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

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**FORM ABS-15G**

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**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 \_\_\_\_\_**

Date of Report (Date of earliest event reported) \_\_\_\_\_

Commission File Number of securitizer: \_\_\_\_\_

Central Index Key Number of securitizer: \_\_\_\_\_

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Name and telephone number, including area code, of the person to  
contact in connection with this filing

Indicate by check mark whether the securitizer has no activity to report for the initial period pursuant to Rule 15Ga-1(c)(1)

Indicate by check mark whether the securitizer has no activity to report for the quarterly period pursuant to Rule 15Ga-1(c)(2)(i)

Indicate by check mark whether the securitizer has no activity to report for the annual period pursuant to Rule 15Ga-1(c)(2)(ii)

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

Central Index Key Number of depositor: 0001469367

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**Sunrun Athena Issuer 2018-1, LLC**

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

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Central Index Key Number of issuing entity (if applicable): 0001757551

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

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**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 November 6, 2018, 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.

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**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 Athena Depositor 2018-1, LLC (Depositor)

By: Sunrun Athena Investor 2018-1, LLC  
Its: Sole Member

By: Sunrun Athena Holdco 2018-1, LLC  
Its: Sole Member

By: Sunrun Inc.  
Its: Sole Member

Date November 14, 2018

/s/ Jeanna Steele

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Name: Jeanna Steele  
Title: General Counsel

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**EXHIBIT INDEX**

Exhibit Number	Description
99.1	Consultant's Report, dated November 6, 2018, of Leidos Engineering, LLC, setting forth findings and conclusions of Leidos with respect to certain residential photovoltaic solar assets.

November 6, 2018

Sunrun Inc.  
595 Market Street, 29<sup>th</sup> Floor  
San Francisco, CA 94107

**Subject: Consultant's Report of Findings and Conclusions  
Sunrun Residential Photovoltaic Portfolio**

Ladies and Gentleman:

**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") for inclusion in a future investment fund (a "Fund"). Some Facilities also include a battery energy storage system ("ESS"), which will operate in cooperation with the PV installation, and a very small percentage of the Facilities are ground-mounted. The Facilities may be located on residential rooftops located in 21 states: Arizona, California, Colorado, Connecticut, Delaware, Florida, Hawaii, Illinois, Massachusetts, Maryland, Nevada, New Hampshire, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, South Carolina, Texas, and Vermont. This report (the "Report") has been prepared in connection with debt and equity transactions related to the Facilities, and in accordance with the Professional Services Agreement, dated July 16, 2018, between Leidos and Sunrun. In order to gain a complete understanding of our review, and of our findings and conclusions, the Consultant's Report should be read in its entirety.

The Facilities are to be mounted in fixed-tilt rooftop configurations. The various Facilities are expected to typically have capacities ranging from 2 kilowatt ("kW")-direct current ("DC") to 30 kW-DC. Sunrun, or its affiliates, will construct, and Sunrun will own and operate the Facilities, including performance of the operation and maintenance ("O&M") activities. The owners of the sites on which the Facilities are to be located are herein individually referred to as a "Site Owner" and collectively as the "Site Owners."

**Our Review**

We reviewed and analyzed the methodologies and processes that Sunrun uses to develop residential rooftop sites similar to the Facilities. For this review, Sunrun provided a data tape of its trailing six months of contract originations ("Originations") through June 30, 2018, which are representative of its larger fleet. Besides the methodologies and processes that Sunrun uses to develop residential rooftop sites, we also reviewed the energy production estimates of 10 installations (the "Reference Facilities"), which Sunrun reports it expects to be substantially similar to the Facilities.

During the preparation of the Consultant's Report, we reviewed Sunrun's methodology for developing energy production estimates for the proposed Facilities. Our review process involved selecting a solar resource dataset and identifying various user input values based on system equipment and design. Further, for each of the Reference Facilities, we have reviewed the design package and Sunrun's energy production estimates, and prepared independent energy production estimates. The analysis determining future production estimates was performed on the specific Sunrun Athena 2018- 1 ABS transaction asset data tape. We reviewed an executed Master Operation, Maintenance and Administration Agreement ("MOMA Agreement") provided by Sunrun, dated November 2, 2017. 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. After Facilities become operational, Sunrun provides daily system surveillance. We reviewed Sunrun's relevant experience and capabilities. As of December 31, 2017, Sunrun had installed more than 200,000 facilities operational in 22 states and Puerto Rico. Sunrun currently employs a staff of more than 3,000 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. In July and August 2018, we visited and made general observations of three operating Facilities and two Facilities 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. However, Sunrun has provided evidence that required permits were obtained for the Existing Facilities.

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 Facilities were functional including: panels, 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, and optimizers. The AVL includes modules from Canadian Solar, Inc. ("Canadian Solar"); Hanwha Q CELLS Co., Ltd. ("Hanwha"); Hyundai Heavy Industries Co, Ltd. ("Hyundai"); LG Electronics, Inc. ("LG"); JA Solar Holdings Co., Ltd. ("JA Solar"); JinkoSolar Holdings Co., Ltd. ("Jinko"); Kyocera International, Inc. ("Kyocera"); Longi Solar ("Longi"); Mitsubishi Electric, Inc. ("Mitsubishi"); Panasonic Corporation ("Panasonic"); REC Solar Holdings AS ("REC"); Silfab Solar, Inc. ("Silfab"); SolarWorld Americas Inc. (SolarWorld"); SunPower Corporation ("SunPower"); and Trina Solar Limited ("Trina" and, collectively, the

“Module Suppliers”). The AVL includes inverters from ABB Asea Brown Boveri Ltd. (“ABB”); Delta Electronics, Inc. (“Delta”); Enphase Energy, Inc. (“Enphase”); Fronius International GmbH (“Fronius”); Ningbo Ginlong Technologies Co., Ltd (“Ginlong”); SMA Solar Technology AG (“SMA”); SolarEdge Technologies, Inc. (“SolarEdge”); and SunPower (collectively, the “Inverter Suppliers”). The AVL includes optimizers from SolarEdge. We reviewed the AVL suppliers. We also reviewed the PV module, inverter and optimizer technologies used by the AVL suppliers.

Sunrun currently offers four types of customer agreements: (1) a monthly 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. In addition, Sunrun provided an example of the monthly PPA and lease for a Facility that includes battery storage. Each agreement type typically has a term of 20 years from the in-service date and provides either a 95 percent or 100 percent performance guarantee. A small percentage of contracts have no performance guaranty. 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. The prepaid PPA provided for our review specifies that this refund is calculated on an annual basis and the monthly lease with battery storage contract does not include a performance guarantee. If the system produces more energy than the guaranteed output, then the extra energy is provided at no additional cost.

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 2009 or the initial operation date (whichever was later) through April 2018 (the “Review Period”) and monthly energy production estimates, based on a first-year estimate developed using SUNSIM then degraded 0.5 percent per year starting in the second year following the initial operation date, for the same time period (the “SUNSIM Estimates”), for 98,585 Facilities within its operating fleet that have at least one year of operating data as of December 31, 2017 (collectively, the “Performance Dataset”). Our assumption for the analysis is that the information included within the Performance Dataset is accurate. For each Facility in the Performance Dataset, we compared the SUNSIM Estimates and the Production Data for the Review Period. In order to complete the analysis, we adjusted the Production Data based on solar resource data for the corresponding month.

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 25-year operating

life. For the probability of exceedance values ("P-values"), we considered regional proxy locations and assigned 26 National Solar Radiation Database datasets ("Regional Proxies") as proxies for overall interannual variability within a given region. To assess interannual variability, we performed a statistical analysis of long-term annual GHI trends using Monte Carlo methods. For each state we developed 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.

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

We have reviewed the replacement curves for the string inverters, microinverters, and the battery energy storage systems as provided by Sunrun. Additionally, Sunrun provided its price projections for string inverters, microinverters, and the ESS. These combined costs will provide the technical inputs to a financial model developed by Sunrun, which Leidos did not review, representing timing and amount for the non-covered service of major maintenance.

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.

## Conclusions

Set forth below are the principal opinions we have reached as a result of our review. For a complete understanding of the estimates, assumptions, and calculations upon which these opinions are based, this Report should be read in its entirety. On the basis of our review and analyses and the assumptions set forth in this 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 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 ESS Suppliers have previously demonstrated the capability to supply ESS equipment to facilities of similar function as those comprising the Facilities and that the ESS technologies proposed are sound and proven methods of energy storage.
7. The Module, Inverter, and ESS Suppliers should be acceptable, from a technical perspective, as suppliers of PV modules inverters, and ESS, 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 systems are designed and installed in accordance with good industry practices; (2) all 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, 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 annual energy production uncertainty of plus or minus 6.6 percent at a 95 percent confidence interval. We determined weather variability profiles considering the mix of regional locations included in each of three types of customer agreements and developed and presented P-values which 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, the \$15.00 per kW-DC Project Service fee for non-prepaid projects and \$10/kW-DC per annum for prepaid projects 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 ESS 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.



### **Principal Considerations and Assumptions**

In the preparation of this Report and the opinions presented in this 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 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 Report, 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 Report summarizes our work up to the date of the 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 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.