to be a Subsidiary as a result of a transaction permitted under the Loan Documents or if such person becomes an Excluded Subsidiary;

(d) to release any Lien on the assets or Equity Interests of a Subsidiary that becomes an Excluded Subsidiary.

Upon request by the Collateral Agent at any time, the Required Lenders will confirm in writing the Collateral Agent’s authority to release or subordinate its interest in particular types or items of property, or to release any Guarantor from its obligations under the Loan Party Guarantee pursuant to this Section 9.10. In each case as specified in this Section 9.10, the Collateral Agent will, at the Borrower’s expense, execute and deliver to the applicable Loan Party such documents as such Loan Party may reasonably request to evidence the release of such item of Collateral from the assignment and security interest granted under the Collateral Documents or to subordinate its interest in such item, or to release such Guarantor from its obligations under the Loan Party Guarantee, in each case in accordance with the terms of the Loan Documents and this Section 9.10.

Neither the Administrative Agent nor the Collateral Agent shall be responsible for or have a duty to ascertain or inquire into any representation or warranty regarding the existence, value or collectability of the Collateral, the existence, priority or perfection of the Collateral Agent’s Lien thereon, or any certificate prepared by any Loan Party in connection therewith, nor shall the Administrative Agent or the Collateral Agent be responsible or liable to the Lenders for any failure to monitor or maintain any portion of the Collateral.

Section 9.11 Secured Cash Management Agreements and Secured Hedge Agreements.

Except as otherwise expressly set forth herein, no Cash Management Bank or Hedge Bank that obtains the benefit of the provisions of Section 8.03, the Loan Party Guarantee or any Collateral by virtue of the provisions hereof or any Collateral Document shall have any right to notice of any action or to consent to, direct or object to any action hereunder or under any other Loan Document or otherwise in respect of the Collateral (including the release or impairment of any Collateral) (or to notice of or to consent to any amendment, waiver or modification of the provisions hereof or of the Loan Party Guarantee or any Collateral Document) other than in its capacity as a Lender and, in such case, only to the extent expressly provided in the Loan Documents. Notwithstanding any other provision of this Article IX to the contrary, the Administrative Agent shall not be required to verify the payment of, or that other satisfactory arrangements have been made with respect to, Secured Obligations arising under Secured Cash Management Agreements and Secured Hedge Agreements except to the extent expressly provided herein and unless the Administrative Agent has received a Secured Party Designation Notice of such Secured Obligations, together with such supporting documentation as the Administrative Agent may request, from the applicable Cash Management Bank or Hedge Bank, as the case may be. The Administrative Agent shall not be required to verify the payment of, or that other satisfactory arrangements have been made with respect to, Secured Obligations arising under Secured Cash Management Agreements and Secured Hedge Agreements in the case of the Facility Termination Date.

Section 9.12 Field Examinations.

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The Collateral Agent shall conduct a field examination pursuant to Section 6.10 at least one time during each calendar year, and not more than 15 months from the prior field examination. Promptly following any field examination that is conducted by or on behalf of the Collateral Agent, and not later than ten (10) days after sign-off from the Collateral Agent on the results of such field examination, the Collateral Agent shall deliver a report of the results of such field examination to the Administrative Agent for distribution to each Lender.

Section 9.13 Erroneous Payments. If the Administrative Agent (x) notifies a Lender, L/C Issuer or Secured Party, or any Person who has received funds on behalf of a Lender, L/C Issuer Bank or Secured Party (any such Lender, L/C Issuer, Secured Party or other recipient (and each of their respective successors and assigns), a “Payment Recipient”) that the Administrative Agent has determined in its sole discretion (whether or not after receipt of any notice under immediately succeeding clause (b)) that any funds (as set forth in such notice from the Administrative Agent) received by such Payment Recipient from the Administrative Agent or any of its Affiliates were erroneously or mistakenly transmitted to, or otherwise erroneously or mistakenly received by, such Payment Recipient (whether or not known to such Lender, L/C Issuer, Secured Party or other Payment Recipient on its behalf) (any such funds, whether transmitted or received as a payment, prepayment or repayment of principal, interest, fees, distribution or otherwise, individually and collectively, an “Erroneous Payment”) and (y) demands in writing the return of such Erroneous Payment (or a portion thereof), such Erroneous Payment shall at all times remain the property of the Administrative Agent pending its return or repayment as contemplated below in this Section 9.13 and held in trust for the benefit of the Administrative Agent, and such Lender, L/C Issuer or Secured Party shall (or, with respect to any Payment Recipient who received such funds on its behalf, shall cause such Payment Recipient to) promptly, but in no event later than two Business Days thereafter (or such later date as the Administrative Agent may, in its sole discretion, specify in writing), return to the Administrative Agent the amount of any such Erroneous Payment (or portion thereof) as to which such a demand was made, in same day funds (in the currency so received), together with interest thereon (except to the extent waived in writing by the Administrative Agent) in respect of each day from and including the date such Erroneous Payment (or portion thereof) was received by such Payment Recipient to the date such amount is repaid to the Administrative Agent in same day funds at the greater of the Federal Funds Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation from time to time in effect. A notice of the Administrative Agent to any Payment Recipient under this clause (a) shall be conclusive, absent manifest error.

(b) Without limiting immediately preceding clause (a), each Lender, L/C Issuer, Secured Party or any Person who has received funds on behalf of a Lender, L/C Issuer or Secured Party (and each of their respective successors and assigns), agrees that if it receives a payment, prepayment or repayment (whether received as a payment, prepayment or repayment of principal, interest, fees, distribution or otherwise) from the Administrative Agent (or any of its Affiliates) (x) that is in a different amount than, or on a different date from, that specified in this Agreement or in a notice of payment, prepayment or repayment sent by the Administrative Agent (or any of its Affiliates) with respect to such payment, prepayment or repayment, (y) that was not preceded or accompanied by a notice of payment, prepayment or repayment sent by the Administrative Agent (or any of its Affiliates), or (z) that such Lender, L/C Issuer or Secured Party, or other such recipient, otherwise becomes aware was transmitted, or received, in error or by mistake (in whole or in part), then in each such case:

(i) it acknowledges and agrees that (A) in the case of immediately preceding clauses (x) or (y), an error and mistake shall be presumed to have been made (absent written confirmation from the Administrative Agent to the contrary) or (B) an error and mistake has been
made (in the case of immediately preceding clause (z)), in each case, with respect to such payment, prepayment or repayment; and

(ii) such Lender, L/C Issuer or Secured Party shall use commercially reasonable efforts to (and shall use commercially reasonable efforts to cause any other recipient that receives funds on its respective behalf to) promptly (and, in all events, within one Business Day of its knowledge of the occurrence of any of the circumstances described in immediately preceding clauses (x), (y) and (z)) notify the Administrative Agent of its receipt of such payment, prepayment or repayment, the details thereof (in reasonable detail) and that it is so notifying the Administrative Agent pursuant to this Section 9.13(b).

For the avoidance of doubt, the failure to deliver a notice to the Administrative Agent pursuant to this Section 9.13(b) shall not have any effect on a Payment Recipient’s obligations pursuant to Section 9.13(a) or on whether or not an Erroneous Payment has been made.

(c) Each Lender, L/C Issuer or Secured Party hereby authorizes the Administrative Agent to set off, net and apply any and all amounts at any time owing to such Lender, L/C Issuer or Secured Party under any Loan Document, or otherwise payable or distributable by the Administrative Agent to such Lender, L/C Issuer or Secured Party under any Loan Document with respect to any payment of principal, interest, fees or other amounts, against any amount that the Administrative Agent has demanded to be returned under immediately preceding clause (a).

(d) (i) In the event that an Erroneous Payment (or portion thereof) is not recovered by the Administrative Agent for any reason, after demand therefor in accordance with immediately preceding clause (a), from any Lender that has received such Erroneous Payment (or portion thereof) (and/or from any Payment Recipient who received such Erroneous Payment (or portion thereof) on its respective behalf) (such unrecovered amount, an “Erroneous Payment Return Deficiency”), upon the Administrative Agent’s notice to such Lender at any time, then effective immediately (with the consideration therefor being acknowledged by the parties hereto), (A) such Lender shall be deemed to have assigned its Loans (but not its Commitments) with respect to which such Erroneous Payment was made (the “Erroneous Payment Impacted Class”) in an amount equal to the Erroneous Payment Return Deficiency (or such lesser amount as the Administrative Agent may specify) (such assignment of the Loans (but not Commitments) of the Erroneous Payment Impacted Class, the “Erroneous Payment Deficiency Assignment”) (on a cashless basis and such amount calculated at par plus any accrued and unpaid interest (with the assignment fee to be waived by the Administrative Agent in such instance)), and is hereby (together with the Borrower) deemed to execute and deliver an Assignment and Assumption (or, to the extent applicable, an agreement incorporating an Assignment and Assumption by reference pursuant to a Platform as to which the Administrative Agent and such parties are participants) with respect to such Erroneous Payment Deficiency Assignment, and such Lender shall deliver any Revolving Notes evidencing such Loans to the Borrower or the Administrative Agent (but the failure of such Person to deliver any such Revolving Notes shall not affect the effectiveness of the foregoing assignment), (B) the Administrative Agent as the assignee Lender shall be deemed to have acquired the Erroneous Payment Deficiency Assignment, (C) upon such deemed acquisition, the Administrative Agent as the assignee Lender shall become a Lender, as applicable, hereunder with respect to such Erroneous Payment Deficiency Assignment and the assigning Lender shall cease to be a Lender, as applicable, hereunder with respect to such
Erroneous Payment Deficiency Assignment, excluding, for the avoidance of doubt, its obligations under the indemnification provisions of this Agreement and its applicable Commitments which shall survive as to such assigning Lender, (D) the Administrative Agent and the Borrower shall each be deemed to have waived any consents required under this Agreement to any such Erroneous Payment Deficiency Assignment, and (E) the Administrative Agent will reflect in the Register its ownership interest in the Loans subject to the Erroneous Payment Deficiency Assignment. For the avoidance of doubt, no Erroneous Payment Deficiency Assignment will reduce the Commitments of any Lender and such Commitments shall remain available in accordance with the terms of this Agreement.

(ii) Subject to Section 11.06 (but excluding, in all events, any assignment consent or approval requirements (whether from the Borrower or otherwise)), the Administrative Agent may, in its discretion, sell any Loans acquired pursuant to an Erroneous Payment Deficiency Assignment and upon receipt of the proceeds of such sale, the Erroneous Payment Return Deficiency owing by the applicable Lender shall be reduced by the net proceeds of the sale of such Loan (or portion thereof), and the Administrative Agent shall retain all other rights, remedies and claims against such Lender (and/or against any recipient that receives funds on its respective behalf). In addition, an Erroneous Payment Return Deficiency owing by the applicable Lender (x) shall be reduced by the proceeds of prepayments or repayments of principal and interest, or other distribution in respect of principal and interest, received by the Administrative Agent on or with respect to any such Loans acquired from such Lender pursuant to an Erroneous Payment Deficiency Assignment (to the extent that any such Loans are then owned by the Administrative Agent) and (y) may, in the sole discretion of the Administrative Agent, be reduced by any amount specified by the Administrative Agent in writing to the applicable Lender from time to time.

(e) The parties hereto agree that (x) irrespective of whether the Administrative Agent may be equitably subrogated, in the event that an Erroneous Payment (or portion thereof) is not recovered from any Payment Recipient that has received such Erroneous Payment (or portion thereof) for any reason, the Administrative Agent shall be subrogated to all the rights and interests of such Payment Recipient (and, in the case of any Payment Recipient who has received funds on behalf of a Lender, L/C Issuer or Secured Party, to the rights and interests of such Lender, L/C Issuer or Secured Party, as the case may be) under the Loan Documents with respect to such amount (the “Erroneous Payment Subrogation Rights”) (provided that the Loan Parties’ Obligations under the Loan Documents in respect of the Erroneous Payment Subrogation Rights shall not be duplicative of such Obligations in respect of Loans that have been assigned to the Administrative Agent under an Erroneous Payment Deficiency Assignment) and (y) an Erroneous Payment shall not pay, prepay, repay, discharge or otherwise satisfy any Obligations owed by the Borrower or any other Loan Party; provided that this Section 9.13 shall not be interpreted to increase (or accelerate the due date for), or have the effect of increasing (or accelerating the due date for), the Obligations of the Borrower relative to the amount (and/or timing for payment) of the Obligations that would have been payable had such Erroneous Payment not been made by the Administrative Agent; provided, further, that for the avoidance of doubt, immediately preceding clauses (x) and (y) shall not apply to the extent any such Erroneous Payment is, and solely with respect to the amount of such Erroneous Payment that is, comprised of funds received by the Administrative Agent from the Borrower for the purpose of making such Erroneous Payment.

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(f) To the extent permitted by applicable law, no Payment Recipient shall assert any right or claim to an Erroneous Payment, and hereby waives, and is deemed to waive, any claim, counterclaim, defense or right of set-off or recoupment with respect to any demand, claim or counterclaim by the Administrative Agent for the return of any Erroneous Payment received, including, without limitation, any defense based on “discharge for value” or any similar doctrine.

(g) Each party’s obligations, agreements and waivers under this Section 9.13 shall survive the resignation or replacement of the Administrative Agent, any transfer of rights or obligations by, or the replacement of, a Lender or L/C Issuer, the termination of the Commitments and/or the repayment, satisfaction or discharge of all Obligations (or any portion thereof) under any Loan Document.

Section 9.14 Flood Law Compliance Policies.

(a) The Collateral Agent maintains internal policies and procedures, standards and/or other documentation that address requirements placed on federally-regulated lenders under the federal laws and regulations regarding flood insurance, including the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973, as amended (the “Flood Laws”). The Collateral Agent will deliver to the Administrative Agent to post on the Platform (or otherwise distribute to each Lender) documents that the Collateral Agent receives or notices that it gives in connection with the Flood Laws. However, the Collateral Agent reminds each Lender that, pursuant to the Flood Laws, each federally regulated lender is responsible for assuring its own compliance with the flood insurance requirements.

(b) The Collateral Agent shall use reasonable efforts to deliver to the Administrative Agent the documents and notices described in Section 9.14(a) in a manner that will permit the Administrative Agent to make such posting or distribution not less than three (3) Business Days prior to execution of any Mortgage covering any improved real property that is taken as Collateral after the Closing Date.

(c) The Collateral Agent shall use reasonable efforts to maintain a customary life of loan monitoring agreement to determine the status of each Mortgaged Property as a Flood Hazard Property.

ARTICLE X
CONTINUING GUARANTY

Section 10.01 Loan Party Guarantee.

Each Guarantor hereby absolutely and unconditionally, jointly and severally guarantees, as a guaranty of payment and performance and not merely as a guaranty of collection, prompt payment when due, whether at stated maturity, by required prepayment, upon acceleration, demand or otherwise, and at all times thereafter, of any and all Obligations and Additional Secured Obligations (for each Guarantor, subject to the proviso in this sentence, its “Guaranteed Obligations”); provided that liability of each Guarantor individually with respect to this Loan Party Guarantee shall be limited to an aggregate amount equal to the largest amount that would not render its obligations hereunder subject to avoidance under Section 548 of the Bankruptcy Code of the United States or any comparable provisions of any applicable state law. The

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Administrative Agent’s books and records showing the amount of the Secured Obligations shall be admissible in evidence in any action or proceeding, and shall be binding upon each Guarantor, and conclusive for the purpose of establishing the amount of the Secured Obligations. This Loan Party Guarantee shall not be affected by the genuineness, validity, regularity or enforceability of the Secured Obligations or any instrument or agreement evidencing any Secured Obligations, or by the existence, validity, enforceability, perfection, non-perfection or extent of any collateral therefor, or by any fact or circumstance relating to the Secured Obligations which might otherwise constitute a defense to the obligations of the Guarantors, or any of them, under this Loan Party Guarantee, and each Guarantor hereby irrevocably waives any defenses it may now have or hereafter acquire in any way relating to any or all of the foregoing.

Section 10.02 Rights of Lenders

Each Guarantor consents and agrees that the Secured Parties may, at any time and from time to time, without notice or demand, and without affecting the enforceability or continuing effectiveness hereof: (a) amend, extend, renew, compromise, discharge, accelerate or otherwise change the time for payment or the terms of the Secured Obligations or any part thereof; (b) take, hold, exchange, enforce, waive, release, fail to perfect, sell, or otherwise dispose of any security for the payment of this Loan Party Guarantee or any Secured Obligations; (c) apply such security and direct the order or manner of sale thereof as the Collateral Agent, the L/C Issuer and the Lenders in their sole discretion may determine; and (d) release or substitute one or more of any endorsers or other guarantors of any of the Secured Obligations. Without limiting the generality of the foregoing, each Guarantor consents to the taking of, or failure to take, any action which might in any manner or to any extent vary the risks of such Guarantor under this Loan Party Guarantee or which, but for this provision, might operate as a discharge of such Guarantor.

Section 10.03 Certain Waivers

Each Guarantor waives (a) any defense arising by reason of any disability or other defense of the Borrower or any other Guarantor, or the cessation from any cause whatsoever (including any act or omission of any Secured Party) of the liability of the Borrower or any other Loan Party; (b) any defense based on any claim that such Guarantor’s obligations exceed or are more burdensome than those of the Borrower or any other Loan Party; (c) the benefit of any statute of limitations affecting any Guarantor’s liability hereunder; (d) any right to proceed against the Borrower or any other Loan Party, proceed against or exhaust any security for the Secured Obligations, or pursue any other remedy in the power of any Secured Party whatsoever; (e) any benefit of and any right to participate in any security now or hereafter held by any Secured Party; and (f) to the fullest extent permitted by law, any and all other defenses or benefits that may be derived from or afforded by applicable Law limiting the liability of or exonerating guarantors or sureties. Each Guarantor expressly waives all setoffs and counterclaims and all presentments, demands for payment or performance, notices of nonpayment or nonperformance, protests, notices of protest, notices of dishonor and all other notices or demands of any kind or nature whatsoever with respect to the Secured Obligations, and all notices of acceptance of this Loan Party Guarantee or of the existence, creation or incurrence of new or additional Secured Obligations.

Section 10.04 Obligations Independent

The obligations of each Guarantor hereunder are those of primary obligor, and not merely as surety, and are independent of the Secured Obligations and the obligations of any other guarantor, and a separate action may be brought against each Guarantor to enforce this Loan Party Guarantee whether or not the Borrower or any other person or entity is joined as a party.
Section 10.05 Subrogation.

No Guarantor shall exercise any right of subrogation, contribution, indemnity, reimbursement or similar rights with respect to any payments it makes under this Loan Party Guarantee until all of the Secured Obligations and any amounts payable under this Loan Party Guarantee have been indefeasibly paid and performed in full and the Commitments and the Facility are terminated. If any amounts are paid to a Guarantor in violation of the foregoing limitation, then such amounts shall be held in trust for the benefit of the Secured Parties and shall forthwith be paid to the Secured Parties to reduce the amount of the Secured Obligations, whether matured or unmatured.

Section 10.06 Termination; Reinstatement.

This Loan Party Guarantee is a continuing and irrevocable guaranty of all Secured Obligations now or hereafter existing and shall remain in full force and effect until the Facility Termination Date. Notwithstanding the foregoing, this Loan Party Guarantee shall continue in full force and effect or be revived, as the case may be, if any payment by or on behalf of the Borrower or a Guarantor is made, or any of the Secured Parties exercises its right of setoff, in respect of the Secured Obligations and such payment or the proceeds of such setoff or any part thereof is subsequently invalidated, declared to be fraudulent or preferential, set aside or required (including pursuant to any settlement entered into by any of the Secured Parties in their discretion) to be repaid to a trustee, receiver or any other party, in connection with any proceeding under any Debtor Relief Laws or otherwise, all as if such payment had not been made or such setoff had not occurred and whether or not the Secured Parties are in possession of or have released this Loan Party Guarantee and regardless of any prior revocation, rescission, termination or reduction. The obligations of each Guarantor under this paragraph shall survive termination of this Loan Party Guarantee.

Section 10.07 Stay of Acceleration.

If acceleration of the time for payment of any of the Secured Obligations is stayed, in connection with any case commenced by or against a Guarantor or the Borrower under any Debtor Relief Laws, or otherwise, all such amounts shall nonetheless be payable by each Guarantor, jointly and severally, immediately upon demand by the Secured Parties.

Section 10.08 Condition of Borrower.

Each Guarantor acknowledges and agrees that it has the sole responsibility for, and has adequate means of, obtaining from the Borrower and any other Guarantor such information concerning the financial condition, business and operations of the Borrower and any such other Guarantor as such Guarantor requires, and that none of the Secured Parties has any duty, and such Guarantor is not relying on the Secured Parties at any time, to disclose to it any information relating to the business, operations or financial condition of the Borrower or any other Guarantor (each Guarantor waiving any duty on the part of the Secured Parties to disclose such information and any defense relating to the failure to provide the same).

Section 10.09 Appointment of Borrower.

Each of the Guarantors hereby appoints the Borrower to act as its agent for all purposes of this Agreement and the other Loan Documents and agrees that (a) the Borrower may execute such documents on behalf of such Guarantor as the Borrower deem appropriate in its sole discretion and each Guarantor shall be obligated by all of the terms of any such document

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executed on its behalf, (b) any notice or communication delivered by the Administrative Agent, the Collateral Agent or the Lenders to the Borrower shall be deemed delivered to each Guarantor and (c) the Administrative Agent, the Collateral Agent or the Lenders may accept, and be permitted to rely on, any document, instrument or agreement executed by the Borrower on behalf of each Guarantor.

Section 10.10 Right of Contribution.

The Guarantors agree among themselves that, in connection with payments made hereunder, each Guarantor shall have contribution rights against the other Guarantors as permitted under applicable Law.

Section 10.11 Keepwell.

Each Loan Party that is a Qualified ECP Guarantor at the time the Loan Party Guarantee or the grant of a Lien under the Loan Documents, in each case, by any Specified Loan Party becomes effective with respect to any Swap Obligation, hereby jointly and severally, absolutely, unconditionally and irrevocably undertakes to provide such funds or other support to each Specified Loan Party with respect to such Swap Obligation as may be needed by such Specified Loan Party from time to time to honor all of its obligations under the Loan Documents in respect of such Swap Obligation (but, in each case, only up to the maximum amount of such liability that can be hereby incurred without rendering such Qualified ECP Guarantor’s obligations and undertakings under this Article X voidable under applicable law relating to fraudulent conveyance or fraudulent transfer, and not for any greater amount). The obligations and undertakings of each Qualified ECP Guarantor under this Section shall remain in full force and effect until the Secured Obligations have been indefeasibly paid and performed in full. Each Loan Party intends this Section to constitute, and this Section shall be deemed to constitute, a guarantee of the obligations of, and a “keepwell, support, or other agreement” for the benefit of, each Specified Loan Party for all purposes of the Commodity Exchange Act.

ARTICLE XI

MISCELLANEOUS

Section 11.01 Amendments, Etc.

No amendment or waiver of any provision of this Agreement or any other Loan Document (other than such amendments or waivers which are administrative or ministerial in nature), and no consent to any departure by the Borrower or any other Loan Party therefrom, shall be effective unless in writing signed by the Required Lenders and the Borrower or the applicable Loan Party, as the case may be, and acknowledged by the Administrative Agent, and each such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given; provided, however, that no such amendment, waiver or consent shall:

(a) waive any condition set forth in Section 4.01, or, in the case of the initial Credit Extension, Section 4.02, without the written consent of each Lender;

(b) without limiting the generality of clause (a) above, waive any condition set forth in Section 4.02 as to any Credit Extension without the written consent of the Required Lenders;

(c) extend or increase the Commitment of any Lender (or reinstate any Commitment terminated pursuant to Section 8.02) without the written consent of such Lender (it being

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understood and agreed that a waiver of any condition precedent in Section 4.02 or of any Default or a mandatory reduction in Commitments is not considered an extension or increase in Commitments of any Lender;

(d) postpone any date fixed by this Agreement or any other Loan Document for any payment (excluding mandatory prepayments) of principal, interest, fees, reimbursement obligations or other amounts due to the Lenders (or any of them) hereunder or under such other Loan Document without the written consent of each Lender entitled to such payment;

(e) reduce the principal of, or the rate of interest specified herein on, any Loan or L/C Borrowing, or (subject to clause (iv) of the second proviso to this Section 11.01) any fees or other amounts payable or required to be reimbursed hereunder or under any other Loan Document without the written consent of each Lender entitled to such amount; provided, however, that only the consent of the Required Lenders shall be necessary to amend the definition of “Default Rate” or to waive any obligation of the Loan Parties to pay interest or Letter of Credit Fees at the Default Rate;

(f) change any provision of Section 11.06 in a manner that imposes any additional restriction on any Lender’s ability to assign any of its rights or obligations hereunder without the written consent of such Lender;

(g) change Section 2.12 or Section 8.03 in a manner that would alter the pro rata sharing or application of payments required thereby without the written consent of each Lender;

(h) change any provision of this Section 11.01 or the definition of “Required Lenders” or any other provision of any Loan Document specifying the number or percentage of Lenders required to amend, waive or otherwise modify any rights hereunder or thereunder or make any determination or grant any consent hereunder, without the written consent of each Lender;

(i) release all or substantially all of the Collateral in any transaction or series of related transactions (except with respect to Permitted Dispositions and Investments permitted under Section 7.03), without the written consent of each Lender;

(j) release all or substantially all of the value of the Loan Party Guarantee, without the written consent of each Lender, except to the extent the release of any Guarantor from the Loan Party Guarantee is permitted pursuant to Section 9.10 (in which case such release may be made by the Administrative Agent acting alone);

(k) release the Loan Parties from any of its obligations under this Agreement or the other Loan Documents, or permit the Loan Parties to assign or transfer any of their rights or obligations under this Agreement or the other Loan Documents, without the consent of each Lender;

(l) change the percentages of the formula for calculation of the Borrowing Base as set forth in the definition of “Borrowing Base” in a manner that is intended to increase the availability under the Borrowing Base in any material respect, without the written consent of the Supermajority Lenders; provided that this clause (l) shall not limit the ability of the Collateral Agent and the Borrower to revise the amounts and percentages of the formula for calculation of the Borrowing Base as described in clause (z) of the definition of the term “Borrowing Base”; or

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(m) change or otherwise modify the eligibility criteria, eligible asset classes, reserves or sublimits in respect of the Borrowing Base, or add new asset categories to the Borrowing Base, including “Eligible Project Back-Log” and “Eligible Take-Out”, if such change, modification or addition is intended to increase availability under the Borrowing Base, in each case without the written consent of the Supermajority Lenders; provided that this clause (m) shall not limit the ability of the Collateral Agent and the Borrower to revise the amounts and percentages of the formula for calculation of the Borrowing Base as described in clause (z) of the definition of the term “Borrowing Base”;

and provided, further, that (i) no amendment, waiver or consent shall, unless in writing and signed by the L/C Issuer in addition to the Lenders required above, affect the rights or duties of the L/C Issuer under this Agreement or any Issuer Document relating to any Letter of Credit issued or to be issued by it; (ii) no amendment, waiver or consent shall, unless in writing and signed by the Collateral Agent in addition to the Lenders required above, affect the rights or duties of the Collateral Agent under this Agreement; (iii) no amendment, waiver or consent shall, unless in writing and signed by the Administrative Agent in addition to the Lenders required above, affect the rights or duties of the Administrative Agent under this Agreement or any other Loan Document; and (iv) the Fee Letter may be amended, or rights or privileges thereunder waived, in a writing executed only by the parties thereto. Notwithstanding anything to the contrary herein, (A) no Defaulting Lender shall have any right to approve or disapprove any amendment, waiver or consent hereunder (and any amendment, waiver or consent which by its terms requires the consent of all Lenders or each affected Lender, or all Lenders or each affected Lender under the Facility, may be effected with the consent of the applicable Lenders other than Defaulting Lenders, except that (1) the Commitment of any Defaulting Lender may not be increased or extended without the consent of such Lender and (2) any waiver, amendment or modification requiring the consent of all Lenders or each affected Lender, or all Lenders or each affected Lender under the Facility, that by its terms affects any Defaulting Lender disproportionately adversely relative to other affected Lenders shall require the consent of such Defaulting Lender; (B) each Lender is entitled to vote as such Lender sees fit on any bankruptcy reorganization plan that affects the Loans, and each Lender acknowledges that the provisions of Section 1126(c) of the Bankruptcy Code of the United States supersedes the unanimous consent provisions set forth herein; and (C) the Required Lenders shall determine whether or not to allow a Loan Party to use cash collateral in the context of a bankruptcy or insolvency proceeding and such determination shall be binding on all of the Lenders.

Notwithstanding anything to the contrary herein the Administrative Agent may, with the prior written consent of the Borrower only, amend, modify or supplement this Agreement or any of the other Loan Documents to cure any ambiguity, omission, mistake, defect or inconsistency.

Notwithstanding any provision herein to the contrary, this Agreement may be amended with the written consent of the Required Lenders, the Administrative Agent and the Borrower (I) to add one or more additional revolving credit or term loan facilities to this Agreement and to permit the extensions of credit and all related obligations and liabilities arising in connection therewith from time to time outstanding to share ratably (or on a basis subordinated to the existing facilities hereunder) in the benefits of this Agreement and the other Loan Documents with the obligations and liabilities from time to time outstanding in respect of the existing facilities hereunder, and (II) in connection with the foregoing, to permit, as deemed appropriate by the Administrative Agent and approved by the Required Lenders, the Lenders providing such additional credit facilities to obtain comparable tranche voting rights with respect to each such new facility and to participate in any required vote or action required to be approved by the Required Lenders or by any other number, percentage or class of Lenders hereunder.
If any Lender does not consent to a proposed amendment, waiver, consent or release with respect to any Loan Document that requires the consent of each Lender and that has been approved by the Required Lenders, the Borrower may replace such Non-Consenting Lender in accordance with Section 11.13; provided that, such amendment, waiver, consent or release can be effected as a result of the assignment contemplated by such Section (together with all other such assignments required by the Borrower to be made pursuant to this paragraph).

Section 11.02 Notices; Effectiveness; Electronic Communications.

(a) Notices Generally. Except in the case of notices and other communications expressly permitted to be given by telephone (and except as provided in subsection (b) below), all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by fax transmission or e-mail transmission as follows, and all notices and other communications expressly permitted hereunder to be given by telephone shall be made to the applicable telephone number, as follows:

(i) if to the Borrower or any other Loan Party, the Administrative Agent, the Collateral Agent or the L/C Issuer, to the address, facsimile number, e-mail address or telephone number specified for such Person on Schedule 1.01(a) and

(ii) if to any other Lender, to the address, facsimile number, e-mail address or telephone number specified in its Administrative Questionnaire (including, as appropriate, notices delivered solely to the Person designated by a Lender on its Administrative Questionnaire then in effect for the delivery of notices that may contain material non-public information relating to the Borrower).

Notices and other communications sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices and other communications sent by (fax transmission or e-mail transmission shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next Business Day for the recipient). Notices and other communications delivered through electronic communications to the extent provided in subsection (b) below shall be effective as provided in such subsection (b).

(b) Electronic Communications. Notices and other communications to the Lenders and the L/C Issuer hereunder may be delivered or furnished by electronic communication (including e-mail address and Internet or intranet websites) pursuant to procedures approved by the Administrative Agent; provided that, the foregoing shall not apply to notices to any Lender or the L/C Issuer pursuant to Article II if such Lender or the L/C Issuer, as applicable, has notified the Administrative Agent that it is incapable of receiving notices under such Article by electronic communication. The Administrative Agent, the Collateral Agent, the L/C Issuer or any Loan Party may each, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it; provided that, approval of such procedures may be limited to particular notices or communications.

Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender’s receipt of an acknowledgement from the intended recipient (such as by the “return receipt requested” function, as available, return e-mail address or other written acknowledgement), and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient at its e-mail address as described in the foregoing.

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clause (i) of notification that such notice or communication is available and identifying the website address therefor; provided that, for both clauses (i) and (ii), if such notice, email or other communication is not sent during the normal business hours of the recipient, such notice, email or communication shall be deemed to have been sent at the opening of business on the next business day for the recipient.

(c) **The Platform.** THE PLATFORM IS PROVIDED “AS IS” AND “AS AVAILABLE.” THE AGENT PARTIES (AS DEFINED BELOW) DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE BORROWER MATERIALS OR THE ADEQUACY OF THE PLATFORM, AND EXPRESSLY DISCLAIM LIABILITY FOR ERRORS IN OR OMISSIONS FROM THE BORROWER MATERIALS, NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS, IS MADE BY ANY AGENT PARTY IN CONNECTION WITH THE BORROWER MATERIALS OR THE PLATFORM. In no event shall the Administrative Agent, the Collateral Agent or any of their respective Related Parties (collectively, the “Agent Parties”) have any liability to the Loan Parties, any Lender, the L/C Issuer or any other Person for losses, claims, damages, liabilities or expenses of any kind (whether in tort, contract or otherwise) arising out of the Borrower’s, any other Loan Party’s, the Administrative Agent’s or the Collateral Agent’s transmission of Borrower Materials or any other Information through the Internet, telecommunications, electronic or other information transmission systems.

(d) **Change of Address, Etc.** Each of the Loan Parties, the Administrative Agent, the Collateral Agent and the L/C Issuer may change its address, facsimile number or telephone number or e-mail address for notices and other communications hereunder by notice to the other parties hereto. Each Lender may change its address, facsimile number or telephone number or e-mail address for notices and other communications hereunder by notice to the Loan Parties, the Administrative Agent, the Collateral Agent and the L/C Issuer. In addition, each Lender agrees to notify the Administrative Agent from time to time to ensure that the Administrative Agent has on record (i) an effective address, contact name, telephone number, facsimile number and e-mail address to which notices and other communications may be sent and (ii) accurate wire instructions for such Lender. Furthermore, each Public Lender agrees to cause at least one (1) individual at or on behalf of such Public Lender to at all times have selected the “Private Side Information” or similar designation on the content declaration screen of the Platform in order to enable such Public Lender or its delegate, in accordance with such Public Lender’s compliance procedures and applicable Law, including United States federal and state securities Laws, to make reference to Borrower Materials that are not made available through the “Public Side Information” portion of the Platform that may contain material non-public information with respect to the Borrower or its securities for purposes of United States federal or state securities laws.

(e) **Reliance by Administrative Agent, Collateral Agent, L/C Issuer and Lenders.** The Administrative Agent, the Collateral Agent, the L/C Issuer and the Lenders shall be entitled to rely and act upon any notices (including telephonic or electronic Loan Notices and Letter of Credit Applications) purportedly given by or on behalf of any Loan Party even if (i) such notices were not made in a manner specified herein, were incomplete or were not preceded or followed by any other form of notice specified herein, or (ii) the terms thereof, as understood by the recipient, varied from any confirmation thereof. The Loan Parties shall indemnify the Administrative Agent, the Collateral Agent, the L/C Issuer, each Lender and the Related Parties of each of them from all losses, costs, expenses and liabilities resulting from the reliance by such Person on each notice purportedly given by or on behalf of a Loan Party. All telephonic notices

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to and other telephonic communications with the Administrative Agent or the Collateral Agent may be recorded by the Administrative Agent or the Collateral Agent, and each of the parties hereto hereby consents to such recording.

Section 11.03 No Waiver; Cumulative Remedies; Enforcement.

No failure by any Lender, the L/C Issuer, the Administrative Agent or the Collateral Agent to exercise, and no delay by any such Person in exercising, any right, remedy, power or privilege hereunder or under any other Loan Document shall operate as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder or under any other Loan Document preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. The rights, remedies, powers and privileges herein provided, and provided under each other Loan Document, are cumulative and not exclusive of any rights, remedies, powers and privileges provided by law.

Notwithstanding anything to the contrary contained herein or in any other Loan Document, the authority to enforce rights and remedies hereunder and under the other Loan Documents against the Loan Parties or any of them shall be vested exclusively in, and all actions and proceedings at law in connection with such enforcement shall be instituted and maintained exclusively by, the Administrative Agent in accordance with Section 8.02 for the benefit of all the Lenders and the L/C Issuer, provided, however, that the foregoing shall not prohibit (a) the Administrative Agent from exercising on its own behalf the rights and remedies that inure to its benefit (solely in its capacity as Administrative Agent) hereunder and under the other Loan Documents, (b) the L/C Issuer from exercising the rights and remedies that inure to its benefit (solely in its capacity as L/C Issuer) hereunder and under the other Loan Documents, (c) any Lender from exercising setoff rights in accordance with Section 11.08 (subject to the terms of Section 2.12), or (d) any Lender from filing proofs of claim or appearing and filing pleadings on its own behalf during the pendency of a proceeding relative to any Loan Party under any Debtor Relief Law; and provided, further, that if at any time there is no Person acting as Administrative Agent hereunder and under the other Loan Documents, then (i) the Required Lenders shall have the rights otherwise ascribed to the Administrative Agent pursuant to Section 8.02 and (ii) in addition to the matters set forth in clauses (b), (c) and (d) of the preceding proviso and subject to Section 2.12, any Lender may, with the consent of the Required Lenders, enforce any rights and remedies available to it and as authorized by the Required Lenders.

Section 11.04 Expenses; Indemnity; Damage Waiver.

(a) Costs and Expenses. The Loan Parties shall pay (i) all reasonable out-of-pocket expenses incurred by the Administrative Agent, each Arranger, the Collateral Agent and the L/C Issuer and their respective Affiliates (including the reasonable fees, charges and disbursements of counsel for such Persons), in connection with the syndication of the credit facilities provided for herein, the preparation, negotiation, execution, delivery and administration of this Agreement and the other Loan Documents or any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions contemplated hereby or thereby shall be consummated); (ii) all reasonable out-of-pocket expenses incurred by the L/C Issuer in connection with the issuance, amendment, renewal or extension of any Letter of Credit or any demand for payment thereunder; and (iii) all out-of-pocket expenses incurred by the Administrative Agent, each Arranger, the Collateral Agent, any Lender or the L/C Issuer and their respective Affiliates (including the reasonable fees, charges and disbursements of any counsel for such Persons) (x) in connection with the enforcement or protection of its rights (A) in connection with this Agreement and the other Loan Documents, including its rights under this Section, or (B) in connection with Loans made or Letters of Credit issued hereunder, including

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all such reasonable out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans or Letters of Credit, and (y) in connection with any documentary taxes associated with the Facility.

(b) Indemnification by the Loan Parties. The Loan Parties shall indemnify the Administrative Agent and the Collateral Agent (and any sub-agent thereof), each Lender and the L/C Issuer, and each Related Party, successor and assign of any of the foregoing Persons (each such Person being called an “Indemnitee”) against, and hold each Indemnitee harmless from, any and all losses, claims, damages, liabilities and related expenses (including the reasonable fees, charges and disbursements of counsel, which shall include the fees of one firm of counsel for all Indemnitees, taken as a whole (and, if necessary, the fees of a single firm of local counsel in each appropriate jurisdiction for all Indemnitees, taken as a whole (and, in the case of an actual or perceived conflict of interest, the fees of another firm of counsel (and local counsel, if applicable) for such affected Indemnitee)), incurred by any Indemnitee or asserted against any Indemnitee by any Person (including the Borrower or any other Loan Party) arising out of, in connection with, or as a result of (i) the execution or delivery of this Agreement, any other Loan Document or any agreement or instrument contemplated hereby or thereby, the performance by the parties hereto of their respective obligations hereunder or thereunder or the consummation of the transactions contemplated hereby or thereby, or, in the case of the Administrative Agent (and any sub-agent thereof) and its Related Parties only, the administration of this Agreement and the other Loan Documents (including in respect of any matters addressed in Section 3.01), (ii) any Loan or Letter of Credit or the use or proposed use of the proceeds therefrom (including any refusal by the L/C Issuer to honor a demand for payment under a Letter of Credit if the documents presented in connection with such demand do not strictly comply with the terms of such Letter of Credit), (iii) any actual or alleged presence or Release of Hazardous Materials on or from any property owned or operated by a Loan Party or any of its Subsidiaries or related to any of the Projects, or any Environmental Liability related in any way to a Loan Party or any of its Subsidiaries, or (iv) any actual or prospective claim, litigation, investigation or proceeding relating to any of the foregoing, whether based on contract, tort or any other theory, whether brought by a third party or by the Borrower or any other Loan Party or any of the Borrower’s or such Loan Party’s Affiliates, directors, equity holders or creditors, and regardless of whether any Indemnitee is a party thereto; provided that, such indemnity shall not, as to any Indemnitee, be available to the extent that such losses, claims, damages, liabilities or related expenses are determined by a court of competent jurisdiction by final and nonappealable judgment to have resulted primarily from the gross negligence or willful misconduct of such Indemnitee. Without limiting the provisions of Section 3.01(c), this Section 11.04(b) shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

(c) Reimbursement by Lenders. To the extent that the Loan Parties for any reason fail to indefeasibly pay any amount required under subsection (a) or (b) of this Section to be paid by it to the Administrative Agent or the Collateral Agent (or any sub-agent thereof), the L/C Issuer or any Related Party of any of the foregoing, each Lender severally agrees to pay to the Administrative Agent or the Collateral Agent (or any such sub-agent), the L/C Issuer or such Related Party, as the case may be, such Lender’s pro rata share (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought based on each Lender’s share of the Total Credit Exposure at such time) of such unpaid amount (including any such unpaid amount in respect of a claim asserted by such Lender), provided, further that, the unreimbursed expense or indemnified loss, claim, damage, liability or related expense, as the case may be, was incurred by or asserted against the Administrative Agent or the Collateral Agent (or any such sub-agent) or the L/C Issuer in its capacity as such, or against any Related Party of any of the foregoing acting for the Administrative Agent or the Collateral Agent (or any

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such sub-agent) or the L/C Issuer in connection with such capacity. The obligations of the Lenders under this subsection (c) are subject to the provisions of Section 2.11(d).

(d) **Waiver of Consequential Damages, Etc.** To the fullest extent permitted by applicable Law, no Loan Party shall assert, and each Loan Party hereby waives, and acknowledges that no other Person shall have, any claim against any Indemnitee, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement, any other Loan Document or any agreement or instrument contemplated hereby, the transactions contemplated hereby or thereby, any Loan or Letter of Credit or the use of the proceeds thereof. No Indemnitee referred to in subsection (b) above shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed to such unintended recipients by such Indemnitee through telecommunications, electronic or other information transmission systems in connection with this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby other than for direct or actual damages resulting from the gross negligence or willful misconduct of such Indemnitee as determined by a final and nonappealable judgment of a court of competent jurisdiction.

(e) **Payments.** All amounts due under this Section shall be payable not later than ten (10) Business Days after demand therefor.

(f) **Survival.** The agreements in this Section and the indemnity provisions of Section 11.02(e) shall survive the resignation of the Administrative Agent, the Collateral Agent and the L/C Issuer, the replacement of any Lender, the termination of the Aggregate Commitments and the repayment, satisfaction or discharge of all the other Obligations.

Section 11.05 Payments Set Aside

To the extent that any payment by or on behalf of the Loan Parties is made to the Administrative Agent, the Collateral Agent, the L/C Issuer or any Lender, or the Administrative Agent, the Collateral Agent, the L/C Issuer or any Lender exercises its right of setoff, and such payment or the proceeds of such setoff or any part thereof is subsequently invalidated, declared to be fraudulent or preferential, set aside or required (including pursuant to any settlement entered into by the Administrative Agent, the Collateral Agent, the L/C Issuer or such Lender in its discretion) to be repaid to a trustee, receiver or any other party, in connection with any proceeding under any Debtor Relief Law or otherwise, then (a) to the extent of such recovery, the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such setoff had not occurred, and (b) each Lender and the L/C Issuer severally agrees to pay to the Administrative Agent or the Collateral Agent upon demand its applicable share (without duplication) of any amount so recovered from or repaid by the Administrative Agent or the Collateral Agent, plus interest thereon from the date of such demand to the date such payment is made at a rate per annum equal to the Federal Funds Rate from time to time in effect. The obligations of the Lenders and the L/C Issuer under clause (b) of the preceding sentence shall survive the payment in full of the Obligations and the termination of this Agreement.

Section 11.06 Successors and Assigns

(a) **Successors and Assigns Generally.** The provisions of this Agreement and the other Loan Documents shall be binding upon and inure to the benefit of the parties hereto and thereto and their respective successors and assigns permitted hereby, except neither the Borrower nor any other Loan Party may assign or otherwise transfer any of its rights or obligations
hereunder without the prior written consent of the Administrative Agent and no Lender may assign or otherwise transfer any of its rights or obligations hereunder except (i) to an assignee in accordance with the provisions of subsection (b) of this Section, (ii) by way of participation in accordance with the provisions of subsection (d) of this Section, or (iii) by way of pledge or assignment of a security interest subject to the restrictions of subsection (f) of this Section (and any other attempted assignment or transfer by any party hereto shall be null and void). Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby, Participants to the extent provided in subsection (d) of this Section and, to the extent expressly contemplated hereby, the Related Parties of each of the Administrative Agent, the Collateral Agent, the L/C Issuer and the Lenders) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) **Assignments by Lenders.** Any Lender may at any time assign to one or more assignees all or a portion of its rights and obligations under this Agreement and the other Loan Documents (including all or a portion of its Commitment(s) and the Loans (including for purposes of this subsection (b), participations in L/C Obligations) at the time owing to it); provided that (in each case with respect to the Facility), any such assignment shall be subject to the following conditions:

(i) **Minimum Amounts.**

(A) in the case of an assignment of the entire remaining amount of the assigning Lender’s Commitment under the Facility and/or the Loans at the time owing to it (in each case with respect to the Facility) or contemporaneous assignments to related Approved Funds that equal at least the amount specified in paragraph (b)(i)(B) of this Section in the aggregate or in the case of an assignment to a Lender, an Affiliate of a Lender or an Approved Fund, no minimum amount need be assigned; and

(B) in any case not described in subsection (b)(i)(A) of this Section, the aggregate amount of the Commitment (which for this purpose includes Loans outstanding hereunder) or, if the Commitment is not then in effect, the principal outstanding balance of the Loans of the assigning Lender subject to each such assignment, determined as of the date the Assignment and Assumption with respect to such assignment is delivered to the Administrative Agent or, if “Trade Date” is specified in the Assignment and Assumption, as of the Trade Date, shall not be less than $5,000,000 (and shall be in an amount of an integral multiple of $1,000,000), in the case of any assignment in respect of the Facility, unless each of the Administrative Agent and, so long as no Event of Default has occurred and is continuing, the Borrower otherwise consents (each such consent not to be unreasonably withheld or delayed).

(ii) **Proportionate Amounts.** Each partial assignment shall be made as an assignment of a proportionate part of all the assigning Lender’s rights and obligations under this Agreement and the other Loan Documents with respect to the Loans and/or the Commitment assigned.

(iii) **Required Consents.** No consent shall be required for any assignment except to the extent required by subsection (b)(i)(B) of this Section and, in addition:

(A) the consent of the Borrower (such consent not to be unreasonably withheld or delayed) shall be required unless (1) an Event of Default has occurred and is continuing at the time of such assignment or (2) such assignment is to a Lender, an Affiliate of a Lender or an Approved Fund; provided that, (i) in no event shall any such assignment be made to
any Competitor of the Loan Parties and (ii) the Borrower shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to the Administrative Agent within five (5) Business Days after having received notice thereof;

(B) the consent of the Administrative Agent (such consent not to be unreasonably withheld or delayed) shall be required for assignments in respect of any Commitment if such assignment is to a Person that is not a Lender with a Commitment in respect of the applicable Facility, an Affiliate of such Lender or an Approved Fund with respect to such Lender; and

(C) the consent of the L/C Issuer (such consent not to be unreasonably withheld or delayed) shall be required for any assignment in respect of the Facility.

(iv) Assignment and Assumption. The parties to each assignment shall execute and deliver to the Administrative Agent an Assignment and Assumption, together with a processing and recordation fee in the amount of $3,500; provided, however, that the Administrative Agent may, in its sole discretion, elect to waive or reduce such processing and recordation fee in the case of any assignment. The assignee, if it is not a Lender, shall deliver to the Administrative Agent an Administrative Questionnaire and all applicable tax forms.

(v) No Assignment to Certain Persons. No such assignment shall be made (A) to the Borrower or any of its Affiliates or Subsidiaries, (B) to any Defaulting Lender or any of its Subsidiaries, or any Person who, upon becoming a Lender hereunder, would constitute any of the foregoing Persons described in this clause (B), or (C) to a natural Person.

(vi) Certain Additional Payments. In connection with any assignment of rights and obligations of any Defaulting Lender hereunder, no such assignment shall be effective unless and until, in addition to the other conditions thereto set forth herein, the parties to the assignment shall make such additional payments to the Administrative Agent in an aggregate amount sufficient, upon distribution thereof as appropriate (which may be outright payment, purchases by the assignee of participations or subparticipations, or other compensating actions, including funding, with the consent of the Borrower and the Administrative Agent, the applicable pro rata share of Loans previously requested but not funded by the Defaulting Lender, to each of which the applicable assignee and assignor hereby irrevocably consent), to (A) pay and satisfy in full all payment liabilities then owed by such Defaulting Lender to the Administrative Agent, the L/C Issuer or any Lender hereunder (and interest accrued thereon) and (B) acquire (and fund as appropriate) such Defaulting Lender’s full pro rata share of all Revolving Borrowings and participations in Letters of Credit in accordance with its Applicable Percentage of each Revolving Borrowing and of each participation in a Letter of Credit. Notwithstanding the foregoing, in the event that any assignment of rights and obligations of any Defaulting Lender hereunder shall become effective under applicable Law without compliance with the provisions of this paragraph, then the assignee of such interest shall be deemed to be a Defaulting Lender for all purposes of this Agreement until such compliance occurs.

Subject to acceptance and recording thereof by the Administrative Agent pursuant to subsection (c) of this Section, from and after the effective date specified in each Assignment and Assumption, the assignee thereunder shall be a party to this Agreement and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of the assigning Lender’s rights and obligations under this Agreement, such Lender shall cease to be a party)

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hereto but shall continue to be entitled to the benefits of Sections 3.01, 3.04, 3.05 and 11.04 with respect to facts and circumstances occurring prior to the effective date of such assignment; provided that, except to the extent otherwise expressly agreed by the affected parties, no assignment by a Defaulting Lender will constitute a waiver or release of any claim of any party hereunder arising from that Lender’s having been a Defaulting Lender. Upon request, the Borrower (at its expense) shall execute and deliver a Revolving Note to the assignee Lender. Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this subsection shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with subsection (d) of this Section.

(c) **Register.** The Administrative Agent, acting solely for this purpose as an agent of the Borrower (and such agency being solely for tax purposes), shall maintain at the Administrative Agent’s Office a copy of each Assignment and Assumption delivered to it (or the equivalent thereof in electronic form) and a register for the recording of the names and addresses of the Lenders, and the Commitments of, and principal amounts (and stated interest) of the Loans and L/C Obligations owing to, each Lender pursuant to the terms hereof from time to time (the “Register”). The entries in the Register shall be conclusive, absent manifest error, and the Borrower, the Administrative Agent and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by the Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice. Upon its receipt of, and consent to, a duly completed Assignment and Assumption executed by an assigning Lender and an assignee, an Administrative Questionnaire completed in respect of the assignee (unless the assignee shall already be a Lender hereunder), the processing and recordation fee referred to in paragraph (b) above, if applicable, and the written consent of the Administrative Agent and the L/C Issuer and, if required, the Borrower, to such assignment and any applicable tax forms, the Administrative Agent shall (i) accept such Assignment and Assumption and (ii) promptly record the information contained therein in the Register. No assignment shall be effective unless it has been recorded in the Register as provided in this paragraph (c).

(d) **Participations.** Any Lender may at any time, without the consent of, or notice to, the Borrower, the Administrative Agent or the L/C Issuer, sell participations to any Person (other than a natural Person, a Defaulting Lender or the Borrower or any of its Affiliates or Subsidiaries) (each, a “Participant”) in all or a portion of such Lender’s rights and/or obligations under this Agreement (including all or a portion of its Commitment and/or the Loans (including such Lender’s participations in L/C Obligations) owing to it); provided that, (i) such Lender’s obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (iii) the Borrower, the Administrative Agent, the Lenders and the L/C Issuer shall continue to deal solely and directly with such Lender in connection with such Lender’s rights and obligations under this Agreement; and provided, further, that in no event shall any such participation be sold to any Competitor of the Loan Parties. For the avoidance of doubt, each Lender shall be responsible for the indemnity under Section 11.04(c) without regard to the existence of any participations.

Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement; provided that, such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, waiver or other modification described in clauses (c), (d), (e), (i) and (j) of the first proviso to Section 11.01 that affects such Participant. The Borrower agrees that each Participant shall be entitled to the benefits of Sections 3.01, 3.04 and 3.05.

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
subject to the requirements and limitations herein, including the requirements under Section 3.01(e) (it being understood that the documentation required under Section 3.01(e) shall be delivered to the Lender who sells the participation) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (b) of this Section; provided that, such Participant (A) agrees to be subject to the provisions of Sections 3.06 and 11.13 as if it were an assignee under paragraph (b) of this Section and (B) shall not be entitled to receive any greater payment under Sections 3.01 or 3.04, with respect to any participation, than the Lender from whom it acquired the applicable participation would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a Change in Law that occurs after the Participant acquired the applicable participation. Each Lender that sells a participation agrees, at the Borrower’s request and expense, to use reasonable efforts to cooperate with the Borrower to effectuate the provisions of Section 3.06 with respect to any Participant. To the extent permitted by law, each Participant also shall be entitled to the benefits of Section 11.08 as though it were a Lender; provided that, such Participant agrees to be subject to Section 2.12 as though it were a Lender. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrower, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant’s interest in the Loans or other obligations under the Loan Documents (the “Participant Register”); provided that, no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant’s interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(e) **Certain Pledges.** Any Lender may at any time, without consent of the Loan Parties or the Administrative Agent, pledge or assign a security interest in all or any portion of its rights under this Agreement (including under its Revolving Note or Revolving Notes, if any) to secure obligations of such Lender, including any pledge or assignment to secure obligations, to a Federal Reserve Bank; provided that no such pledge or assignment shall release such Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

(f) **Resignation as L/C Issuer after Assignment.** Notwithstanding anything to the contrary contained herein, if at any time a Lender assigns all of its Commitment and Revolving Loans pursuant to subsection (b) above, such Lender may, (i) upon ten (10) days’ notice to the Borrower and the Lenders, resign as L/C Issuer. In the event of any such resignation as L/C Issuer, the Borrower shall be entitled to appoint from among the Lenders a successor L/C Issuer hereunder with the consent of the Administrative Agent (which consent shall not be unreasonably withheld or delayed) and such Lender; provided, however, that no failure by the Borrower to appoint any such successor shall affect the resignation of such Lender as L/C Issuer. If such Lender resigns as L/C Issuer, it shall retain all the rights, powers, privileges and duties of the L/C Issuer hereunder with respect to all Letters of Credit issued by such Lender outstanding as of the effective date of its resignation as L/C Issuer and all L/C Obligations with respect thereto (including the right to require the Lenders to make Base Rate Loans or fund risk participations in Unreimbursed Amounts pursuant to Section 2.03(c)). Upon the appointment of a successor L/C Issuer, (A) such successor shall succeed to and become vested with all of the

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rights, powers, privileges and duties of the retiring L/C Issuer, (B) the retiring L/C Issuer shall be discharged from all of its duties and obligations hereunder or under the other Loan Documents and (C) the successor L/C Issuer shall issue letters of credit in substitution for the Letters of Credit issued by the retiring L/C Issuer, if any, outstanding at the time of such succession or make other arrangements satisfactory to the retiring L/C Issuer to effectively assume the obligations of the retiring L/C Issuer with respect to such Letters of Credit.

Section 11.07 Treatment of Certain Information: Confidentiality.

(a) Treatment of Certain Information. Each of the Administrative Agent, the Collateral Agent, the Lenders and the L/C Issuer agrees to maintain the confidentiality of the Information (as defined below), except that Information may be disclosed (i) to its Affiliates and to its Related Parties (it being understood that the Persons to whom such disclosure is made will be informed of the confidential nature of such Information and instructed to keep such Information confidential), (ii) to the extent required or requested by any regulatory authority having jurisdiction over such Person or its Related Parties (including any self-regulatory authority, such as the National Association of Insurance Commissioners), (iii) to the extent required by applicable Laws or regulations or by any subpoena or similar legal process, (iv) to any other party hereto, (v) in connection with the exercise of any remedies hereunder or under any other Loan Document or any action or proceeding relating to this Agreement or any other Loan Document or the enforcement of rights hereunder or thereunder, (vi) subject to an agreement containing provisions substantially the same as those of this Section, to (A) any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights and obligations under this Agreement or (B) any actual or prospective party (or its Related Parties) to any swap, derivative or other transaction under which payments are to be made by reference to the Borrower and its obligations, this Agreement or payments hereunder, (vii) on a confidential basis to (1) the CUSIP Service Bureau or any similar agency in connection with the issuance and monitoring of CUSIP numbers or other market identifiers with respect to the credit facilities provided hereunder or (2) any administration, management or settlement service providers, (viii) with the consent of the Borrower or to the extent such Information (1) becomes publicly available other than as a result of a breach of this Section or (2) becomes available to the Administrative Agent, the Collateral Agent, any Lender or the L/C Issuer on a nonconfidential basis from a source other than the Borrower or any Subsidiary thereof. For purposes of this Section, “Information” means all information received from the Borrower or any Subsidiary thereof relating to the Borrower or any Subsidiary thereof or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or any Subsidiary thereof. For purposes of this Section, “Information” means all information received from the Borrower or any Subsidiary thereof relating to the Borrower or any Subsidiary thereof or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or any Subsidiary thereof. For purposes of this Section, “Information” means all information received from the Borrower or any Subsidiary thereof relating to the Borrower or any Subsidiary thereof or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or any Subsidiary thereof. For purposes of this Section, “Information” means all information received from the Borrower or any Subsidiary thereof relating to the Borrower or any Subsidiary thereof or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or any Subsidiary thereof. For purposes of this Section, “Information” means all information received from the Borrower or any Subsidiary thereof relating to the Borrower or any Subsidiary thereof or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or any Subsidiary thereof. For purposes of this Section, “Information” means all information received from the Borrower or any Subsidiary thereof relating to the Borrower or any Subsidiary thereof or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or any Subsidiary thereof. For purposes of this Section, “Information” means all information received from the Borrower or any Subsidiary thereof relating to the Borrower or any Subsidiary thereof or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or any Subsidiary thereof. For purposes of this Section, “Information” means all information received from the Borrower or any Subsidiary thereof relating to the Borrower or any Subsidiary thereof or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or any Subsidiary thereof. For purposes of this Section, “Information” means all information received from the Borrower or any Subsidiary thereof relating to the Borrower or any Subsidiary thereof or any of their respective Affiliates on a nonconfidential basis from a source other than the Borrower or any Subsidiary thereof.

(b) Non-Public Information. Each of the Administrative Agent, the Collateral Agent, the Lenders and the L/C Issuer acknowledges that (i) the Information may include material non-public information concerning a Loan Party or a Subsidiary thereof, as the case may be, (ii) it has developed compliance procedures regarding the use of material non-public information and (iii) it will handle such material non-public information in accordance with applicable Law, including United States federal and state securities Laws.

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
(c) **Press Releases.** The Loan Parties and their Affiliates agree that they will not in the future issue any press releases or other public disclosure using the name of the Administrative Agent, the Collateral Agent or any Lender or their respective Affiliates or referring to this Agreement or any of the Loan Documents without the prior written consent of the Administrative Agent, unless (and only to the extent that) the Loan Parties or such Affiliates are required to do so under law and then, in any event the Loan Parties or such Affiliates will consult with such Person before issuing such press release or other public disclosure.

(d) **Customary Advertising Material.** The Loan Parties consent to the publication by the Administrative Agent, the Collateral Agent or any Lender of customary advertising material relating to the transactions contemplated hereby using the name, product photographs, logo or trademark of the Loan Parties; provided that, if any such advertising materials include Borrower’s results of operating or other non-public Information that is to be treated as confidential under this Section 11.07, the Borrower’s consent shall be required prior to use of such Information.

(e) **FOIL.** NOTWITHSTANDING ANY PROVISION OF THIS SECTION 11.07 TO THE CONTRARY, THE LOAN PARTIES ACKNOWLEDGE AND AGREE THAT ALL INFORMATION, IN ANY FORMAT, SUBMITTED TO NYGB SHALL BE SUBJECT TO AND TREATED IN ACCORDANCE WITH THE NYS FREEDOM OF INFORMATION LAW (“FOIL,” PUBLIC OFFICERS LAW, ARTICLE 6). PURSUANT TO FOIL, NYGB IS REQUIRED TO MAKE AVAILABLE TO THE PUBLIC, UPON REQUEST, RECORDS OR PORTIONS THEREOF WHICH IT POSSESSES, UNLESS THAT INFORMATION IS STATUTORILY EXEMPT FROM DISCLOSURE THEREFORE, UNLESS THIS AGREEMENT SPECIFICALLY REQUIRES OTHERWISE, THE LOAN PARTIES SHOULD SUBMIT INFORMATION TO NYGB IN A NON-CONFIDENTIAL, NON-PROPRIETARY FORMAT. FOIL DOES PROVIDE THAT NYGB MAY DENY ACCESS TO RECORDS OR PORTIONS THEREOF THAT “ARE TRADE SECRETS OR ARE SUBMITTED TO AN AGENCY BY A COMMERCIAL ENTERPRISE OR DERIVED FROM INFORMATION OBTAINED FROM A COMMERCIAL ENTERPRISE AND WHICH IF DISCLOSED WOULD CAUSE SUBSTANTIAL INJURY TO THE COMPETITIVE POSITION OF THE SUBJECT ENTERPRISE.” [SEE PUBLIC OFFICERS LAW, § 87(2)(D)]. ACCORDINGLY, IF THIS AGREEMENT SPECIFICALLY REQUIRES SUBMISSION OF INFORMATION IN A FORMAT THE LOAN PARTIES CONSIDER A PROPRIETARY AND/OR CONFIDENTIAL TRADE SECRET, THE LOAN PARTIES SHALL FULLY IDENTIFY AND PLAINLY LABEL THE INFORMATION “CONFIDENTIAL” OR “PROPRIETARY” AT THE TIME OF DISCLOSURE. WITHOUT LIMITATION, INFORMATION WILL NOT BE CONSIDERED CONFIDENTIAL OR PROPRIETARY IF IT IS OR HAS BEEN (I) GENERALLY KNOWN OR AVAILABLE FROM OTHER SOURCES WITHOUT OBLIGATION CONCERNING ITS CONFIDENTIALITY; (II) MADE AVAILABLE BY THE OWNER TO OTHERS WITHOUT OBLIGATION CONCERNING ITS CONFIDENTIALITY; OR (III) ALREADY AVAILABLE TO NYGB WITHOUT OBLIGATION CONCERNING ITS CONFIDENTIALITY IN THE EVENT OF A FOIL REQUEST, IT IS NYGB’S POLICY TO CONSIDER RECORDS AS MARKED ABOVE PURSUANT TO THE TRADE SECRET EXEMPTION PROCEDURE SET FORTH IN 21 NEW YORK CODES RULES & REGULATIONS § 501.6 AND ANY OTHER APPLICABLE LAW OR REGULATION. HOWEVER, NYGB CANNOT GUARANTEE THE CONFIDENTIALITY OF ANY INFORMATION SUBMITTED. MORE INFORMATION ON FOIL, AND THE RELEVANT STATUTORY LAW AND REGULATIONS, CAN BE FOUND AT THE WEBSITE FOR THE

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[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
Section 11.08 Right of Setoff

If an Event of Default shall have occurred and be continuing, each Lender, the L/C Issuer and each of their respective Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by applicable Law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held and other obligations (in whatever currency) at any time owing by such Lender, the L/C Issuer or any such Affiliate to or for the credit or the account of the Borrower or any other Loan Party against any and all of the obligations of the Borrower or such Loan Party now or hereafter existing under this Agreement or any other Loan Document to such Lender or the L/C Issuer or their respective Affiliates, irrespective of whether or not such Lender, the L/C Issuer or Affiliate shall have made any demand under this Agreement or any other Loan Document and although such obligations of the Borrower or such Loan Party may be contingent or unmatured, secured or unsecured, or are owed to a branch, office or Affiliate of such Lender or the L/C Issuer different from the branch, office or Affiliate holding such deposit or obligated on such indebtedness; provided that, in the event that any Defaulting Lender shall exercise any such right of setoff, (a) all amounts so set off shall be paid over immediately to the Administrative Agent for further application in accordance with the provisions of Section 2.14 and, pending such payment, shall be segregated by such Defaulting Lender from its other funds and deemed held in trust for the benefit of the Administrative Agent, the L/C Issuer and the Lenders, and (b) the Defaulting Lender shall provide promptly to the Administrative Agent a statement describing in reasonable detail the Secured Obligations owing to such Defaulting Lender as to which it exercised such right of setoff. The rights of each Lender, the L/C Issuer and their respective Affiliates under this Section are in addition to other rights and remedies (including other rights of setoff) that such Lender, the L/C Issuer or their respective Affiliates may have. Each Lender and the L/C Issuer agrees to notify the Borrower or such Loan Party and the Administrative Agent promptly after any such setoff and application; provided that, the failure to give such notice shall not affect the validity of such setoff and application.

Section 11.09 Interest Rate Limitation

Notwithstanding anything to the contrary contained in any Loan Document, the interest paid or agreed to be paid under the Loan Documents shall not exceed the maximum rate of non-usurious interest permitted by applicable Law (the “Maximum Rate”). If the Administrative Agent or any Lender shall receive interest in an amount that exceeds the Maximum Rate, the excess interest shall be applied to the principal of the Loans or, if it exceeds such unpaid principal, refunded to the Borrower. In determining whether the interest contracted for, charged, or received by the Administrative Agent or a Lender exceeds the Maximum Rate, such Person may, to the extent permitted by applicable Law, (a) characterize any payment that is not principal as an expense, fee, or premium rather than interest, (b) exclude voluntary prepayments and the effects thereof, and (c) amortize, prorate, allocate, and spread in equal or unequal parts the total amount of interest throughout the contemplated term of the Obligations hereunder.

Section 11.10 Counterparts; Integration; Effectiveness

This Agreement and each of the other Loan Documents may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which taken together shall constitute a single contract. This Agreement, the other Loan Documents, and any separate letter agreements with respect to fees payable to the
Administrative Agent, the Collateral Agent or the L/C Issuer, constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Except as provided in Section 4.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof that, when taken together, bear the signatures of each of the other parties hereto. Delivery of an executed counterpart of a signature page of this Agreement or any other Loan Document, or any certificate delivered thereunder, by fax transmission or other e-mail transmission (e.g., “pdf” or “tif”) shall be effective as delivery of an original executed counterpart of this Agreement or such other Loan Document or certificate. Without limiting the foregoing, to the extent an original executed counterpart is not specifically required to be delivered under the terms of any Loan Document, upon the request of any party, such fax transmission or e-mail transmission shall be promptly followed by delivery of such original executed counterpart.

Section 11.11 Survival of Representations and Warranties.

All representations and warranties made hereunder and in any other Loan Document or other document delivered pursuant hereto or thereto or in connection herewith or therewith shall survive the execution and delivery hereof and thereof. Such representations and warranties have been or will be relied upon by the Administrative Agent and each Lender, regardless of any investigation made by the Administrative Agent or any Lender or on their behalf and notwithstanding that the Administrative Agent or any Lender may have had notice or knowledge of any Default at the time of any Credit Extension, and shall continue in full force and effect as long as any Loan or any other Obligation hereunder shall remain unpaid or unsatisfied or any Letter of Credit shall remain outstanding.

Section 11.12 Severability.

If any provision of this Agreement or the other Loan Documents is held to be illegal, invalid or unenforceable, (a) the legality, validity and enforceability of the remaining provisions of this Agreement and the other Loan Documents shall not be affected or impaired thereby and (b) the parties shall endeavor in good faith negotiations to replace the illegal, invalid or unenforceable provisions with valid provisions the economic effect of which comes as close as possible to that of the illegal, invalid or unenforceable provisions. The invalidity of a provision in a particular jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction. Without limiting the foregoing provisions of this Section, if and to the extent that the enforceability of any provisions in this Agreement relating to Defaulting Lenders shall be limited by Debtor Relief Laws, as determined in good faith by the Administrative Agent or the L/C Issuer, as applicable, then such provisions shall be deemed to be in effect only to the extent not so limited.

Section 11.13 Replacement of Lenders.

If the Borrower is entitled to replace a Lender pursuant to the provisions of Section 3.06, or if any Lender is a Defaulting Lender or a Non-Consenting Lender or if any other circumstance exists hereunder that gives the Borrower the right to replace a Lender as a party hereto, then the Borrower may, at its sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in, and consents required by, Section 11.06), all of its interests, rights (other than its existing rights to payments pursuant to Sections 3.01 and 3.04) and obligations under this Agreement and the related Loan Documents to an Eligible Assignee.

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that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment); provided that:

(a) the Borrower shall have paid to the Administrative Agent the assignment fee (if any) specified in Section 11.06(b);

(b) such Lender shall have received payment of an amount equal to 100% of the outstanding principal of its Loans and L/C Advances, accrued interest thereon, accrued fees and all other amounts payable to it hereunder and under the other Loan Documents (including any amounts under Section 3.05) from the assignee (to the extent of such outstanding principal and accrued interest and fees) or the Borrower (in the case of all other amounts);

(c) in the case of any such assignment resulting from a claim for compensation under Section 3.04 or payments required to be made pursuant to Section 3.01, such assignment will result in a reduction in such compensation or payments thereafter;

(d) such assignment does not conflict with applicable Laws; and

(e) in the case of an assignment resulting from a Lender becoming a Non-Consenting Lender, the applicable assignee shall have consented to the applicable amendment, waiver or consent.

A Lender shall not be required to make any such assignment or delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Borrower to require such assignment and delegation cease to apply.

Section 11.14 Governing Law; Jurisdiction; Etc.

(a) GOVERNING LAW. THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS (EXCEPT, AS TO ANY OTHER LOAN DOCUMENT, AS EXPRESSLY SET FORTH THEREIN) AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSE OF ACTION (WHETHER IN CONTRACT OR TORT OR OTHERWISE) BASED UPON, ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT (EXCEPT, AS TO ANY OTHER LOAN DOCUMENT, AS EXPRESSLY SET FORTH THEREIN) AND THE TRANSACTIONS CONTEMPLATED HEREBY AND THEREBY SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

(b) SUBMISSION TO JURISDICTION. THE BORROWER AND EACH OTHER LOAN PARTY IRREVOCABLY AND UNCONDITIONALLY AGREE THAT IT WILL NOT COMMENCE ANY ACTION, LITIGATION OR PROCEEDING OF ANY KIND OR DESCRIPTION, WHETHER IN LAW OR EQUITY, WHETHER IN CONTRACT OR IN TORT OR OTHERWISE, AGAINST THE ADMINISTRATIVE AGENT, ANY LENDER, THE L/C ISSUER, OR ANY RELATED PARTY OF THE FOREGOING IN ANY WAY RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS RELATING HERETO OR THEREOF OR FOR THE RECOGNITION AND ENFORCEMENT OF ANY JUDGMENT IN RESPECT THEREOF, IN ANY FORUM OTHER THAN THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY, AND ANY APPELLATE COURT THEREOF, AND EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY, IN ACCORDANCE WITH THE PROVISIONS OF NY CLS CPLR § 505, SUBMITS TO THE EXCLUSIVE GENERAL JURISDICTION OF SUCH COURTS AND AGREES THAT ALL CLAIMS IN RESPECT OF

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
ANY SUCH ACTION, LITIGATION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION, LITIGATION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT OR IN ANY OTHER LOAN DOCUMENT SHALL AFFECT ANY RIGHT THAT THE ADMINISTRATIVE AGENT, THE COLLATERAL AGENT, ANY LENDER OR THE L/C ISSUER MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AGAINST THE BORROWER OR ANY OTHER LOAN PARTY OR THEIR PROPERTIES IN THE COURTS OF ANY JURISDICTION.

(c) WAIVER OF VENUE. EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY WAIVE, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT IN ANY COURT REFERRED TO IN PARAGRAPH (B) OF THIS SECTION 11.14. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(d) SERVICE OF PROCESS. EACH PARTY HERETO IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 11.02. NOTHING IN THIS AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW.

Section 11.15 Waiver of Jury Trial.

EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (a) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (b) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 11.15.

Section 11.16 Subordination.

Each Loan Party (a “Subordinating Loan Party”) hereby subordinates the payment of all obligations and indebtedness of any other Loan Party owing to it, whether now existing or hereafter arising, including but not limited to any obligation of any such other Loan Party to the Subordinating Loan Party as subrogee of the Secured Parties or resulting from such Subordinating Loan Party’s performance under this Loan Party Guarantee, to the indefeasible payment in full in cash of all Obligations. If the Secured Parties so request, any such obligation

[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
or indebtedness of any such other Loan Party to the Subordinating Loan Party shall be enforced and performance received by the Subordinating Loan Party as trustee for the Secured Parties and the proceeds thereof shall be paid over to the Secured Parties on account of the Secured Obligations, but without reducing or affecting in any manner the liability of the Subordinating Loan Party under this Agreement. Without limitation of the foregoing, so long as no Default has occurred and is continuing, the Loan Parties may make and receive payments with respect to Intercompany Debt; provided, that in the event that any Loan Party receives any payment of any Intercompany Debt at a time when such payment is prohibited by this Section, such payment shall be held by such Loan Party, in trust for the benefit of, and shall be paid forthwith over and delivered, upon written request, to the Administrative Agent.

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[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
Section 11.17 No Advisory or Fiduciary Responsibility

In connection with all aspects of each transaction contemplated hereby (including in connection with any amendment, waiver or other modification hereof or of any other Loan Document), the Borrower and each other Loan Party acknowledge and agree, and acknowledge their respective Affiliates’ understanding, that: (a) (i) the arranging and other services regarding this Agreement provided by the Administrative Agent and any Affiliate thereof, each Arranger and the Lenders are arm’s-length commercial transactions between the Borrower, each other Loan Party and their respective Affiliates, on the one hand, and the Administrative Agent and its Affiliates, the L/C Issuer and its Affiliates, the Collateral Agent and its Affiliates and the Lenders and their Affiliates (including in the case of any such Affiliate as an Arranger), on the other hand, (ii) each of the Borrower and the other Loan Parties has consulted its own legal, accounting, regulatory and tax advisors to the extent it has deemed appropriate, and (iii) the Borrower and each other Loan Party are capable of evaluating, and understand and accept, the terms, risks and conditions of the transactions contemplated hereby and by the other Loan Documents; (b) (i) the Administrative Agent and its Affiliates, the L/C Issuer and its Affiliates, the Collateral Agent and its Affiliates and each Lender and its Affiliates (including in the case of any such Affiliate as an Arranger) each are and have been acting solely as a principal and, except as expressly agreed in writing by the relevant parties, have not been, are not, and will not be acting as an advisor, agent or fiduciary, for the Borrower, any other Loan Party or any of their respective Affiliates, or any other Person and (ii) none the Administrative Agent and any of its Affiliates, the L/C Issuer and any of its Affiliates, the Collateral Agent and any of its Affiliates, or any Lender and any of its Affiliates (including in the case of any such Affiliate as an Arranger) has any obligation to the Borrower, any other Loan Party or any of their respective Affiliates with respect to the transactions contemplated hereby except those obligations expressly set forth herein and in the other Loan Documents; and (c) the Administrative Agent and its Affiliates, the L/C Issuer and its Affiliates, the Collateral Agent and its Affiliates, and the Lenders and their Affiliates (including in the case of any such Affiliate as an Arranger) may be engaged in a broad range of transactions that involve interests that differ from those of the Borrower, the other Loan Parties and their respective Affiliates, and none the Administrative Agent and any of its Affiliates, the L/C Issuer and any of its Affiliates, the Collateral Agent and any of its Affiliates, or any Lender and any of its Affiliates (including in the case of any such Affiliate as an Arranger) has any obligation to disclose any of such interests to the Borrower, any other Loan Party or any of their respective Affiliates. To the fullest extent permitted by law, each of the Borrower and each other Loan Party hereby waives and releases any claims that it may have against the Administrative Agent and any of its Affiliates, the L/C Issuer and any of its Affiliates, the Collateral Agent and any of its Affiliates, or any Lender and any of its Affiliates (including in the case of any such Affiliate as an Arranger) with respect to any breach or alleged breach of agency or fiduciary duty in connection with any aspect of any transactions contemplated hereby.

Section 11.18 Electronic Execution of Assignments and Certain Other Documents

The words “execute,” “execution,” “signed,” “signature,” and words of like import in any Assignment and Assumption or in any amendment or other modification hereof (including waivers and consents) shall be deemed to include electronic signatures, the electronic matching of assignment terms and contract formations on electronic platforms approved by the Administrative Agent, or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable Law, including the Federal Electronic Signatures in Global and National Commerce

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Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

Section 11.19 USA PATRIOT Act Notice.

Each Lender that is subject to the PATRIOT Act and the Administrative Agent (for itself and not on behalf of any Lender) hereby notifies the Borrower and the other Loan Parties that pursuant to the requirements of PATRIOT Act, it is required to obtain, verify and record information that identifies each Loan Party, which information includes the name and address of each Loan Party and other information that will allow such Lender or the Administrative Agent, as applicable, to identify each Loan Party in accordance with the PATRIOT Act. The Borrower and the other Loan Parties agree to, promptly following a request by the Administrative Agent or any Lender and no later than five (5) Business Days prior to the Closing Date, provide all such other documentation and information that the Administrative Agent or such Lender requests in order to comply with its ongoing obligations under applicable “know your customer” and anti-money laundering rules and regulations, including the PATRIOT Act.

Section 11.20 Time of the Essence.

Time is of the essence of the Loan Documents.

Section 11.21 Acknowledgement and Consent to Bail-In of Affected Financial Institutions.

Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any Affected Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of the applicable Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by the applicable Resolution Authority to any such liabilities arising hereunder that may be payable to it by any party hereto that is an Affected Financial Institution; and

(b) the effects of any Bail-In Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such Affected Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of the applicable Resolution Authority.

Section 11.22 Acknowledgement Regarding Any Supported QFCs.

To the extent that the Loan Documents provide support, through a guarantee or otherwise, for Secured Hedge Agreements or any other agreement or instrument that is a QFC (such support, “QFC Credit Support” and each such QFC a “Supported QFC”), the parties

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[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if publicly disclosed.
acknowledge and agree as follows with respect to the resolution power of the Federal Deposit Insurance Corporation under the Federal Deposit
Insurance Act and Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act (together with the regulations promulgated
thereunder, the “U.S. Special Resolution Regimes”) in respect of such Supported QFC and QFC Credit Support (with the provisions below
applicable notwithstanding that the Loan Documents and any Supported QFC may in fact be stated to be governed by the laws of the State of
New York and/or of the United States or any other state of the United States):

(a) In the event a Covered Entity that is party to a Supported QFC (each, a “Covered Party”) becomes subject to a proceeding under a
U.S. Special Resolution Regime, the transfer of such Supported QFC and the benefit of such QFC Credit Support (and any interest and
obligation in or under such Supported QFC and such QFC Credit Support, and any rights in property securing such Supported QFC or such
QFC Credit Support) from such Covered Party will be effective to the same extent as the transfer would be effective under the U.S. Special
Resolution Regime if the Supported QFC and such QFC Credit Support (and any such interest, obligation and rights in property) were
governed by the laws of the United States or a state of the United States. In the event a Covered Party or a BHC Act Affiliate of a Covered
Party becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under the Loan Documents that might
otherwise apply to such Supported QFC or any QFC Credit Support that may be exercised against such Covered Party are permitted to be
exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if the Supported QFC and
the Loan Documents were governed by the laws of the United States or a state of the United States. Without limitation of the foregoing, it is
understood and agreed that rights and remedies of the parties with respect to a Defaulting Lender shall in no event affect the rights of any
Covered Party with respect to a Supported QFC or any QFC Credit Support.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

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[***] = Certain information contained in this document, marked by brackets, has been omitted because it is both not material and would be competitively harmful if
publicly disclosed.
IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the date first above written.

BORROWER:  SUNRUN INC.,
a Delaware corporation

By:  
Name:  
Title:  

GUARANTORS:  AEE SOLAR INC.,
a California corporation

By:  
Name:  
Title:  

SUNRUN SOUTH LLC,
a Delaware limited liability company

By:  
Name:  
Title:  

SUNRUN INSTALLATION SERVICES INC.,
a Delaware corporation

By:  
Name:  
Title:  

[Signature Page to Credit Agreement]
CLEAN ENERGY EXPERTS LLC,
a California limited liability company

By: _________________________
Name: _______________________
Title: ________________________

VIVINT SOLAR, INC.,
a Delaware corporation

By: _________________________
Name: _______________________
Title: ________________________

VIVINT SOLAR HOLDINGS, INC.,
a Delaware corporation

By: _________________________
Name: _______________________
Title: ________________________

VIVINT SOLAR OPERATIONS, LLC,
a Delaware limited liability company

By: _________________________
Name: _______________________
Title: ________________________

VIVINT SOLAR DEVELOPER, LLC,
a Delaware limited liability company

By: _________________________
Name: _______________________
Title: ________________________

[Signature Page to Credit Agreement]
KEYBANK NATIONAL ASSOCIATION,
as Administrative Agent, an L/C Issuer and a Lender

By: ________________________________
Name: ______________________________
Title: ______________________________

[Signature Page to Credit Agreement]
SILICON VALLEY BANK,
as Collateral Agent, an L/C Issuer and a Lender

By: ___________________________________
Name: ___________________________________
Title: ____________________________________

[Signature Page to Credit Agreement]
MUFG BANK, LTD.,
as a Lender

By: ______________________
Name: ____________________
Title: _____________________

[Signature Page to Credit Agreement]
BANK OF AMERICA, N.A.,
as a Lender

By: ________________________________
Name: ________________________________
Title: ________________________________

[Signature Page to Credit Agreement]
CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH,
as a Lender

By: ___________________________________
Name: 
Title: 

By: ___________________________________
Name: 
Title:

[Signature Page to Credit Agreement]
MORGAN STANLEY SENIOR FUNDING, INC.,
as a Lender

By: ________________________________
Name: ________________________________
Title: ________________________________

[Signature Page to Credit Agreement]
CREDIT AGRICOLE CORPORATE AND INVESTMENT BANK,
as a Lender

By: ________________________________
Name: ______________________________
Title: ______________________________

[Signature Page to Credit Agreement]
ROYAL BANK OF CANADA,

as a Lender

By: ______________________________________
Name: _________________________________
Title: _________________________________

[Signature Page to Credit Agreement]
DEUTSCHE BANK AG, NEW YORK BRANCH,
as a Lender

By: ______________________________
Name: ____________________________
Title: _____________________________

By: ______________________________
Name: ____________________________
Title: _____________________________

[Signature Page to Credit Agreement]
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<th>Name of Subsidiary</th>
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<td>Vivint Solar SREC Marketing, LLC</td>
<td>Delaware</td>
</tr>
<tr>
<td>VS BS Solar Lessee I, LLC</td>
<td>Delaware</td>
</tr>
</tbody>
</table>
Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- Registration Statement (Form S-8 No. 333-231293) pertaining to the Sunrun Inc. 2015 Equity Incentive Plan and Sunrun Inc. 2015 Employee Stock Purchase Plan
- Registration Statement (Form S-8 No. 333-224806) pertaining to the Sunrun Inc. 2015 Equity Incentive Plan and Sunrun Inc. 2015 Employee Stock Purchase Plan
- Registration Statement (Form S-8 No. 333-217869) pertaining to the Sunrun Inc. 2015 Equity Incentive Plan and Sunrun Inc. 2015 Employee Stock Purchase Plan
- Registration Statement (Form S-8 No. 333-211356) pertaining to the Sunrun Inc. 2015 Equity Incentive Plan and Sunrun Inc. 2015 Employee Stock Purchase Plan
- Registration Statement (Form S-8 No. 333-206120) pertaining to the Sunrun Inc. 2015 Equity Incentive Plan, Sunrun Inc. 2015 Employee Stock Purchase Plan, Sunrun Inc. 2014 Equity Incentive Plan, Sunrun Inc. 2013 Equity Incentive Plan, Sunrun Inc. 2008 Equity Incentive Plan, and Mainstream Energy Corporation 2009 Stock Plan
- Registration Statement (Form S-8 No. 333-246371) pertaining to the V Solar Holdings, Inc. 2013 Omnibus Incentive Plan and Vivint Solar, Inc. 2014 Equity Incentive Plan
- Registration Statement (Form S-8 No. 333-245684) pertaining to the Sunrun Inc. 2015 Equity Incentive Plan and Sunrun Inc. 2015 Employee Stock Purchase Plan
- Registration Statement (Form S-8 No. 333-258493) pertaining to the Sunrun Inc. 2015 Equity Incentive Plan, the Sunrun Inc. 2015 Employee Stock Purchase Plan, and the Sunrun-VSI 2014 Equity Incentive Plan
- Registration Statement (Form S-3 No. 333-264669) of Sunrun Inc.;

of our reports dated February 22, 2023, with respect to the consolidated financial statements of Sunrun Inc. and the effectiveness of internal control over financial reporting of Sunrun Inc. included in this Annual Report (Form 10-K) of Sunrun Inc. for the year ended December 31, 2022.

/s/ Ernst & Young LLP

San Francisco, California
February 22, 2023
CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Mary Powell, certify that:

1. I have reviewed this Annual Report on Form 10-K of Sunrun Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: February 22, 2023

By: /s/ Mary Powell

Mary Powell
Chief Executive Officer and Director
(Principal Executive Officer)
I, Danny Abajian, certify that:

1. I have reviewed this Annual Report on Form 10-K of Sunrun Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: February 22, 2023

By: ___________________________  
/s/ Danny Abajian
Danny Abajian
Chief Financial Officer
(Principal Financial Officer)
Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, each of the undersigned officers of Sunrun Inc. (the "Company") hereby certifies that the Company's Annual Report on Form 10-K for the year ended December 31, 2022 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 22, 2023

By: /s/ Mary Powell
Mary Powell
Chief Executive Officer and Director
(Principal Executive Officer)

By: /s/ Danny Abajian
Danny Abajian
Chief Financial Officer
(Principal Financial Officer)