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

FORM ABS-15G

ASSET-BACKED SECURITIZER
REPORT PURSUANT TO SECTION 15G OF
THE SECURITIES EXCHANGE ACT OF 1934

Check the appropriate box to indicate the filing obligation to which this form is intended to satisfy:

Rule 15Ga-1 under the Exchange Act (17 CFR 240.15Ga-1) for the reporting period _____ to

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Rule 15Ga-2 under the Exchange Act (17 CFR 240.15Ga-2)

Central Index Key Number of depositor: 0001469367

Sunrun Iris Issuer 2023-1, LLC

(Exact name of issuing entity as specified in its charter)

Central Index Key Number of issuing entity (if applicable): 0001969160

Central Index Key Number of underwriter (if applicable): Not applicable

Jeanna Steele, (415) 982-9000
**Name and telephone number, including area code, of the person to
contact in connection with this filing**

INFORMATION TO BE INCLUDED IN THE REPORT
FINDINGS AND CONCLUSIONS OF THIRD-PARTY DUE DILIGENCE REPORTS

Item 2.01 Findings and Conclusions of a Third Party Due Diligence Report Obtained by the Issuer

Attached as Exhibit 99.1 hereto is a consultant's report, dated April 14, 2023, obtained by Sunrun Inc., which report sets forth a summary of the findings and conclusions of Leidos Engineering, LLC with respect to certain residential photovoltaic solar assets.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the reporting entity has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Sunrun Inc.

Date: April 19, 2023

/s/ Jeanna Steele

Name: Jeanna Steele

Title: Chief Legal Officer and Chief People Officer

EXHIBIT INDEX

Exhibit Number	Description
99.1	Summary Report of Findings and Conclusions, dated April 14, 2023, of Leidos Engineering, LLC, setting forth findings and conclusions of Leidos with respect to certain residential photovoltaic solar assets.



April 14, 2023

Sunrun Inc.
225 Bush St., Suite 1400
San Francisco, CA 94104

**Subject: Summary Report of Findings and Conclusions
Sunrun Fleetwide Review**

Ladies and Gentlemen:

Introduction

Leidos Engineering, LLC (“Leidos”) has reviewed certain aspects of the methods and procedures used by Sunrun Inc. (“Sunrun”) in its development of residential rooftop photovoltaic (“PV”) power generation installations (individually referred to as a “Facility” or, if more than one Facility, the “Facilities”) on a fleet-wide basis, some of which include battery energy storage systems (“BESS”) operating in cooperation with the PV installation. The results of our review were provided in reports titled “*Independent Engineer’s Report; Sunrun Inc. Fleetwide Review*” dated May 19, 2022, and Addenda (together, the “IE Report”).

This summary report (the “Summary Report”) has been prepared in connection with project-level debt and equity financings related to the Facilities (each, a “Fund”), and in accordance with the Task Authorization dated December 10, 2018, under a Master Professional Services Agreement dated November 1, 2018, between Leidos and Sunrun. It is expected that these debt and equity transactions may include Facilities that have not yet begun development, but some operating Facilities and some Facilities under development may also be included. In order to gain a complete understanding of our review, and of our findings and conclusions, the IE Report should be read in its entirety.

Sunrun has installed Facilities on residential rooftops located in 21 states, Washington, D.C., and Puerto Rico; a small percentage of the Facilities have been ground-mounted. The Facilities are mounted in fixed-tilt rooftop configurations, and have capacities ranging from 2 kilowatts (“kW”)–direct current (“DC”) to 30 kW-DC. Sunrun or its affiliates have constructed and Sunrun owns and operates the Facilities, including performance of the operations and maintenance (“O&M”) activities. The owners of the sites on which the Facilities are located are herein individually referred to as a “Site Owner” and collectively as the “Site Owners.”

550 Cochituate Rd., West Wing, 4th Floor / Framingham, MA 01701 / 508.935.1600 / energy.leidos.com

Summary of Leidos' Review

During the preparation of this Report, we reviewed Sunrun's methodology for developing energy production estimates for operating Facilities and Facilities under development, as Sunrun believes these are reflective of future Facilities that are to be developed (the "New Facilities"). The review of methodology included reviewing aspects of both Sunrun's operating fleet and Facilities originated during a six-month period ending December 31, 2021 (some of which are under development, and some of which are operating), for which Sunrun has executed agreements for power and/or construction (the "Origination Facilities"), and which Sunrun expects to be representative of projects currently being developed. Further, we have reviewed the design package, reviewed Sunrun's energy production estimates, and prepared independent energy production estimates for 10 of the Origination Facilities (the "Reference Facilities"). Our review and comparison of energy production estimates involved selecting a solar resource dataset and identifying various user input values based on system equipment and design.

We reviewed an executed Master Operation, Maintenance, and Administration Agreement (the "MOMA Agreement") provided by Sunrun and dated January 13, 2022, which Sunrun has stated is materially similar to recent financings. Our scope did not include review of the construction cost and schedule projections or individual Facility-specific O&M costs.

Sunrun is responsible for the customization of the respective solar plan, design approval, permitting, installation, city/county inspections, utility interconnections, and O&M services for each Facility. After a Facility becomes operational, Sunrun provides daily system surveillance. We reviewed Sunrun's relevant experience and capabilities. As of December 31, 2021, Sunrun had installed more than 350,000 facilities operational in 21 states, Washington, D.C., and Puerto Rico. Sunrun currently employs a staff of more than 11,000 and is a fully integrated provider, conducting all sales, design and engineering, equipment procurement, construction, commissioning, and O&M services.

We reviewed Sunrun's project development processes including site selection, design and engineering, equipment selection, electrical design, electrical interconnection, structural evaluation and design, quality control, installation, and commercial operation. On February 24, 2022, we visited and made general observations of one operating Facility and one Facility in construction in Colorado, and on March 14, 2022, we visited and made general observations of two operating Facilities and one Facility in construction in Massachusetts (the "Existing Facilities") that are expected to be similar in design and constructed using methods similar to the Facilities contemplated for a Fund. The visits were made to confirm that the methods of design and construction of the Existing Facilities were consistent with the proposed methods of design and construction for the Facilities. The general field observations were visual examinations of selected areas, which we deemed adequate to allow us to comment on the conditions of the respective Existing Facility, but which were not at the level of detail necessary to reveal conditions with respect to the structural integrity of the rooftops, environmental conditions, the internal physical condition of any equipment, or conformance with agreements, codes, permits, rules, or regulations of any party having jurisdiction with respect to an Existing Facility or an Existing Facility site. Sunrun has provided evidence that the key environmental permits and approvals were obtained for the "Permit Reference Facilities," as defined in the IE Report.

Our observations during visits to the Existing Facilities indicate that they were constructed or were being constructed in a manner consistent with other similar PV facilities with which we are familiar. All major components of the operating Existing Facilities appeared to be functional including: PV modules, inverters, protection, disconnects, communications, and grounding systems. We did not observe any indications of deficiencies in the housekeeping of the site grounds, the general maintenance areas, or the equipment.

The external appearance of the equipment, systems and related spaces appeared orderly, clean and well-maintained. All evidence of wear and tear observed was judged to be normal and comparable to similar operating facilities with a comparable operational history.

Sunrun maintains and periodically updates an approved vendor list ("AVL") for PV modules, inverters, optimizers, and BESS equipment. As of the date of the IE Report, the AVL included modules from Aptos Solar Technology; Boviet Solar Technology Co. Ltd.; Canadian Solar, Inc.; CertainTeed Solar; Hanwha Q CELLS Co., Ltd.; HT Solar Energy J.S.C.; Hyundai Energy Solutions; JA Solar Holdings Co., Ltd.; JinkoSolar Holdings Co., Ltd.; LG Electronics, Inc.; LONGi Solar; REC Solar Holdings AS; Seraphim Solar System Co. Ltd.; The Solaria Corporation; Silfab Solar, Inc.; SunPower Corporation; Talesun Solar; Tesla, Inc. ("Tesla"); Trina Solar Limited; Vikram Solar Limited; and Waaree Energies Ltd. (collectively, the "Module Suppliers"). As of the date of the IE Report, the AVL included inverters from Delta Electronics, Inc.; Dynapower Sensata Technologies, Inc.; Enphase Energy, Inc. ("Enphase"); Ningbo Ginlong Technologies Co., Ltd.; Growatt New Energy Technology Co., Ltd.; SMA Solar Technology AG; SolarEdge Technologies, Inc. ("SolarEdge"); and Tesla (collectively, the "Inverter Suppliers"). As of the date of the IE Report, the AVL included BESS equipment from ELM FieldSight, Enphase, LG Chem Ltd., SolarEdge, Tesla, and Generac Holdings (collectively, the "BESS Suppliers"). We reviewed the AVL suppliers. We also reviewed the PV module, inverter, optimizer, and BESS technologies used by the AVL suppliers. In addition to the suppliers on the current AVL, Sunrun reports that the equipment deployed in the existing fleet was on the then-current AVL at the time of origination.

Sunrun currently offers four types of customer agreements: (1) a monthly power purchase agreement ("PPA"), (2) a prepaid PPA, (3) a monthly lease agreement, and (4) a prepaid lease agreement. Sunrun provided an example of each of these types of agreements for our review but reported that the specifics of each contract can differ depending on the location and particular Facility. Each agreement type typically has a term of 25 years from the in-service date and newer agreements provide either a 90 percent or 95 percent performance guarantee (the "Performance Guarantee Percentage"). Some pre-2017 performance guarantees could be as high as 100 percent. Sunrun does not provide a performance guarantee for systems in Hawaii with battery storage and systems in Florida. If the energy production over the term of the agreement does not meet the performance guarantee, Sunrun is to refund the difference to the Site Owner at the rate per kWh specified in the agreement. The majority of the agreements provided for our review calculate the guaranteed performance against the actual performance and calculates a refund if applicable every two years. If the system produces more energy than the guaranteed output, then the extra energy is provided at no additional cost. Agreements for Facilities that include battery storage provide no guarantee or warranty that the battery backup capacity will be available without interruption during every power outage. Sunrun disclaims, and the Site Owner agrees that Sunrun has no liability in the event that the batteries fail to provide backup power.

We reported on the estimated useful life of a rooftop PV facility, which is dependent on such characteristics as the integrity of the host building, the design of the system, the technology employed, the quality of the installation, and the provision of sufficient parts and service to monitor and maintain the facility. While PV modules are typically warranted for 25 years, it is not uncommon for PV modules to remain in service for considerably longer, albeit with degradation effects continuing, and with risks of PV module failure increasing as they age. Beyond the PV modules themselves, the continued maintenance and repair or replacement of roof structure components, racking, and electrical components (electrical panels, inverters, etc.) is necessary to assure optimal generation as a facility continues to age.

Solar resource and energy production estimates were not developed for all of the Facilities. Rather, we have evaluated Sunrun's methodology for developing energy production estimates, both in general and as applied to the 10 existing Reference Facilities, including one with battery storage, which we chose from a list of operating Facilities provided by Sunrun.

Sunrun provided actual monthly energy production (the "Production Data") from January 2008 or the initial operation date (whichever was later), through December 2021 (the "Review Period") and a first-year energy estimate developed using SUNSIM (the "SUNSIM Estimates"), for 255,409 Facilities within its operating fleet that have been operational for at least one year as of December 31, 2021, (collectively, the "Performance Dataset"). For the purposes of our analysis, we assumed that the information included within the Performance Dataset was accurate.

For each Facility in the Performance Dataset, we compared the SUNSIM Estimates and the Production Data, adjusted based on solar resource data, for the Review Period. The adjustment for solar resource was completed by selecting a regional proxy location for each city where Sunrun has Facilities in the Representative Fleet, as defined in the IE Report (the "Regional Proxy"). The typical meteorological year ("TMY") and time series ("Actual Irradiance") data utilized for each Regional Proxy were SolarAnywhere version 3.5 data collected from Clean Power Research. For each Facility, the monthly Actual Irradiance was compared to the monthly TMY irradiance resulting in a "Ratio of Irradiance-Adjusted Production to SUNSIM Estimates" for each Facility.

Critical for any PV facility is the expected long-term variability of the solar resource and the subsequent impact on energy production variability. In order to assess variability, a dataset must represent a long enough period-of-record to fully capture variability trends that would be expected over a 30-year or greater operating life. Since no such long-term dataset is available specific to the Regional Proxies, we used the 24 complete years of time series data for each Regional Proxy to estimate long-term resource variability. Each Regional Proxy's annual global horizontal irradiance ("GHI") value for the years 1998 through 2021 were normalized with respect to the average of those GHI values ("Normalized GHI Values"), which were then combined into a portfolio-wide average, weighted by DC capacity of each region. We used a similar approach to derive a period-of-record uncertainty for the full portfolio. To assess interannual variability, we performed a statistical analysis of long-term annual GHI trends using a Monte Carlo simulation that takes a predetermined number of random samples from the normalized GHI values and uses computational algorithms to simulate P-values.

The energy production estimates that we developed are different from those developed by Sunrun, which may be due to differences in the modeling assumptions discussed in the IE Report. The average difference between our energy estimates and those developed by Sunrun, weighted by DC capacity across the 10 Reference Facilities, is 3.8 percent. This difference is primarily due to the assumptions for solar access utilized in the SUNSIM estimates, which are more conservative than our corresponding assumptions for soiling and shading. In addition, we re-ran the analysis after replacing our assumptions with Sunrun's assumptions in our PVsyst models for the 10 Reference Facilities. For individual Facilities, the PVsyst and SUNSIM models do not consistently overestimate or underestimate production relative to each other. The average difference between our estimates and the original SUNSIM estimates is 1.4 percent, weighted by DC capacity. This indicates a reasonable level of agreement between the two models.

We reviewed Sunrun's O&M programs and procedures. Sunrun provided an executed MOMA Agreement for our review that it reported is typical of the agreements that it executes with its various Fund owners. The services provided in accordance with the MOMA Agreement are provided by Sunrun. The MOMA Agreement outlines the scope of O&M activities performed by Sunrun.

We have reviewed the replacement curves for the string inverters, microinverters, and BESS equipment as provided by Sunrun. Additionally, Sunrun provided its price projections for string inverters, microinverters, and BESS equipment. These combined costs will provide the technical inputs to a financial model developed by Sunrun, which we did not review, representing timing and amounts for non-covered major maintenance services.

Sunrun reported the Facilities are to be designed, constructed, and operated in accordance with applicable environmental laws, regulations, policies, codes, and standards. Sunrun is responsible for obtaining and maintaining all governmental approvals and permits. Our general understanding of the status of the Facilities in a fund with respect to permits and applicable environmental regulations is based on discussions with personnel knowledgeable about the permitting, responses from Sunrun to our inquiries and data requests, and review of information on permits provided for three representative Facilities.

Principal Considerations and Assumptions

In the preparation of this Summary Report and the opinions presented in this Summary Report and in the IE Report, we have made certain assumptions with respect to conditions which may exist, or events which may occur in the future. While we believe these assumptions to be reasonable for the purpose of this Summary Report and the IE Report, they are dependent upon future events, and actual conditions may differ from those assumed. In addition, we have used and relied upon certain information provided to us by others. While we believe the use of such information and assumptions to be reasonable for the purposes of this Summary Report and the IE Reports, we offer no other assurances with respect thereto, and some assumptions may vary significantly due to unanticipated events and circumstances. To the extent that actual future conditions differ from those assumed herein or provided to us by others, the actual results will vary from those projected herein. This Summary Report summarizes our work up to the date of the IE Report. Changed conditions occurring or becoming known after such date could affect the material presented to the extent of such changes.

The principal considerations and assumptions made by us and the principal information provided to us by others include the following:

1. As an Independent Engineer, we have made no determination as to the validity and enforceability of any contract, agreement, rule, or regulation applicable to the Facilities. For the purposes of this Summary Report and the IE Report, we have assumed that all contracts, agreements, rules, and regulations will be fully enforceable in accordance with the contractual terms. Moreover, it is assumed that all parties will comply with and fulfill the provisions of the contracts and agreements.
2. The design, manufacturing, and construction of the Facilities will be completed in accordance with the proposed Sunrun programs and procedures and good industry practices.
3. The structural integrity of the rooftops is adequate to support the equipment.
4. The Facilities will be operated in accordance with the policies and procedures proposed by Sunrun, with input collected from its monitoring systems.
5. The Facilities will be maintained in accordance with good engineering and maintenance practices, all required renewals and replacements of equipment will be made in a timely manner, and the equipment will not be operated to cause it to exceed the equipment manufacturers' recommended maximum ratings.

6. Qualified and competent personnel will be employed who will properly operate and maintain the Facilities in accordance with the equipment manufacturers' recommendations and generally accepted industry practices and will generally operate the Facilities in a sound and businesslike manner.
7. The design and installation of the Facilities will be consistent with the Reference Facilities.

Conclusions

Set forth below are the principal conclusions we reached in our IE Report. For a complete understanding of the estimates, assumptions, and calculations upon which these opinions are based, this Summary Report and the IE Report should be read in their entirety. On the basis of our review and analyses and the assumptions set forth in this Summary Report and the IE Report, we are of the opinion that:

1. Sunrun has previously demonstrated the capability to construct and operate facilities of similar design and technology as those proposed to comprise the New Facilities.
2. Sunrun's site selection process considers the critical technical and environmental factors that typically impact the suitability of sites for construction, operation, and maintenance of residential PV installations such as those proposed to comprise the Facilities.
3. The proposed method of design, installation, and commissioning of the Facilities is generally consistent with other residential PV installations with which we are familiar in regions similar to the locations of the Facilities and the QA/QC program is in line with industry best practices.
4. The Module and Inverter Suppliers have previously demonstrated the capability to supply PV modules and inverters, respectively, to facilities of similar size and technology as those proposed to comprise the Facilities.
5. The PV technologies proposed are sound and proven methods of energy generation.
6. The BESS Suppliers have previously demonstrated the capability to supply BESS equipment to facilities of similar function as those comprising the Facilities and the BESS technologies proposed are sound and proven methods of energy storage.
7. The Module, Inverter, and BESS Suppliers should be acceptable, from a technical perspective, as suppliers of PV modules inverters, and BESS equipment, respectively.
8. In the event that a particular Module Supplier was no longer able to service its warranty, Sunrun should be able to acquire modules from another company that could be substituted as a replacement with minor modifications to the racking if required.
9. Provided that: (1) the PV systems are designed and installed in accordance with good industry practices; (2) all PV equipment is operated in accordance with manufacturer recommendations; (3) all required renewals and replacements are made on a timely basis; (4) the components meet their respective warranty provisions and continue to operate post expiration in general accordance with those provisions; and (5) any roof repairs or other mitigation techniques required to support the equipment are implemented, PV installations such as those proposed to comprise the Facilities should be capable of achieving a useful life of at least 35 years.
10. Sunrun's methodology for estimating energy production, while reasonable within the bounds of uncertainty discussed previously, includes assumptions that are more conservative than ours for some of the Facilities.

11. We estimate an overall fleet wide annual energy production uncertainty of plus or minus 6.1 percent at a 95 percent confidence interval. We determined weather variability profiles considering the mix of regional locations included in the Performance Dataset and developed P values that incorporate our uncertainty estimate with the weather variability profiles.
12. The O&M practices and the scope of services in the MOMA Agreement are consistent with generally accepted industry practices for residential PV installations. Further, Project Service fees of up to \$22/kW-DC are comparable to fees for other residential PV portfolios with which we are familiar.
13. Sunrun is projecting failure curves for string inverters, microinverters, and the BESS that are consistent with manufacturer representations and generally accepted in the industry. Sunrun's price projections for the near term, which we would define as the next three years, are reasonable.
14. Sunrun has identified and obtained the key environmental permits and approvals required from the various federal, state, and local agencies that are currently necessary to construct and operate the Facilities, and has a process in place for the remaining Facilities to be constructed.