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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2018

OR

☐ **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	**26-2841711**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

595 Market Street, 29th Floor
San Francisco, California 94105
(Address of principal executive offices and Zip Code)

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

Indicate by check mark whether the registrant (1) 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	☐	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 Exchange Act. ☒

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

As of November 2, 2018, the number of shares of the registrant's common stock outstanding was 111,852,426.

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Sunrun Inc.
Consolidated Balance Sheets
(In Thousands, Except Share Par Values)
(Unaudited)

	September 30, 2018	December 31, 2017
Assets		
Current assets:		
Cash	$ 242,936	$ 202,525
Restricted cash	32,049	39,265
Accounts receivable (net of allowances for doubtful accounts of $2,369 and $1,665 as of September 30, 2018 and December 31, 2017, respectively)	65,354	60,359
State tax credits receivable	—	11,085
Inventories	95,978	94,427
Prepaid expenses and other current assets	9,699	9,202
Total current assets	446,016	416,863
Restricted cash	148	—
Solar energy systems, net	3,618,125	3,161,570
Property and equipment, net	33,522	36,402
Intangible assets, net	11,140	14,294
Goodwill	87,543	87,543
Other assets	336,705	246,464
Total assets (1)	$ 4,533,199	$ 3,963,136
Liabilities and total equity		
Current liabilities:		
Accounts payable	$ 136,064	$ 115,193
Distributions payable to noncontrolling interests and redeemable noncontrolling interests	15,387	13,583
Accrued expenses and other liabilities	85,897	97,230
Deferred revenue, current portion	46,571	42,609
Deferred grants, current portion	8,719	8,193
Finance lease obligations, current portion	8,372	7,421
Non-recourse debt, current portion	27,496	21,529
Pass-through financing obligation, current portion	55,355	5,387
Total current liabilities	383,861	311,145
Deferred revenue, net of current portion	539,863	522,243
Deferred grants, net of current portion	220,274	227,519
Finance lease obligations, net of current portion	7,301	5,811
Recourse debt	247,000	247,000
Non-recourse debt, net of current portion	1,290,102	1,026,416
Pass-through financing obligation, net of current portion	306,642	132,823
Other liabilities	37,717	42,743
Deferred tax liabilities	98,954	83,119
Total liabilities (1)	3,131,714	2,598,819
Commitments and contingencies (Note 15)		
Redeemable noncontrolling interests	117,468	123,801
Stockholders' equity:		
Preferred stock, $0.0001 par value—authorized, 200,000 shares as of September 30, 2018 and December 31, 2017; no shares issued and outstanding as of September 30, 2018 and December 31, 2017	—	—
Common stock, $0.0001 par value—authorized, 2,000,000 shares as of September 30, 2018 and December 31, 2017; issued and outstanding, 111,652 and 107,350 shares as of September 30, 2018 and December 31, 2017, respectively	11	11
Additional paid-in capital	712,646	682,950
Accumulated other comprehensive income	18,856	(4,113)
Retained earnings	235,279	202,734
Total stockholders' equity	966,792	881,582
Noncontrolling interests	317,225	358,934
Total equity	1,284,017	1,240,516
Total liabilities, redeemable noncontrolling interests and total equity	$ 4,533,199	$ 3,963,136

1) The Company's consolidated assets as of September 30, 2018 and December 31, 2017 include $2,783,397 and $2,568,378, respectively, in assets of variable interest entities ("VIEs") that can only be used to settle obligations of the VIEs. These assets include solar energy systems, net, as of September 30, 2018 and December 31, 2017 of $2,587,296 and $2,385,329, respectively; cash as of September 30, 2018 and December 31, 2017 of $106,492 and $118,352, respectively; restricted cash as of September 30, 2018 and December 31, 2017 of $4,944 and $2,699, respectively; accounts receivable, net as of September 30, 2018 and December 31, 2017 of $19,123 and $18,786, respectively; prepaid expenses and other current assets as of September 30, 2018 and December 31, 2017 of $387 and $917, respectively; and other assets as of September 30, 2018 and December 31, 2017 of $65,155 and $42,295, respectively. The Company's consolidated liabilities as of September 30, 2018 and December 31, 2017 include $652,906 and $677,955, respectively, in liabilities of VIEs whose creditors have no recourse to the Company. These liabilities include accounts payable as of September 30, 2018 and December 31, 2017 of $8,442 and $15,929, respectively; distributions payable to noncontrolling interests and redeemable noncontrolling interests as of September 30, 2018 and December 31, 2017 of $15,337 and $13,526, respectively; accrued expenses and other current liabilities as of September 30, 2018 and December 31, 2017 of $6,568 and $5,200, respectively; deferred revenue as of September 30, 2018 and December 31, 2017 of $388,970 and $409,761, respectively; deferred grants as of September 30, 2018 and December 31, 2017 of $29,505 and $30,406, respectively; non-recourse debt as of September 30, 2018 and December 31, 2017 of $195,294 and $201,285, respectively; and other liabilities as of September 30, 2018 and December 31, 2017 of $8,790 and $1,848, respectively.

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

Sunrun Inc.
Consolidated Statements of Operations
(In Thousands, Except Per Share Amounts)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Revenue:				
Customer agreements and incentives	$ 114,572	$ 61,717	$ 273,167	$ 168,918
Solar energy systems and product sales	90,388	82,829	246,694	211,359
Total revenue	204,960	144,546	519,861	380,277
Operating expenses:				
Cost of customer agreements and incentives	63,195	47,299	175,540	135,201
Cost of solar energy systems and product sales	76,179	69,588	205,026	179,957
Sales and marketing	56,758	39,921	150,074	108,109
Research and development	4,604	3,936	13,552	10,642
General and administrative	26,720	27,925	87,743	77,761
Amortization of intangible assets	1,051	1,052	3,153	3,154
Total operating expenses	228,507	189,721	635,088	514,824
Loss from operations	(23,547)	(45,175)	(115,227)	(134,547)
Interest expense, net	34,482	23,217	94,552	65,746
Other expenses (income), net	(4,517)	(94)	(5,701)	589
Loss before income taxes	(53,512)	(68,298)	(204,078)	(200,882)
Income tax expense (benefit)	(5,988)	14,517	6,593	30,698
Net loss	(47,524)	(82,815)	(210,671)	(231,580)
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	(44,628)	(110,822)	(243,216)	(287,815)
Net income (loss) available to common stockholders	$ (2,896)	$ 28,007	$ 32,545	$ 56,235
Net income (loss) per share available to common stockholders				
Basic	$ (0.03)	$ 0.26	$ 0.30	$ 0.54
Diluted	$ (0.02)	$ 0.26	$ 0.28	$ 0.52
Weighted average shares used to compute net income per share available to common stockholders				
Basic	111,134	105,783	109,351	105,060
Diluted	120,396	109,598	116,052	107,893

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

Sunrun Inc.
Consolidated Statements of Comprehensive Income
(In Thousands)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	**2017**	**2018**	**2017**
Net income (loss) available to common stockholders	$ (2,896)	$ 28,007	$ 32,545	$ 56,235
Other comprehensive income:				
Unrealized gain (loss) on derivatives, net of income taxes	8,495	(543)	30,328	(5,016)
Less interest income (expense) on derivatives recognized into earnings, net of income taxes	697	(138)	2,352	(1,042)
Comprehensive income	$ 4,902	$ 27,602	$ 60,521	$ 52,261

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

	Nine Months Ended September 30,	
	2018	2017
Operating activities:		
Net loss	$ (210,671)	$ (231,580)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization, net of amortization of deferred grants	113,711	94,077
Deferred income taxes	6,590	30,697
Stock-based compensation expense	21,983	16,494
Interest on pass-through financing obligations	12,464	9,457
Reduction in pass-through financing obligations	(69,842)	(13,799)
Other noncash losses and expenses	20,636	15,341
Changes in operating assets and liabilities:		
Accounts receivable	(6,063)	(8,783)
Inventories	(1,551)	4,003
Prepaid and other assets	(54,157)	(37,152)
Accounts payable	18,289	31,669
Accrued expenses and other liabilities	(16,727)	(5,288)
Deferred revenue	21,582	30,834
Net cash used in operating activities	(143,756)	(64,030)
Investing activities:		
Payments for the costs of solar energy systems	(571,181)	(558,393)
Purchases of property and equipment	(3,079)	(5,956)
Net cash used in investing activities	(574,260)	(564,349)
Financing activities:		
Proceeds from state tax credits, net of recapture	10,949	12,785
Proceeds from issuance of recourse debt	17,000	125,400
Repayment of recourse debt	(17,000)	(122,400)
Proceeds from issuance of non-recourse debt	488,376	294,086
Repayment of non-recourse debt	(224,033)	(92,801)
Payment of debt fees	(9,839)	(6,332)
Proceeds from pass-through financing and other obligations	286,642	4,639
Payment of finance lease obligations	(6,390)	(7,585)
Contributions received from noncontrolling interests and redeemable noncontrolling interests	247,704	471,322
Distributions paid to noncontrolling interests and redeemable noncontrolling interests	(50,726)	(38,761)
Proceeds from exercises of stock options, net of withholding taxes paid on restricted stock units	8,676	(207)
Net cash provided by financing activities	751,359	640,146
Net change in cash and restricted cash	33,343	11,767
Cash and restricted cash, beginning of period	241,790	224,363
Cash and restricted cash, end of period	$ 275,133	$ 236,130
Supplemental disclosures of cash flow information		
Cash paid for interest	$ 55,601	$ 29,383
Cash paid for 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	$ 23,445	$ 29,206
Purchases of solar energy systems included in non-recourse debt	$ —	$ 12,873
Right-of-use assets obtained in exchange for new finance lease liabilities	$ 9,001	$ 166

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

Note 1. Organization

Sunrun Inc. (“Sunrun” or the “Company”) was originally formed in 2007 as a California limited liability company and was converted into a Delaware corporation in 2008. The Company 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 system (“Customer Agreement”) which typically has an initial term of 20 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 unaudited consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) and applicable rules and regulations of the Securities and Exchange Commission regarding interim financial reporting. Certain information and note disclosures normally included in the financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. As such, these unaudited condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and accompanying notes included in the Company’s annual report on Form 10-K for the year ended December 31, 2017. The Company has restated certain prior period amounts to conform to the current period presentation as described in the Recently Issued and Adopted Accounting Standards section below. The results of the three and nine months ended September 30, 2018 are not necessarily indicative of the results to be expected for the fiscal year ending December 31, 2018 or other future periods.

The consolidated financial statements reflect the accounts and operations of the Company and those of its subsidiaries, including Funds, in which the Company has a controlling financial interest. 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 (“Topic 810”) *Consolidation*, the Company consolidates any VIE of which it is the primary beneficiary. The primary beneficiary, as defined in Topic 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 significant estimates and assumptions, including, but not limited to, for revenue recognition, constraints which 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 finance 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):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Customer agreements	$ 70,864	$ 55,134	$ 199,171	$ 152,679
Incentives	43,708	6,583	73,996	16,239
Customer agreements and incentives	114,572	61,717	273,167	168,918
Solar energy systems	47,771	30,734	122,503	79,431
Products	42,617	52,095	124,191	131,928
Solar energy systems and product sales	90,388	82,829	246,694	211,359
Total revenue	$ 204,960	$ 144,546	$ 519,861	$ 380,277

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 in the Customer Agreement. Revenue from incentives includes revenue from the sale of investment tax credits ("ITCs") and renewable energy credits ("SRECs"). The increase relates primarily to the sale of ITCs related to a financing obligation fund opened in 2018.

Cash and Restricted Cash

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):

	September 30, 2018	December 31, 2017
Cash	$ 242,936	$ 202,525
Restricted cash, current and long-term	32,197	39,265
Total	$ 275,133	$ 241,790

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

Accounts Receivable

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

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

	September 30, 2018	December 31, 2017
Customer receivables	$ 63,150	$ 59,263
Other receivables	1,128	1,319
Rebates receivable	3,445	1,442
Allowance for doubtful accounts	(2,369)	(1,665)
Total	$ 65,354	$ 60,359

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 $525.4 million as of December 31, 2016. Deferred revenue consists of the following (in thousands):

	September 30, 2018	December 31, 2017
Under Customer Agreements:		
Payments received	$ 535,045	$ 517,544
Financing component balance	35,979	30,736
	571,024	548,280
Under SREC contracts:		
Payments received	13,494	14,805
Financing component balance	1,916	1,767
	15,410	16,572
Total	$ 586,434	$ 564,852

In the three months ended September 30, 2018 and 2017, the Company recognized revenue of $13.3 million and $12.1 million, respectively, and in the nine months ended September 30, 2018 and 2017, the Company recognized revenue of $39.1 million and $35.1 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 $5.1 billion as of September 30, 2018, of which the Company expects to recognize approximately 6% 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 our fleet of residential solar energy systems under Customer Agreements is less than three 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 following 10 years as the typically 20 year initial term expires on individual Customer Agreements.

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.

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 expected 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 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. The Company recognizes revenue evenly over the time that it satisfies its performance obligations over the initial term of the Customer Agreements. Customer Agreements typically have an initial term of 20 years. After the initial contract term, our Customer Agreements typically automatically renew on an annual basis and the rate is initially set at up to a 10% discount to then-prevailing power prices.

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. For pass-through financing obligation Funds, the value attributable to the ITCs are recognized in the period a solar system is granted PTO - see Note 10, *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 provisions under SREC contracts. 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, the Company recognizes revenue when the solar energy system passes inspection by the authority having jurisdiction. The Company’s installation projects are typically completed in a short period of time.

Product sales consist of solar panels, racking systems, inverters, other solar energy products sold to resellers and customer leads. Product sales revenue is recognized at the time when control is transferred, generally upon shipment. Consideration from customers is considered variable when volume discounts are given to customers, and are recorded as a reduction of revenue. 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. Upon adoption of Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers* ("Topic 606"), the Company no longer records initial direct costs from the origination of Customer Agreements. Instead, the Company records costs to obtain a contract as described in Revenue Recognition above.

Solar energy systems and product sales

Cost of revenue for solar energy systems and non-lead generation product sales consists of direct and indirect material and labor costs for solar energy systems installations and product sales. Also included are engineering and design costs specific to an individual customer project, 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 generation consists of costs related to direct-response advertising activities associated with generating customer leads.

Recently Issued and Adopted Accounting Standards

Accounting standards adopted January 1, 2018 causing restatement of prior periods:

In May 2014, the FASB issued Topic 606. The standard establishes a single revenue recognition model for all contracts with customers, eliminates industry specific requirements, and expands disclosure requirements. The Company adopted Topic 606 effective January 1, 2018, using the full retrospective method, which required the Company to restate each prior reporting period presented. The Company has elected to use the practical expedient under Topic 606 and has excluded disclosures of transaction prices allocated to remaining performance

obligations and when the Company expects to recognize such revenue for all periods prior to the date of initial application.

In February 2016, the FASB issued ASU No. 2016-02, *Leases*, to replace existing lease guidance with Accounting Standards Codification Topic 842 ("Topic 842"). Topic 842 changes how the definition of a lease is applied and judgment may be required in applying the definition of a lease to certain arrangements. The Company elected to early adopt the standard effective January 1, 2018 concurrent with the adoption of Topic 606 related to revenue recognition, using the modified retrospective approach at the beginning of the earliest comparative period presented in the financial statements, which required the Company to restate each prior reporting period presented. In July 2018, the FASB issued ASU No. 2018-10, *Codification Improvements to Topic 842, Leases*, to clarify how to apply certain aspects of the new leases standard. The clarifications address the rate implicit in the lease, impairment of the net investment in the lease, lessee reassessment of lease classification, lessor reassessment of lease term and purchase options, variable payments that depend on an index or rate and certain transition adjustments. These amendments have the same effective date and transition requirements as the new leases standard, as such the Company adopted the new ASU and the impact of adopting this standard was not material to its financial statements.

Upon the adoption of Topic 842, the Company's Customer Agreements are accounted for under Topic 606 due to changes in the definition of a lease under Topic 842 when the Company was considered a lessor. For operating leases in which the Company is the lessee, the Company concluded that all existing operating leases under Accounting Standards Codification Topic 840 ("Topic 840"), *Leases*, continue to be classified as operating leases under Topic 842, and all existing capital leases under Topic 840 are classified as finance leases under Topic 842. The Company has lease agreements with lease and non-lease components, which are generally accounted for as a single lease component. The Company accounts for short-term leases on a straight-line basis over the lease term.

Under Topic 606, total consideration for Customer Agreements, including price escalators and performance guarantees, is estimated and recognized over the term of the Customer Agreement. This accounting for price escalators creates an unbilled receivable balance for the first half of the Customer Agreement, which is then reduced over the second half. Customer Agreements and SRECs with a prepaid element are deemed to include a significant financing component, as defined under Topic 606, which increases both revenue and interest expense. For pass-through financing obligation funds that report investment tax credit revenue, the ITC revenue is now recognized in full at PTO. SREC revenue is estimated net of any variable consideration related to possible liquidated damages, and recognized upon delivery of SRECs to the counterparty. The accounting did not materially differ for revenue currently recognized as solar energy systems and product sales. The adoption of Topic 606 also resulted in an adjustment to the Company's deferred tax liabilities, and impacted the analysis of the realizability of deferred tax assets, resulting in the release of valuation allowance related to state deferred tax assets.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows* ("Topic 230"), Restricted Cash, which requires a statement of cash flows to present the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash and restricted cash equivalents. The Company adopted Topic 230 effective January 1, 2018, using the retrospective transition method, which required the Company to restate each prior reporting period presented. As a result, the Company no longer presents transfers between cash and restricted cash in the consolidated cash flow statements.

Adjustments to Previously Reported Financial Statements from the Adoption of Accounting Standards

The primary impact of adopting Topic 606 and Topic 842 includes the recognition of revenue from Customer Agreements, and certain incentives revenue, namely SRECs and ITCs. Previously, under Topic 840, the Company recognized revenue related to certain Customer Agreements as contingent revenue when earned. Under Topic 606, because the Company has a continuous obligation to provide fully functional systems that provide electricity over the term of the Customer Agreement, it recognizes revenue evenly over the term of the Customer Agreements taking into account price escalators and performance guarantees when estimating variable consideration. Previously, the Company recognized revenue related to the sale of SRECs to the extent the cumulative value of delivered SRECs per contract exceeded any possible liquidated damages for non-delivery, if any. Under Topic 606, the Company estimates revenue net of any variable consideration related to possible liquidated damages, and recognizes revenue upon delivery of SRECs to the counterparty. Under Topic 605 and Topic 840, the Company previously reported ITC revenue over five years: following when the related solar system was granted PTO, with one-fifth of the monetized ITCs recognized on each anniversary of the solar energy systems' PTO date. Under

Topic 606, the Company recognizes ITC revenue in full at PTO. Previously, under Topic 840, the Company capitalized direct and incremental costs as a component of Solar energy systems, net on the consolidated balance sheets. Under Topic 606, 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.

In addition to the impact of revenue recognition related to Customer Agreements, the impact of adopting Topic 842 includes a change in accounting for leases when the Company is the lessee, primarily the inclusion of right-of use ("ROU") assets included in other assets on the consolidated balance sheets, and operating lease liabilities included in accrued expenses and other liabilities and other liabilities on the consolidated balance sheets. The income tax impact as a result of the adoption of Topic 842 was immaterial.

The following table presents the effect of the adoption of Topic 606 and Topic 842 on the Company's condensed consolidated balance sheet as of December 31, 2017 (in thousands):

	December 31, 2017		
	Previously Reported	Adoption Impact	Restated
Accounts receivable, net of allowances for doubtful accounts	$ 76,198	$ (15,839)	$ 60,359
Solar energy systems, net	3,319,708	(158,138)	3,161,570
Other assets	37,225	209,239	246,464
Accrued expenses and other liabilities	85,639	11,591	97,230
Deferred revenue, current portion	77,310	(34,701)	42,609
Deferred grants, current portion	8,269	(76)	8,193
Pass-through financing obligation, current portion	6,087	(700)	5,387
Deferred revenue, net of current portion	584,427	(62,184)	522,243
Deferred grants, net of current portion	228,603	(1,084)	227,519
Pass-through financing obligation, net of current portion	138,124	(5,301)	132,823
Other liabilities	13,520	29,223	42,743
Deferred tax liabilities	59,131	23,988	83,119
Redeemable noncontrolling interests	123,737	64	123,801
Additional paid-in capital	684,141	(1,191)	682,950
Retained earnings	131,959	70,775	202,734
Noncontrolling interests	354,076	4,858	358,934

The following table presents the effect of the adoption of Topic 606 and Topic 842 on the Company's condensed consolidated statement of operations for the three and nine months ended September 30, 2017 (in thousands except per share amounts):

	Three Months Ended September 30, 2017			Nine Months Ended September 30, 2017		
	Previously Reported	Adoption Impact	Restated	Previously Reported	Adoption Impact	Restated
Revenue: Customer agreements and incentives	$ 58,462	$ 3,255	$ 61,717	$ 171,897	$ (2,979)	$ 168,918
Cost of customer agreements and incentives	49,232	(1,933)	47,299	140,682	(5,481)	135,201
Sales and marketing	37,298	2,623	39,921	101,758	6,351	108,109
General and administrative	27,925	—	27,925	77,776	(15)	77,761
Interest expense, net	17,707	5,510	23,217	49,586	16,160	65,746
Income tax expense	14,834	(317)	14,517	37,625	(6,927)	30,698
Net loss	(80,187)	(2,628)	(82,815)	(218,513)	(13,067)	(231,580)
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	(107,969)	(2,853)	(110,822)	(284,144)	(3,671)	(287,815)
Net income available to common stockholders	27,782	225	28,007	65,631	(9,396)	56,235
Basic net income per share available to common stockholders	0.26	—	0.26	0.62	(0.08)	0.54
Diluted net income per share available to common stockholders	0.25	0.01	0.26	0.61	(0.09)	0.52

The following table presents the effect of the adoption of Topic 230, Topic 606 and Topic 842 on the Company's condensed consolidated statement of cash flows for the nine months ended September 30, 2017 (in thousands):

	Nine Months Ended September 30, 2017		
	Previously Reported	Adoption Impact	Restated
Net loss	$ (218,513)	$ (13,067)	$ (231,580)
Net cash used in operating activities	(39,166)	(24,864)	(64,030)
Net cash used in investing activities	(589,144)	24,795	(564,349)
Net cash provided by financing activities	638,088	2,058	640,146
Net change in cash and restricted cash [1]	9,778	1,989	11,767
Cash and restricted cash, beginning of period [1]	206,364	17,999	224,363
Cash and restricted cash, end of period [1]	216,142	19,988	236,130

[1] Pursuant to Topic 230, restricted cash is included in the restated balances in the statement of cash flows, as described above. The amounts in the previously reported column include only cash.

Accounting standards to be adopted:

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 which 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. This ASU is effective for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years. Early adoption is permitted. Adoption of this ASU is applied using a modified retrospective approach, with certain aspects requiring a prospective approach. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.

In August 2017, the FASB issued 2017-12, *Derivatives and Hedging,* Targeted Improvements to Accounting for Hedging Activities, which expands an entity's ability to hedge nonfinancial and financial risk components, eliminates the requirement to separately measure and report hedge ineffectiveness, and aligned the recognition and presentation of the effects of hedging instruments in the financial statements. The ASU is effective for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years. Early adoption is permitted. Adoption of this ASU is applied using a modified retrospective approach. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation - Stock Compensation (Topic 718), Improvements to Nonemployee Share-Based Payment Accounting*, which is intended to align the accounting for share-based payment awards issued to employees and nonemployees, however, this amendment does not apply to instruments issued in a financing transaction nor to equity instruments granted to a customer under a contract in the scope of Topic 606. Currently, performance conditions are recognized once the performance conditions are met. Under this new amendment, equity-classified nonemployee share-based payments will be measured at the grant-date fair value and will be recognized based on the probable outcome of the performance conditions. This ASU is effective for fiscal periods beginning after December 15, 2018. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.

In July 2018, the FASB issued ASU No. 2018-09, *Codification Improvements*. This amendment makes changes to a variety of topics to clarify, correct errors in, or make minor improvements to the Accounting Standards Codification. The majority of the amendments in ASU 2018-09 are effective for periods beginning after December 15, 2018. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.

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. This ASU is effective for fiscal periods beginning after December 15, 2019. The Company is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements and disclosures.

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 is currently evaluating this guidance and the impact it may have on the Company's consolidated financial statements.

In August 2018, the Securities and Exchange Commission adopted a Disclosure Update and Simplification release, which outlines Regulation S-X amendments to eliminate outdated or duplicative disclosure requirements. The final rule also amends the interim financial statement requirements to require a reconciliation of changes in stockholders' equity in the notes or as a separate statement. These amendments are effective for all filings made 30 days after the amendments are published in the Federal Register, which was on October 4, 2018. The SEC announced that it would not object if the first presentation of the changes in stockholders' equity for a calendar year

end filer were made in the Company's March 31, 2019 Form 10-Q. The Company plans to use the new presentation beginning in 2019.

Note 3. Fair Value Measurement

At September 30, 2018 and December 31, 2017, 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):

	September 30, 2018		December 31, 2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Bank line of credit	$ 247,000	$ 247,000	$ 247,000	$ 247,000
Senior debt	1,067,947	1,067,529	808,455	807,698
Subordinated debt	157,943	156,257	111,488	111,095
Securitization debt	91,708	89,005	95,821	96,999
SREC Loans	—	—	32,181	32,181
Total	$ 1,564,598	$ 1,559,791	$ 1,294,945	$ 1,294,973

At September 30, 2018 and December 31, 2017, the fair value of the Company's lines of credit, and certain senior, subordinated and SREC loans approximate their carrying values because their interest rates are variable rates that approximate rates currently available to the Company. At September 30, 2018 and December 31, 2017, 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 3 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.

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.

At September 30, 2018 and December 31, 2017, financial instruments measured at fair value on a recurring basis, based upon the fair value hierarchy are as follows (in thousands):

	September 30, 2018			
	Level 1	Level 2	Level 3	Total
Derivative assets:				
Interest rate swaps	$ —	$ 27,567	$ —	$ 27,567
Total	$ —	$ 27,567	$ —	$ 27,567
Derivative liabilities:				
Interest rate swaps	$ —	$ 55	$ —	$ 55
Total	$ —	$ 55	$ —	$ 55

	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Derivative assets:				
Interest rate swaps	$ —	$ 1,917	$ —	$ 1,917
Total	$ —	$ 1,917	$ —	$ 1,917
Derivative liabilities:				
Interest rate swaps	$ —	$ 8,568	$ —	$ 8,568
Total	$ —	$ 8,568	$ —	$ 8,568

Note 4. Inventories

Inventories consist of the following (in thousands):

	September 30, 2018	December 31, 2017
Raw materials	$ 84,726	$ 87,927
Work-in-process	11,252	6,500
Total	$ 95,978	$ 94,427

Note 5. Solar Energy Systems, net

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

	September 30, 2018	December 31, 2017
Solar energy system equipment costs	$ 3,622,735	$ 3,124,407
Inverters	374,035	317,390
Total solar energy systems	3,996,770	3,441,797
Less: accumulated depreciation and amortization	(498,797)	(399,280)
Add: construction-in-progress	120,152	119,053
Total solar energy systems, net	$ 3,618,125	$ 3,161,570

All solar energy systems, construction-in-progress and inverters have been leased to or are subject to signed Customer Agreements with customers. The Company recorded depreciation expense related to solar energy systems of $35.6 million and $28.9 million for the three months ended September 30, 2018 and 2017, respectively, and $101.8 million and $82.1 million for the nine months ended September 30, 2018 and 2017, respectively. The depreciation expense was reduced by the amortization of deferred grants of $2.0 million and $1.9 million for the three months ended September 30, 2018 and 2017, respectively, and $5.8 million and $5.7 million for the nine months ended September 30, 2018 and 2017, respectively.

Note 6. Other Assets

Other assets consist of the following (in thousands):

	September 30, 2018	December 31, 2017
Costs to obtain contracts	$ 200,758	$ 157,970
Accumulated amortization of costs to obtain contracts	(22,571)	(16,485)
Unbilled receivables	72,290	51,710
Operating lease right-of-use assets	20,577	25,465
Other assets	65,651	27,804
Total	$ 336,705	$ 246,464

The Company recorded amortization of costs to obtain contracts of $2.2 million and $1.7 million for the three months ended September 30, 2018 and 2017, respectively, and $6.2 million and $4.7 million for the nine months ended September 30, 2018 and 2017, respectively, in the sales and marketing expense.

The majority of unbilled receivables arise from fixed price escalators included in our long-term Customer Agreements. The escalator is included in calculating the total estimated transaction value for an individual Customer Agreement. The average rate is then determined from the transaction value and consistently applied over the term of such Customer Agreement to recognize revenue. The amount of unbilled receivables increases while the actual billing rate in an individual Customer Agreement is less than the average rate for that Customer Agreement. Conversely, the amount of unbilled receivables decreases when the actual billing rate escalates and becomes higher than the average rate. 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.

Note 7. Accrued Expenses and Other Liabilities

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

	September 30, 2018	December 31, 2017
Accrued employee compensation	$ 30,623	$ 30,298
Operating lease obligations	8,288	9,202
Accrued interest	7,889	6,054
Accrued professional fees	9,643	5,837
Other accrued expenses	29,454	45,839
Total	$ 85,897	$ 97,230

Note 8. Indebtedness

As of September 30, 2018, debt consisted of the following (in thousands, except percentages):

	Carrying Values, net of debt discount			Unused Borrowing Capacity	Interest Rate (1)	Maturity Date
	Current	Long Term	Total			
Recourse debt:						
Bank line of credit	$ —	$ 247,000	$ 247,000	$ 406	5.33% - 5.54%	April 2020
Total recourse debt	$ —	$ 247,000	$ 247,000	$ 406		
Non-recourse debt:						
Senior	18,693	1,049,254	1,067,947	—	4.33% - 5.39%	September 2020 - October 2024
Subordinated	4,641	153,302	157,943	—	7.03% - 7.84%	September 2020 - October 2024
Securitization Class A	3,703	78,241	81,944	—	4.40 %	July 2024
Securitization Class B	459	9,305	9,764	—	5.38 %	July 2024
Total non-recourse debt	$ 27,496	$ 1,290,102	$ 1,317,598	$ —		
Total debt	$ 27,496	$ 1,537,102	$ 1,564,598	$ 406		

(1) Reflects contractual, unhedged rates. See Note 9, *Derivatives* for hedge rates.

As of December 31, 2017, debt consisted of the following (in thousands, except percentages):

	Carrying Values, net of debt discount			Unused Borrowing Capacity	Interest Rate	Maturity Date
	Current	Long Term	Total			
Recourse debt:						
Bank line of credit	$ —	$ 247,000	$ 247,000	$ 406	4.58% - 4.87%	April 2018
Total recourse debt	$ —	$ 247,000	$ 247,000	$ 406		
Non-recourse debt:						
Senior	3,561	804,894	808,455	12,758	3.63% - 4.69%	September 2020 - October 2024
Subordinated	4,301	107,187	111,488	27	6.36% - 7.13%	September 2020 - October 2024
Securitization Class A	3,534	82,203	85,737	—	4.40 %	July 2024
Securitization Class B	440	9,644	10,084	—	5.38 %	July 2024
SREC Loans	9,693	22,488	32,181	—	7.28 %	July 2021
Total non-recourse debt	$ 21,529	$ 1,026,416	$ 1,047,945	$ 12,785		
Total debt	$ 21,529	$ 1,273,416	$ 1,294,945	$ 13,191		

Bank Line of Credit

The Company has outstanding borrowings under a syndicated working capital facility with banks for a total commitment of up to $250.0 million. The working capital facility is secured by substantially all of the unencumbered assets of the Company, as well as ownership interests in certain subsidiaries of the Company. Loans under the facility bear interest at LIBOR +3.25% per annum or the Base Rate + 2.25% per annum. The Base Rate is the highest of the Federal Funds Rate +0.50%, the Prime Rate, or LIBOR + 1.00%.

Under the terms of the working capital facility, the Company is required to meet various restrictive covenants, such as the completion and presentation of audited consolidated financial statements, maintaining a minimum unencumbered liquidity of at least $30 million at the end of each calendar month and maintaining a minimum interest coverage ratio of 3.00 or greater, measured quarterly as of the last day of each quarter. The Company was in compliance with all debt covenants as of September 30, 2018. As of September 30, 2018, the balance under this facility was $247.0 million with a maturity date in April 2020.

Syndicated Credit Facilities

Each of the Company's syndicated credit facilities contain customary covenants including the requirement to maintain certain financial measurements and provide lender reporting. Each of the syndicated credit facilities also contain certain provisions in the event of default which 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 credit facilities. 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. The Company was in compliance with all debt covenants as of September 30, 2018.

As of September 30, 2018, certain subsidiaries of the Company have an outstanding balance of $285.7 million on secured credit facilities that were syndicated with various lenders due in October 2024. The credit facilities totaled $303.0 million and consisted of $293.0 million in term loans, and a $10.0 million revolving debt service reserve letter of credit facility. Term Loan A ("TLA") is a senior delayed draw term loan that bears interest at LIBOR +2.75% per annum for LIBOR loans or the Base Rate +1.75% per annum on Base Rate loans. Term Loan B ("TLB") is subordinated debt and consists of a Class A portion which accrues interest at a fixed interest rate of 7.03% per annum and a Class B portion which accrues interest at LIBOR + 5.00% per annum or the Base Rate + 4.00% per annum. The Base Rate is the highest of the Federal Funds Rate +0.50%, the Prime Rate, or LIBOR + 1.00%. Under TLA, prepayments are permitted with no penalties. Under TLB, prepayments are permitted with associated penalties ranging from 0% - 5% depending on the timing of prepayments.

As of September 30, 2018, certain subsidiaries of the Company have an outstanding balance of $188.3 million on senior secured credit facilities that were syndicated with various lenders due in April 2024. These facilities are subject to the National Grid project equity transaction. The credit facilities totaled $202.0 million and consisted of a $195.0 million senior delayed draw term loan facility and a $7.0 million revolving debt service reserve letter of credit facility. Loans under the facility bear interest at LIBOR +2.25% per annum, as amended in March 2018, for the remainder of the initial four-year period for LIBOR loans or the Base Rate +1.25% per annum for Base Rate Loans. The Base Rate is the highest of the Federal Funds Rate + 0.50%, the Prime Rate, or LIBOR +1.00%. The facilities are non-recourse to the Company and are secured by net cash flows from Customer Agreements and SRECs, less certain operating, maintenance and other expenses which are available to the borrower after distributions to tax equity investors. Prepayments are permitted under the delayed draw term loan facility.

As of September 30, 2018, certain subsidiaries of the Company have an outstanding balance of $511.9 million on secured credit facilities agreements, as amended, with a syndicate of banks due in March 2023. The facilities totaled $595.0 million and consisted of a revolving aggregation facility ("Aggregation Facility"), a term loan ("Term Loan") and a revolving debt service reserve letter of credit facility. Senior loans under the Aggregation Facility bear interest at LIBOR +2.50% per annum for the initial three-year revolving availability period, stepping up to LIBOR + 2.75% per annum in the following two-year period. The subordinated Term Loan bears interest at LIBOR +5.00% per annum for the first three-year period, stepping up to LIBOR + 6.50% per annum thereafter. Term Loan prepayment penalties range from 0% - 1% depending on the timing of prepayments.

Senior Debt

As of September 30, 2018, a subsidiary of the Company has an outstanding balance of $189.6 million on a revolving loan facility due in September 2020. The facility is non-recourse to the Company and is secured by the assets of such subsidiary and its net cash flows, including the net cash flows from the generation of contracted SRECs by certain subsidiaries of the Company. Loans under the facility bear interest at LIBOR +2.75% per annum for the senior secured loan, and LIBOR +5.50% per annum for the subordinated loan. The Company was in compliance with all debt covenants under this loan facility as of September 30, 2018.

As of September 30, 2018, a subsidiary of the Company has an outstanding balance of $21.8 million on a term loan due in April 2022. The loan is secured by the assets and related net cash flow of this subsidiary and is non-recourse to the Company's other assets. The Company was in compliance with all debt covenants under this loan as of September 30, 2018.

As of September 30, 2018, a subsidiary of the Company has an outstanding balance of $11.1 million on a non-recourse loan due in September 2022. The loan is secured by substantially all of the assets of the subsidiary including this subsidiary's membership interests and assets in its investment funds. The loan contains certain provisions in the event of default which entitles the lender to take certain actions including acceleration of amounts due under the loan. Loans under this facility bear interest at LIBOR +3.00% per annum. The financing agreement requires the Company to maintain certain financial covenants. The Company was in compliance with all debt covenants under this loan as of September 30, 2018.

As of September 30, 2018, a subsidiary of the Company has an outstanding balance of $17.5 million on a secured, non-recourse loan agreement due in September 2022. The loan will be repaid through cash flows from a pass-through financing obligation arrangement previously entered into by the Company. The loan agreement contains customary covenants including the requirement to maintain certain financial measurements and provide lender reporting. The loan also contains certain provisions in the event of default which entitles the lender to take certain actions including acceleration of amounts due under the loan. Loans under this facility bear interest at LIBOR +2.25% per annum. The Company was in compliance with all debt covenants under this loan as of September 30, 2018.

Securitization Loans

As of September 30, 2018, a subsidiary of the Company has an outstanding balance of $91.7 million on solar asset-backed notes ("Notes") secured by associated customer contracts ("Solar Assets") held by a special purpose entity ("Issuer"). As of September 30, 2018 and December 31, 2017, these Solar Assets had a carrying value of $166.5 million and $172.8 million, respectively, and are included under solar energy systems, net, in the consolidated balance sheets. The Company was in compliance with all debt covenants as of September 30, 2018.

Note 9. 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 one or three month LIBOR 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 nine months ended September 30, 2018, the hedge relationships on the Company's interest rate swaps have been assessed as highly effective as 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 affects earnings.

The Company recorded an unrealized gain of $8.5 million and $30.3 million for the three and nine months ended September 30, 2018 respectively, net of applicable tax expense of $(3.1) million and $(10.7) million, respectively. The Company recorded an unrealized loss of $0.5 million and $5.0 million for the three and nine months ended September 30, 2017 respectively, net of applicable tax benefit of $0.3 million and $3.2 million, respectively. The Company recognized interest expense on derivatives of $0.7 million and $2.4 million for the three and nine months ended September 30, 2018, respectively, net of tax benefit of $0.3 million and $0.8 million, respectively. The Company recognized interest expense on derivatives of $0.1 million and $1.0 million for the three and nine months ended September 30, 2017, respectively, net of tax expense of $0.1 million and $0.7 million, respectively.

During the three months ended September 30, 2018, the Company accelerated the reclassification of an amount in other comprehensive income to earnings as a result of a hedged forecasted transaction becoming probable to not occur due to a refinancing which repaid the hedged debt. The related interest rate swap was also terminated. The accelerated amount resulted in a gain of $6.9 million recognized as Other expenses (income), net in the Consolidated Statement of Operations.

During the next 12 months, the Company expects to reclassify $1.8 million of net gains on derivative instruments from accumulated other comprehensive income to earnings. There were no undesignated derivative instruments recorded by the Company as of September 30, 2018.

At September 30, 2018, the Company had designated derivative instruments classified as derivative assets as reported in other assets of $27.6 million and derivative liabilities as reported in other liabilities of $0.1 million in the Company's balance sheet. At December 31, 2017, the Company had designated derivative instruments classified as hedges of variable interest payments as derivative assets that are reported in other assets of $1.9 million and derivative liabilities as reported in other liabilities of $8.6 million in the Company's balance sheet. At September 30, 2018, the Company had the following derivative instruments (dollars in thousands):

Type	Quantity	Effective Dates	Maturity Dates	Hedge Interest Rates	Notional Amount	Adjusted Net Fair Market Value
Interest rate swap	1	5/21/2018	9/20/2020	2.69%	$ 109,305	$ 228
Interest rate swaps	2	4/29/2016 - 12/30/2016	8/31/2022 - 9/30/2022	1.27%- 2.37%	$ 24,952	$ 897
Interest rate swaps	10	7/31/2017 - 1/31/2019	4/30/2024 - 10/31/2024	2.16%- 2.69%	$ 347,687	$ 11,797
Interest rate swaps	3	4/30/2021	10/30/2026 - 10/31/2026	2.89% - 3.08%	$ 102,720	$ 383
Interest rate swap	1	9/20/2020	6/20/2030	2.57%	$ 67,013	$ 1,374
Interest rate swap	1	9/30/2022	9/30/2031	3.23%	$ 8,642	$ (44)
Interest rate swap	1	9/20/2020	4/20/2032	2.60%	$ 33,409	$ 775
Interest rate swaps	5	1/31/2019 - 10/31/2024	7/31/2034	2.48% - 3.04%	$ 144,379	$ 4,562
Interest rate swaps	5	7/31/2017 - 4/30/2024	7/31/2035	2.56% - 2.95%	$ 151,869	$ 3,330
Interest rate swaps	5	1/31/2018 - 10/18/2024	10/31/2036	2.62% - 2.95%	$ 183,671	$ 3,802
Interest rate swaps	3	10/30/2026 - 10/31/2026	1/31/2038	3.01% - 3.16%	$ 101,135	$ 408

Note 10. 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 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 typically 20 years. The solar energy systems are subject to Customer Agreements with an initial term of typically 20 years that automatically renew on an annual basis. These solar energy systems are reported under the line item solar energy systems, net in the consolidated balance sheets. As of September 30, 2018 and December 31, 2017, the cost of the solar energy systems placed in service under the financing obligations was $565.3 million and $464.2 million, respectively. The accumulated depreciation related to these assets as of September 30, 2018 and December 31, 2017 was $76.5 million and $63.7 million, respectively.

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 arrangements as borrowings by recording the proceeds received as financing obligations. These financing obligations are reduced over a period of approximately 20 years by customer payments under the Customer Agreements, U.S. Treasury grants (where applicable), incentive rebates (where applicable), the fair value of the ITCs monetized (where applicable) and proceeds from the contracted resale of SRECs as they are received by the investor. Under this approach, the Company accounts for the Customer Agreements and any related U.S. Treasury grants or incentive rebates as well 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, including ITCs, 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.

In one arrangement the investor has a right, on June 30, 2019, to purchase all of the systems leased at a price equal to the higher of (a) the sum of the present value of the expected remaining lease payments due by the investor, discounted at 5%, and the fair market value of the Company's residual interest in the systems as determined through independent valuation or (b) a set value per kilowatt applied to the aggregate size of all leased systems.

Under all 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 customers, 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 11. VIE Arrangements

The Company consolidated various VIEs at September 30, 2018 and December 31, 2017. The carrying amounts and classification of the VIEs' assets and liabilities included in the consolidated balance sheets are as follows (in thousands):

	September 30, 2018	December 31, 2017
Assets		
Current assets		
Cash	$ 106,492	$ 118,352
Restricted cash	4,944	2,699
Accounts receivable, net	19,123	18,786
Prepaid expenses and other current assets	387	917
Total current assets	130,946	140,754
Solar energy systems, net	2,587,296	2,385,329
Other assets	65,155	42,295
Total assets	$ 2,783,397	$ 2,568,378
Liabilities		
Current liabilities		
Accounts payable	$ 8,442	$ 15,929
Distributions payable to noncontrolling interests and redeemable noncontrolling interests	15,337	13,526
Accrued expenses and other liabilities	6,568	5,200
Deferred revenue, current portion	28,034	28,695
Deferred grants, current portion	1,016	1,021
Non-recourse debt, current portion	2,755	11,179
Total current liabilities	62,152	75,550
Deferred revenue, net of current portion	360,936	381,066
Deferred grants, net of current portion	28,489	29,385
Non-recourse debt, net of current portion	192,539	190,106
Other liabilities	8,790	1,848
Total liabilities	$ 652,906	$ 677,955

The Company holds a variable interest in an entity that provides the noncontrolling interest with a right to terminate the leasehold interests in all of the leased projects on the tenth anniversary of the effective date of the master lease. In this circumstance, the Company would be required to pay the noncontrolling interest an amount equal to the fair market value, as defined in the governing agreement of all leased projects as of that date.

The Company holds certain variable interests in nonconsolidated VIEs established as a result of five pass-through financing obligation Fund arrangements as further explained in Note 10, *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 12. Redeemable Noncontrolling Interests and Equity

As of September 30, 2018, the changes in redeemable noncontrolling interests, total stockholders' equity and noncontrolling interests were as follows (in thousands):

	Redeemable Noncontrolling Interests	Total Stockholders' Equity	Noncontrolling Interests	Total Equity
Balance — December 31, 2017	$ 123,801	$ 881,582	$ 358,934	$ 1,240,516
Exercise of stock options	—	13,860	—	13,860
Issuance of restricted stock units, net of tax withholdings	—	(7,910)	—	(7,910)
Shares issued in connection with the Employee Stock Purchase Plan	—	1,755	—	1,755
Stock based compensation	—	21,991	—	21,991
Contributions from noncontrolling interests and redeemable noncontrolling interests	60,683	—	187,021	187,021
Distributions to noncontrolling interests and redeemable noncontrolling interests	(8,168)	—	(44,362)	(44,362)
Net income (loss)	(58,848)	32,545	(184,368)	(151,823)
Other comprehensive loss, net of taxes	—	22,969	—	22,969
Balance — September 30, 2018	$ 117,468	$ 966,792	$ 317,225	$ 1,284,017

The carrying value of redeemable noncontrolling interests was greater than the redemption value except for five Funds at September 30, 2018 and December 31, 2017 where the carrying value has been adjusted to the redemption value.

As of September 30, 2017, the changes in redeemable noncontrolling interests, total stockholders' equity and noncontrolling interests were as follows (in thousands):

	Redeemable Noncontrolling Interests	Total Stockholders' Equity	Noncontrolling Interests	Total Equity
Balance — December 31, 2016	$ 140,996	$ 742,771	$ 252,957	$ 995,728
Cumulative effect of adoption of ASU 2016-16 and ASU 2016-09	—	2,996	—	2,996
Exercise of stock options	—	1,573	—	1,573
Issuance of restricted stock units, net of tax withholdings	—	(2,925)	—	(2,925)
Shares issued in connection with the Employee Stock Purchase Plan	—	1,145	—	1,145
Stock based compensation	—	16,530	—	16,530
Contributions from noncontrolling interests and redeemable noncontrolling interests	105,167	—	368,902	368,902
Distributions to noncontrolling interests and redeemable noncontrolling interests	(11,794)	—	(31,098)	(31,098)
Net income (loss)	(57,942)	56,235	(229,873)	(173,638)
Other comprehensive loss, net of taxes	—	(3,974)	—	(3,974)
Balance — September 30, 2017	$ 176,427	$ 814,351	$ 360,888	$ 1,175,239

Note 13. Stock-Based Compensation

Stock Options

The following table summarizes the activity for all stock options under all of the Company's equity incentive plans for the nine months ended September 30, 2018 (shares and aggregate intrinsic value in thousands):

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding at December 31, 2017	16,268	$ 5.70	7.41	$ 14,832
Granted	1,469	8.48		
Exercised	(2,555)	5.40		
Cancelled / forfeited	(834)	6.56		
Outstanding at September 30, 2018	14,348	$ 5.98	6.81	$ 93,159
Options vested and exercisable at September 30, 2018	8,093	$ 5.53	5.56	$ 56,270

Restricted Stock Units

The following table summarizes the activity for all restricted stock units ("RSUs") under all of the Company's equity incentive plans for the nine months ended September 30, 2018 (shares in thousands):

	Number of Awards	Weighted Average Grant Date Fair Value
Unvested balance at December 31, 2017	5,330	$ 5.82
Granted	1,909	8.54
Issued	(1,451)	6.45
Cancelled / forfeited	(1,170)	5.62
Unvested balance at September 30, 2018	4,618	$ 6.80

Employee Stock Purchase Plan

Under the Company's amended 2015 Employee Stock Purchase Plan ("ESPP"), 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.

Stock-Based Compensation Expense

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Cost of customer agreements and incentives	$ 648	$ (69)	$ 1,926	$ 1,792
Cost of solar energy systems and product sales	188	171	545	441
Sales and marketing	1,102	1,580	6,086	4,304
Research and development	313	259	918	594
General and administration	3,490	3,164	12,507	9,363
Total	$ 5,741	$ 5,105	$ 21,982	$ 16,494

In August 2017, the Company entered into an agreement with an affiliate ("Contractor") of Comcast Corporation ("Comcast") whereby Contractor will receive lead or sales fees for new customers it brings to the Company over a 40-month term. The Company also issued Comcast a warrant to purchase up to 11,793,355 shares of the Company's common stock, at an exercise price of $0.01 per warrant share. The warrant would initially vest 50.05% when both (i) Contractor has earned a lead or sales fee with respect to 30,000 of installed solar energy systems, and (ii) Contractor or its affiliates have spent at least $10.0 million in marketing and sales in connection with the agreement. Thereafter, the warrant would vest in five additional increments for each additional 6,000 installed solar energy systems. On November 7, 2018 the warrant vesting schedule was modified so that it will initially vest either (i) as to 10.0% if Contractor has earned a lead or sales fee with respect to 6,000 of installed solar energy systems by September 30, 2019 or (ii) as to 13.3% if Contractor has earned a lead or sales fee with respect to 8,000 of installed solar energy systems by December 31, 2019, provided that, in either case, Contractor or its affiliates have spent at least $25.0 million in marketing and sales in connection with the agreement. Thereafter, the warrant will vest in additional 8.3% increments for each additional 5,000 installed solar energy systems. If the initial vesting conditions have not been met by December 31, 2019, the Warrant will expire. As of November 7, 2018, none of the shares under this amended warrant have vested and, therefore, the modification has no current financial statement effect as no expense has been recognized to date based on the terms of the award.

Note 14. Income Taxes

The income tax expense rate for the three months ended September 30, 2018 and 2017 was 11.2% and (21.3)%, respectively, and for the nine months ended September 30, 2018 and 2017 was (3.2)% and (15.3)%, respectively. The differences between the actual consolidated effective income tax rate and the U.S. federal statutory rate were primarily attributable to the allocation of losses on noncontrolling interests and redeemable noncontrolling interests, which assumes a hypothetical liquidation of these partnerships as of the reporting dates and therefore a deferred tax expense is calculated on the income available to common stockholders.

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.

Tax Act

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the U.S. tax code that affected 2017, the current year and onwards, including, but not limited to, a reduction of the U.S. federal corporate tax rate from as high as 35% to 21%, net operating loss deduction limitations, interest expense limitations, revenue recognition changes and 100% disallowance of entertainment expense. The Company continues to analyze the Tax Act and implement relevant changes in the accounting for income taxes.

In addition on December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under ASC 740, *Income Taxes*, for the year ended December 31, 2017. In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. The Company has determined that the deduction related to officers' compensation and the new tax statute needs further analysis to make their final assessment. The Company is still within the measurement period

as of September 30, 2018 and no further conclusions have been made, as the Company reviews the law change and the impact to the Company.

Uncertain Tax Positions

As of September 30, 2018 and December 31, 2017, the Company had $0.6 million and $1.5 million, respectively, of unrecognized tax benefits related to an acquisition in 2015. In addition, there was $0.2 million and $0.4 million of interest and penalties for uncertain tax positions as of September 30, 2018 and December 31, 2017, respectively. During the nine months ended September 30, 2018, the Company recorded an income tax benefit of $1.1 million due to the expiration of federal and California statute of limitations. This benefit was fully offset by an indemnification asset that was written down to zero through operating expenses during the year. The Company is subject to taxation and files income tax returns in the United States, 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.

Net Operating Loss Carryforwards

As a result of the Company's net operating loss carryforwards as of September 30, 2018 and December 31, 2017, the Company does not expect to pay income tax, including in connection with its income tax provision for the nine months ended September 30, 2018 until the Company's net operating losses are fully utilized. As of December 31, 2017, the Company's federal and state net operating loss carryforwards were $720.1 million and $630.7 million, respectively. If not utilized, the federal net operating loss will begin to expire in the year 2028 and the state net operating losses will begin to expire in the year 2024.

Note 15. Commitments and Contingencies

Letters of Credit

As of September 30, 2018 and December 31, 2017, the Company had $15.5 million and $16.4 million, respectively, of unused letters of credit outstanding, which carry fees of 2.50% - 3.25% per annum.

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):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Finance lease cost:				
Amortization of right-of-use assets	$ 3,126	$ 2,706	$ 8,483	$ 8,302
Interest on lease liabilities	167	142	414	509
Operating lease cost	2,616	2,433	7,749	7,563
Short-term lease cost	228	145	583	388
Variable lease cost	947	630	2,454	1,953
Sublease income	$ (156)	$ (18)	$ (381)	$ (18)
Total lease cost	$ 6,928	$ 6,038	$ 19,302	$ 18,697

Other information related to leases was as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Cash paid for amounts included in the measurement of lease liabilities				
Operating cash flows from operating leases	$ 2,771	$ 2,509	$ 8,026	$ 7,481
Operating cash flows from finance leases	123	134	327	468
Financing cash flows from finance leases	2,357	2,369	6,529	7,735
Right-of-use assets obtained in exchange for lease obligations:				
Operating leases	1,322	1,589	1,414	5,455
Finance leases	4,997	72	9,139	174
Weighted average remaining lease term (years):				
Operating leases	3.51	4.08	3.51	4.08
Finance leases	2.59	2.20	2.59	2.20
Weighted average discount rate:				
Operating leases	4.2%	4.0%	4.2%	4.0%
Finance leases	4.0%	3.0%	4.0%	3.0%

Future minimum lease payments under non-cancellable leases as of September 30, 2018 were as follows (in thousands):

	Operating Leases	Finance Leases
2018	$ 9,000	$ 8,749
2019	5,984	4,131
2020	4,211	2,371
2021	2,734	1,107
2022	1,918	49
Thereafter	321	19
Total future lease payments	24,168	16,426
Less: Amount representing interest	(1,623)	(753)
Present value of future payments	22,545	15,673
Less: Current portion	(8,288)	(8,372)
Long-term portion	$ 14,257	$ 7,301

Purchase Commitment

The Company entered into purchase commitments, which have the ability to be canceled without significant penalties, with multiple suppliers to purchase $159.6 million of photovoltaic modules and inverters by the end of 2019.

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.

ITC and Cash Grant Indemnification

The Company is contractually committed to compensate certain investors for any losses that they may suffer in certain limited circumstances resulting from reductions in ITCs or U.S. Treasury grants. 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") or U.S. Treasury Department. 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 Company believes that this obligation is not probable based on the facts known as of the filing date of this Quarterly Report on Form 10-Q. The maximum potential future payments that the Company could have to make under this obligation would depend largely on the difference between the prices at which the solar energy systems were sold or transferred to the Funds (or, in certain structures, the fair market value claimed in respect of such systems (referred to as "claimed values")) and the eligible basis determined by 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 ITCs that are passed-through to and claimed by the Fund investors. Since the Company cannot determine how the IRS may evaluate system values used in claiming ITCs, the Company is unable to reliably estimate the maximum potential future payments that it could have to make under this obligation as of each balance sheet date, though any potential future payments are mitigated by the insurance policy described below. In April 2018, the Company purchased an insurance policy providing for certain payments by the insurers in the event there is any final determination (including a judicial determination) that reduced the ITCs 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 ITCs, gross-up costs and expenses incurred in defending such claim, subject to negotiated exclusions from, and limitations to, coverage.

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 July 2012, the U.S. Treasury Department and the Department of Justice (together, the "Government") opened a civil investigation into the participation by residential solar developers in the Section 1603 grant program. The Government served subpoenas on several developers, including Sunrun, along with their investors and valuation firms. The focus of the investigation is the claimed fair market value of the solar systems the developers submitted to the Government in their grant applications. The Company has cooperated fully with the Government and plans to continue to do so. No claims have been brought against the Company. The Company is not able to estimate the ultimate outcome or a range of possible loss at this point in time.

On November 20, 2015, a putative class action captioned *Slovin et al. v. Sunrun Inc. and Clean Energy Experts, LLC* , Case No. 4:15-cv-05340, was filed in the United States District Court, Northern District of California. The complaint generally alleged violations of the Telephone Consumer Protection Act (the "TCPA") on behalf of an individual and putative classes of persons alleged to be similarly situated. Plaintiffs filed a First Amended Complaint on December 2, 2015, and a Second Amended Complaint on March 25, 2016, also asserting individual and putative class claims under the TCPA. By Order entered on April 28, 2016, the Court granted the Company's motion to strike the class allegations set forth in the Second Amended Complaint, and granted leave to amend. Plaintiffs filed a Third Amended Complaint on July 12, 2016 asserting individual and putative class claims under the TCPA. On October 12, 2016, the Court denied the Company's motion to again strike the class allegations set forth in the Third Amended Complaint. On October 3, 2017, plaintiffs filed a motion for leave to file a Fourth Amended Complaint, seeking to, among other things, revise the definitions of the classes that plaintiffs seek to represent. The Company has opposed that motion, which remains pending before the Court. In each iteration of their complaint, plaintiffs seek statutory damages, equitable and injunctive relief, and attorneys' fees and costs, on behalf of themselves and the absent classes. On April 12, 2018, the Company and plaintiffs advised the Court that they reached a settlement in principle, and the Court vacated all deadlines relating to the motion for class certification. On September 27,

2018, Plaintiffs filed a motion for preliminary approval to settle all claims against the Company for $ 5.5 million, which was accrued as of March 31, 2018.

Most, if not all, of the claims asserted in the lawsuit relate to activities allegedly engaged in by third-party vendors, for which the Company denies any responsibility. The vendors are contractually obligated to indemnify the Company for losses related to the conduct alleged. The Company has denied, and continues to deny, the claims alleged and the settlement does not reflect any admission of fault, wrongdoing or liability. The settlement is subject to definitive documentation, class notice and court approval.

On April 13, 2016, a purported shareholder class action captioned *Pytel v. Sunrun Inc., et al.* , Case No. CIV 538215, was filed in the Superior Court of California, County of San Mateo, against the Company, certain of the Company's directors and officers, the underwriters of the Company's initial public offering and certain other defendants. The complaint generally alleges that the defendants violated Sections 11, 12 and 15 of the Securities Act of 1933, as amended (the "Securities Act"), by making false or misleading statements in connection with the Company's August 5, 2015 initial public offering regarding the continuation of net metering programs. The plaintiffs seek to represent a class of persons who acquired the Company's common stock pursuant or traceable to the initial public offering. Plaintiffs seek compensatory damages, including interest, rescission or rescissory damages, an award of reasonable costs and attorneys' fees, and any equitable or injunctive relief deemed appropriate by the court. On April 29, 2016, a purported shareholder class action captioned *Baker et al. v. Sunrun Inc., et al.*, Case No. CIV 538419, was filed in the Superior Court of California, County of San Mateo. On May 10, 2016, a purported shareholder class action captioned *Nunez v. Sunrun Inc., et al.* , Case No. CIV 538593, was filed in the Superior Court of California, County of San Mateo. The *Baker* and *Nunez* complaints are substantially similar to the *Pytel* complaint, and seek similar relief against similar defendants on behalf of the same purported class. On May 3, 2018, plaintiffs filed a second amended complaint including allegations related to the alleged effect of customer cancellations on the Company's business.

On April 21, 2016, a purported shareholder class action captioned *Cohen, et al. v. Sunrun Inc., et al.* , Case No. CIV 538304, was filed in the Superior Court of California, County of San Mateo, against the Company, certain of the Company's directors and officers, and the underwriters of the Company's initial public offering. The complaint generally alleges that the defendants violated Sections 11, 12 and 15 of the Securities Act by making false or misleading statements in connection with an August 5, 2015 initial public offering regarding the Company's business practices and its dependence on complex financial instruments. The *Cohen* plaintiffs seek to represent the same class and seek similar relief as the plaintiffs in the *Pytel, Nunez,* and *Baker* actions. On September 26, 2016, the *Baker, Cohen, Nunez,* and *Pytel* actions were consolidated (such consolidated action referred to as the "state court litigation"). On December 27, 2017, the court granted Plaintiffs' motion for class certification.

Following a mediation on May 4, 2018, the parties entered into an agreement in principle to settle all claims asserted in the state court litigation against all defendants. The aggregate amount of the proposed settlement is $32.0 million, $30.1 million of which will be funded by the Company's insurers and the remaining $1.9 million of which was accrued as of June 30, 2018. The Company and all defendants have denied, and continue to deny, the claims alleged in the state court litigation and the settlement does not reflect any admission of fault, wrongdoing or liability as to any defendant. On September 14, 2018, the court granted preliminary approval of the settlement. The settlement is subject to definitive documentation, shareholder notice and final court approval.

On May 3, 2017, a purported shareholder class action captioned *Fink, et al. v. Sunrun Inc., et al.* , Case No. 3:17-cv-02537, was filed in the United States District Court, Northern District of California, against the Company and certain of the Company's directors and officers. The complaint generally alleges that the defendants violated Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and Securities and Exchange Commission Rule 10b-5, by making false or misleading statements in connection with public filings made between September 15, 2015 and March 8, 2017 regarding the number of customers who canceled contracts after signing up for the Company's home-solar energy system. The plaintiff seeks compensatory damages, including interest, attorney's fees, and costs, on behalf of all persons other than the defendants who purchased the Company's securities between September 16, 2015 and May 2, 2017. On May 4, 2017, a purported shareholder class action captioned *Hall, et al. v. Sunrun Inc., et al.* , Case No. 3:17-cv-02571, was filed in the United States District Court, Northern District of California. On May 18, 2017, a purported shareholder class action captioned *Sanogo, et al. v. Sunrun Inc., et al.*, Case No. 3:17-cv-02865, was filed in the United States District Court, Northern California District of California.
The *Hall* and *Sanogo* complaints are substantially similar to the *Fink* complaint, and seeks similar relief against similar defendants on behalf of a substantially similar class. On August 23, 2017, the *Fink*, *Hall*, and *Sanogo* actions were consolidated, and on September 25, 2017, plaintiffs filed

a consolidated amended complaint which alleges the same underlying violations as the original *Fink*, *Hall* and *Sanogo* complaints (such consolidated action referred to as the "federal court litigation"). On April 5, 2018, the court granted the Company's motion to dismiss without prejudice. Plaintiffs filed a second amended complaint on May 3, 2018. On July 19, 2018, the court again granted defendants' motion to dismiss without prejudice.

On August 8, 2018, the Company reached an agreement in principal with plaintiffs to settle all claims asserted in the federal court litigation against all defendants for $2.5 million, all of which will be funded by the Company's insurers. The Company and all defendants have denied, and continue to deny, the claims alleged in the federal court litigation and the settlement does not reflect any admission of fault, wrongdoing or liability as to any defendant. The settlement is subject to definitive documentation, shareholder notice and court approval.

On June 29, 2017, a shareholder derivative complaint captioned *Barbara Sue Sklar Living Trust v. Sunrun Inc. et al.* , was filed in the United States District Court, Northern District of California, against the Company and certain of the Company's directors and officers. The complaint generally alleges that the defendants violated Section 14(a) of the Exchange Act by making false or misleading statements in connection with public filings, including proxy statements, made between September 10, 2015 and May 3, 2017 regarding the number of customers who cancelled contracts after signing up for the Company's home solar energy system. The Plaintiff seeks, among other things, damages in favor of the Company, certain corporate actions to purportedly improve the Company's corporate governance, and an award of costs and expenses to the putative plaintiff stockholder, including attorneys' fees. The Company believes that the claims are without merit and intends to defend itself vigorously. The case has been stayed pending the outcome of the federal court litigation matter described above.

On April 5, 2018, a stockholder derivative complaint captioned *Leonard Olsen v. Sunrun Inc. et al.* , was filed in the United States District Court, District of Delaware, against the Company and certain of the Company's directors and officers. The complaint generally alleges that the individual defendants breached their fiduciary duties and violated Section 14(a) of the Exchange Act by making false or misleading statements in connection with public filings, including proxy statements, made between September 16, 2015 and May 21, 2017 regarding the number of customers who canceled contracts after signing up for the Company's home-solar energy system. The Plaintiff seeks, among other things, damages in favor of the Company, equitable relief, and an award of costs and expenses to the putative plaintiff stockholder, including attorneys' fees. The Company believes that the claims are without merit and intends to defend itself vigorously.

Note 16. Earnings Per Share

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Numerator:				
Net income (loss) attributable to common stockholders	$ (2,896)	$ 28,007	$ 32,545	$ 56,235
Denominator:				
Weighted average shares used to compute net income per share attributable to common stockholders, basic	111,134	105,783	109,351	105,060
Weighted average effect of potentially dilutive shares to purchase common stock	9,262	3,815	6,701	2,833
Weighted average shares used to compute net income per share attributable to common stockholders, diluted	120,396	109,598	116,052	107,893
Net income (loss) per share attributable to common stockholders				
Basic	$ (0.03)	$ 0.26	$ 0.30	$ 0.54
Diluted	$ (0.02)	$ 0.26	$ 0.28	$ 0.52

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Warrants	—	1,251	834	1,251
Outstanding stock options	527	9,346	4,211	12,257
Unvested restricted stock units	240	787	784	1,099
Total	767	11,384	5,829	14,607

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The discussion in this Quarterly Report on Form 10-Q 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," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" 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 Quarterly Report on Form 10-Q include, but are not limited to, statements about:

- the availability of rebates, tax credits and other financial incentives, and the expected decreases to the ITC rate that begin after December 31, 2019;
- determinations by the Internal Revenue Service or the U.S. Treasury Department of the fair market value of our solar energy systems;
- the retail price of utility-generated electricity or electricity from other energy sources;
- regulatory and policy development and changes;
- our ability to manage our supply chains and distribution channels;
- our industry's, and specifically our, continued ability to manage costs (including, but not limited to, equipment costs) associated with solar service offerings;
- our strategic partnerships and expected benefits of such partnerships;
- 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;
- the potential impact of interest rates on our interest expense;
- 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 channel partners;
- the impact of seasonality on our business;
- our investment in research and development and new product offerings;
- our ability to protect our intellectual property and maintain our brand;
- our expectations regarding certain performance objectives and the renewal rates and purchase value of our solar energy systems after expiration of our Customer Agreements; and
- the calculation of certain of our key financial and operating metrics and accounting policies.

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 Quarterly Report on Form 10-Q. 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. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Quarterly Report on Form 10-Q 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 Quarterly Report on Form 10-Q to conform these statements to actual results or to changes in our expectations, except as required by law.

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

Overview

We provide clean, solar energy to our customers at savings compared to traditional utility energy; our primary customers being 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. Our core solar service offerings are provided through our lease and power purchase agreements which we refer to as our "Customer Agreements" which provide homeowners with simple, predictable pricing for solar energy that is insulated from rising retail electricity prices. While homeowners 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 solar service offerings 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 typically for a 20-year initial term. In certain markets, we offer a 25-year initial term service offering. 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 and non-recourse debt 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. The platform includes processes and software, as well as fulfillment and acquisition marketing leads.

We have experienced substantial growth in our business and operations since our inception in 2007. As of September 30, 2018, we operated the second largest fleet of residential solar energy systems in the United States and provided our solar services to approximately 218,000 customers in 22 states, plus the District of Columbia and Puerto Rico. We have deployed an aggregate of 1,460 megawatts ("MW") as of September 30, 2018, and our Gross Earning Assets as of September 30, 2018 were approximately $2.8 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 Megawatts Deployed and Gross Earning Assets.

Investment Funds

Our Customer Agreements provide for recurring customer payments, typically over 20 years, and the related solar energy systems are generally eligible for 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 ITCs, accelerated depreciation and certain government or utility incentives associated with the funds' ownership of solar energy systems.

From inception to November 2, 2018, we have formed 37 investment funds. Of these 37 funds, 29 are currently active and 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 obligation arrangements on our consolidated balance sheet as a liability. 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):

		Consolidated Joint Ventures	
	Pass-Through Financing Obligations	Partnership Flip	JV Inverted Lease
Consolidation	Owner entity consolidated, tenant entity not consolidated	Single entity, consolidated	Owner and tenant entities consolidated
Balance sheet classification	Pass-through financing obligation	Redeemable noncontrolling interests and noncontrolling interests	Redeemable noncontrolling interests and noncontrolling interests
Revenue from ITCs	Recognized on the PTO date	None	None
Method of calculating investor interest	Effective interest rate method	Greater of HLBV or redemption value	Greater of HLBV or redemption value; or pro rata
Liability balance as of September 30, 2018	$ 362.0	N/A	N/A
Noncontrolling interest balance (redeemable or otherwise) as of September 30, 2018	N/A	$ 400.0	$ 34.7
Number of funds (as of September 30, 2018)	7	20	4
MW deployed (as of September 30, 2018)	205.9	839.4	114.2
Carrying value of solar energy systems, net (as of September 30, 2018)	$ 550.1	$ 2,230.4	$ 356.9
Contributions from third-party fund investors (through September 30, 2018)	$ 739.2	$ 1,858.0	$ 274.6

For further information regarding our investment funds, including the associated risks, see "Risk Factors—Our ability to provide our solar service offerings to homeowners 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", as well as Note 10, *Pass-through Financing Obligations*, Note 11, *VIE Arrangements* and Note 12, *Redeemable Noncontrolling*

Interests and Equity to our consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q.

Key Operating Metrics

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 Quarterly Report on Form 10-Q 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.

- *Megawatts Deployed* represents the aggregate megawatt production capacity of our solar energy systems, whether sold directly to customers or subject to executed Customer Agreements, for which we have (i) confirmation that the systems are installed on the roof, subject to final inspection or (ii) in the case of certain system installations by our partners, accrued at least 80% of the expected project cost.

- *Gross Earning Assets* represents the remaining net cash flows (discounted at 6%) we expect to receive during the initial term of our Customer Agreements (typically 20 or 25 years) for systems that have been deployed as of the measurement date, plus a discounted estimate of the value of the Customer Agreement renewal term or solar energy system purchase at the end of the initial term. Consistent with industry standards, we use a discount rate of 6%. We consider a discount rate of 6% to be appropriate and consistent with recent market transactions that demonstrate that a portfolio of residential solar homeowner contracts is an asset class that can be securitized successfully on a long-term basis, with a coupon of less than 5%. We calculate the Gross Earning Assets value of the purchase or renewal amount at the expiration of the initial contract term assuming either a system purchase or a five year renewal (for our 25-year Customer Agreements) or a 10-year renewal (for our 20-year Customer Agreements), in each case 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 on an annual basis and the rate is initially set at up to a 10% discount to then-prevailing power prices.

  Gross Earning Assets is calculated net of estimated cash distributions to investors in consolidated joint ventures and estimated operating, maintenance and administrative expenses for systems deployed as of the measurement date. In calculating Gross Earning Assets, we deduct estimated cash distributions to our project equity financing providers. In calculating Gross Earning Assets, we do not deduct customer payments we are obligated to pass through to investors in pass-through financing obligations as these amounts are reflected on our balance sheet as long-term and short-term pass-through financing obligations, similar to the way that debt obligations are presented. In determining our finance strategy, we use pass-through financing obligations and long-term debt in an equivalent fashion as the schedule of payments of distributions to pass-through financing obligation investors is more similar to the payment of interest to lenders than the internal rates of return (IRRs) paid to investors in other tax equity structures.

  - *Gross Earning Assets Under Energy Contract* represents the remaining net cash flows during the initial term of our Customer Agreements (less substantially all value from SRECs prior to July 1, 2015), for systems deployed as of the measurement date.

  - *Gross Earning Assets Value of Purchase or Renewal* is the forecasted net present value we would receive upon or following the expiration of the initial Customer Agreement term (either in the form of cash payments during any applicable renewal period or a system purchase at the end of the initial term), for systems deployed as of the measurement date.

  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.

	For the Three Months Ended September 30,	
	2018	2017
MW Deployed (during the period)	100	90

	As of September 30,	
	2018	2017
Cumulative Megawatts Deployed (end of period) [(1)]	1,460	1,117

(1) The Cumulative Megawatts Deployed may not equal the sum of all MW deployed each year due to rounding.

	As of September 30,	
	2018	2017
	(in thousands)	
Gross Earning Assets Under Energy Contract	$ 1,911,656	$ 1,359,017
Gross Earning Assets Value of Purchase or Renewal	917,069	709,414
Gross Earning Assets	$ 2,828,725	$ 2,068,431

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 Under Energy Contract:

	As of September 30, 2018				
	Discount rate				
<u>Default rate</u>	4%	5%	6%	7%	8%
	(in thousands)				
5%	$ 2,181,434	$ 2,013,050	$ 1,863,615	$ 1,730,616	$ 1,611,910
0%	$ 2,239,340	$ 2,065,232	$ 1,910,785	$ 1,773,384	$ 1,650,803

Gross Earning Assets Value of Purchase or Renewal:

	As of September 30, 2018				
	Discount rate				
<u>Purchase or Renewal rate</u>	4%	5%	6%	7%	8%
	(in thousands)				
80%	$ 1,214,363	$ 984,114	$ 800,155	$ 652,688	$ 534,087
90%	$ 1,391,677	$ 1,127,859	$ 917,069	$ 748,086	$ 612,173
100%	$ 1,568,991	$ 1,271,604	$ 1,033,983	$ 843,483	$ 690,259

Total Gross Earning Assets:

	As of September 30, 2018				
	Discount rate				
Purchase or Renewal rate	4%	5%	6%	7%	8%
			(in thousands)		
80%	$ 3,453,703	$ 3,049,346	$ 2,710,940	$ 2,426,072	$ 2,184,889
90%	$ 3,631,017	$ 3,193,091	$ 2,827,854	$ 2,521,470	$ 2,262,975
100%	$ 3,808,331	$ 3,336,836	$ 2,944,768	$ 2,616,867	$ 2,341,062

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 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 Quarterly Report on Form 10-Q.

We believe that assumptions and estimates associated with our principles of consolidation, revenue recognition, impairment of long-lived assets, goodwill impairment analysis, provision for income taxes and valuation 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.

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 Quarterly Report on Form 10-Q.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
	(in thousands, except per share data)			
Revenue:				
Customer agreements and incentives	$ 114,572	$ 61,717	$ 273,167	$ 168,918
Solar energy systems and product sales	90,388	82,829	246,694	211,359
Total revenue	204,960	144,546	519,861	380,277
Operating expenses:				
Cost of customer agreements and incentives	63,195	47,299	175,540	135,201
Cost of solar energy systems and product sales	76,179	69,588	205,026	179,957
Sales and marketing	56,758	39,921	150,074	108,109
Research and development	4,604	3,936	13,552	10,642
General and administrative	26,720	27,925	87,743	77,761
Amortization of intangible assets	1,051	1,052	3,153	3,154
Total operating expenses	228,507	189,721	635,088	514,824
Loss from operations	(23,547)	(45,175)	(115,227)	(134,547)
Interest expense, net	34,482	23,217	94,552	65,746
Other expenses (income), net	(4,517)	(94)	(5,701)	589
Loss before income taxes	(53,512)	(68,298)	(204,078)	(200,882)
Income tax expense (benefit)	(5,988)	14,517	6,593	30,698
Net loss	(47,524)	(82,815)	(210,671)	(231,580)
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	(44,628)	(110,822)	(243,216)	(287,815)
Net income (loss) available to common stockholders	$ (2,896)	$ 28,007	$ 32,545	$ 56,235
Net income (loss) per share available to common stockholders				
Basic	$ (0.03)	$ 0.26	$ 0.30	$ 0.54
Diluted	$ (0.02)	$ 0.26	$ 0.28	$ 0.52
Weighted average shares used to compute net income per share attributable to common stockholders				
Basic	111,134	105,783	109,351	105,060
Diluted	120,396	109,598	116,052	107,893

Comparison of the Three Months Ended September 30, 2018 and 2017

Revenue

	Three Months Ended September 30,		Change	
	2018	2017	$	%
		(in thousands)		
Customer agreements	$ 70,864	$ 55,134	$ 15,730	29 %
Incentives	43,708	6,583	37,125	564 %
Customer agreements and incentives	114,572	61,717	52,855	86 %
Solar energy systems	47,771	30,734	17,037	55 %
Products	42,617	52,095	(9,478)	(18)%
Solar energy systems and product sales	90,388	82,829	7,559	9 %
Total revenue	$ 204,960	$ 144,546	$ 60,414	42 %

Customer Agreements and Incentives. The $15.7 million increase in revenue from Customer Agreements was primarily due to both an increase in solar energy systems under Customer Agreements being placed in service in the period from October 1, 2017 through September 30, 2018, plus a full quarter of revenue recognized in the third quarter of 2018 for systems placed in service in the third quarter of 2017 versus only a partial quarter of such revenue related to the period in which the assets were in service in 2017. Revenue from incentives consists of sales of ITCs and SRECs, which increased by $37.1 million during the three months ended September 30, 2018, compared to the prior year. The increase was primarily due to the sale of ITCs under a financing obligation fund opened in 2018.

Solar Energy Systems and Product Sales. Revenue from solar energy systems sales increased by $17.0 million compared to the prior year due to increased demand through retail partners. Product sales decreased by $9.5 million, primarily due to a decrease in the volume of wholesale products sold compared to the prior year period, which experienced an increase in the volume of wholesale products sold ahead of the anticipated tariffs on imported solar modules and cells (the "Section 201 Module Tariffs"), that were issued in January 2018 as described in Item 1A. Risk Factors below.

Operating Expenses

	Three Months Ended September 30,		Change	
	2018	2017	$	%
	(in thousands)			
Cost of customer agreements and incentives	$ 63,195	$ 47,299	$ 15,896	34 %
Cost of solar energy systems and product sales	76,179	69,588	6,591	9 %
Sales and marketing	56,758	39,921	16,837	42 %
Research and development	4,604	3,936	668	17 %
General and administrative	26,720	27,925	(1,205)	(4)%
Amortization of intangible assets	1,051	1,052	(1)	— %
Total operating expenses	$ 228,507	$ 189,721	$ 38,786	20 %

Cost of Customer Agreements and Incentives. The $15.9 million increase in cost of Customer Agreements and incentives was primarily due to the increase in solar energy systems placed in service in the period from October 1, 2017 through September 30, 2018, plus a full quarter of costs recognized in the third quarter of 2018 for systems placed in service in the third quarter of 2017 versus only a partial quarter of such expenses related to the period in which the assets were in service in 2017.

The cost of Customer Agreements and incentives decreased to 55% of Customer Agreements and incentives revenue during the three months ended September 30, 2018, from 77% during the three months ended September 30, 2017 as a result of $37.1 million increase in incentives revenue during the three months ended September 30, 2018 due to the sale of ITCs related to a financing obligation fund opened in 2018.

Cost of Solar Energy Systems and Product Sales . The $6.6 million increase in cost of solar energy systems and product sales was due to the corresponding net increase in the solar energy systems and product sales discussed above.

Sales and Marketing Expense. The $16.8 million increase in sales and marketing expense was primarily attributable to an increase in headcount driving higher employee compensation. Included in sales and marketing expense is $2.2 million and $1.7 million of amortization of costs to obtain Customer Agreements for the period ended September 30, 2018 and 2017, respectively.

General and Administrative Expense . The $1.2 million decrease in general and administrative expenses primarily relates to a $2.0 million decline in legal professional fees, partially offset by an increase in headcount driving higher employee compensation.

Non-Operating Expenses

	Three Months Ended September 30,		Change	
	2018	2017	$	%
		(in thousands)		
Interest expense, net	$ 34,482	$ 23,217	$ 11,265	49%
Other expenses (income), net	$ (4,517)	$ (94)	(4,423)	4,705%

Interest Expense, net. The increase in interest expense, net of $11.3 million was primarily related to additional borrowings entered into subsequent to September 30, 2017. Included in net interest expense is $5.8 million and $5.3 million of non-cash interest recognized under Customer Agreements that have a significant financing component for the period ended September 30, 2018 and 2017, respectively.

Other Expenses (Income), net. The $4.5 million of other income during the three months ended September 30, 2018 relates primarily to a reclassification of $6.9 million of other comprehensive income to earnings as a result of a hedged forecasted transaction becoming probable to not occur due to a refinancing which repaid the hedged debt during the period, offset by a loss on extinguishment of the related debt.

Income Tax Expense

	Three Months Ended September 30,		Change	
	2018	2017	$	%
		(in thousands)		
Income tax expense (benefit)	$ (5,988)	$ 14,517	$ (20,505)	(141)%

The decrease in income tax expense of $20.5 million primarily relates to a decrease in tax expense related to noncontrolling interests and increases in tax benefits associated with stock compensation deductions and investment tax credits. Given our net operating loss carryforwards as of December 31, 2017 and September 30, 2018, we do not expect to pay income tax, until our net operating losses are fully utilized. As of December 31, 2017, our federal and state net operating loss carryforwards were $720.1 million and $630.7 million, respectively. If not utilized, the federal net operating loss will begin to expire in the year 2028 and the state net operating losses will begin to expire in the year 2024.

Net Loss Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

	Three Months Ended September 30,		Change	
	2018	2017	$	%
		(in thousands)		
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	$ (44,628)	$ (110,822)	$ 66,194	(60)%

The decrease in net loss attributable to noncontrolling interests and redeemable noncontrolling interests of $66.2 million was primarily a result of the addition of 4 funds since September 30, 2017, as well as the HLBV method used in determining the amount of net income or loss attributable to noncontrolling interests and redeemable noncontrolling interests, which generally allocates more loss to the noncontrolling interest in the first several years after fund formation.

Comparison of the Nine Months Ended September 30, 2018 and 2017

Revenue

	Nine Months Ended September 30,		Change	
	2018	2017	$	%
	(in thousands)			
Customer agreements	$ 199,171	$ 152,679	$ 46,492	30 %
Incentives	73,996	16,239	57,757	356 %
Customer agreements and incentives	273,167	168,918	104,249	62 %
Solar energy systems	122,503	79,431	43,072	54 %
Products	124,191	131,928	(7,737)	(6)%
Solar energy systems and product sales	246,694	211,359	35,335	17 %
Total revenue	$ 519,861	$ 380,277	$ 139,584	37 %

Customer Agreements and Incentives. The $46.5 million increase in revenue from Customer Agreements was primarily due to both an increase in solar energy systems under Customer Agreements being placed in service in the period from October 1, 2017 through September 30, 2018, plus a full nine months of revenue recognized in 2018 for systems placed in service in the first nine months of 2017 versus only a partial amount of such revenue related to the period in which the assets were in service in 2017. The $57.8 million increase in revenue from incentives, consisting of the sale of ITCs and SRECs, was primarily due to the sale of ITCs related to a financing obligation fund opened in 2018.

Solar Energy Systems and Product Sales. Revenue from solar energy systems sales increased by $43.1 million compared to the prior year period due to increased demand through retail partners. Product sales decreased by $7.7 million compared to the prior year period primarily due to a decrease in the volume of wholesale products sold compared to the prior year period which experienced an increase in the volume of wholesale products sold ahead of the anticipated Section 201 Module Tariffs.

Operating Expenses

	Nine Months Ended September 30,		Change	
	2018	2017	$	%
	(in thousands)			
Cost of customer agreements and incentives	$ 175,540	$ 135,201	$ 40,339	30 %
Cost of solar energy systems and product sales	205,026	179,957	25,069	14 %
Sales and marketing	150,074	108,109	41,965	39 %
Research and development	13,552	10,642	2,910	27 %
General and administrative	87,743	77,761	9,982	13 %
Amortization of intangible assets	3,153	3,154	(1)	— %
Total operating expenses	$ 635,088	$ 514,824	$ 120,264	23 %

Cost of Customer Agreements and Incentives. The $40.3 million increase in cost of customer agreements and incentives was primarily due to the increase in solar energy systems placed in service in the period from October 1, 2017 through September 30, 2018, plus a full nine months of costs recognized in 2018 for systems placed in service in the first nine months of 2017 versus only a portion of such expenses related to the period in which the assets were in service in 2017.

The cost of customer agreements and incentives decreased to 64% of customer agreements and incentives revenue during the nine months ended September 30, 2018, from 80% during the nine months ended

September 30, 2017 due to the $57.8 million increase in incentives revenue, primarily related to the sale of ITCs under a financing obligation fund opened in 2018.

Cost of Solar Energy Systems and Product Sales . The $25.1 million increase in cost of solar energy systems and product sales was due to the corresponding changes in solar energy systems and product sales discussed above.

Sales and Marketing Expense. The $42.0 million increase in sales and marketing expense was primarily attributable to an increase in headcount driving higher employee compensation. Included in sales and marketing expense is $6.2 million and $4.7 million of amortization of costs to obtain Customer Agreements for the nine months ended September 30, 2018 and 2017, respectively.

General and Administrative Expense . The $10.0 million increase in general and administrative expenses primarily related to an increase in headcount driving higher employee compensation. The remainder of the increase related to litigation and legal settlement activity.

Non-Operating Expenses

	Nine Months Ended September 30,		Change	
	2018	2017	$	%
		(in thousands)		
Interest expense, net	$ 94,552	$ 65,746	$ 28,806	44 %
Other expenses (income), net	$ (5,701)	$ 589	(6,290)	(1,068)%

Interest Expense, net. The increase in interest expense, net of $28.8 million was primarily related to additional borrowings entered into subsequent to September 30, 2017. Included in net interest expense is $17.1 million and $15.7 million of non-cash interest recognized under Customer Agreements that have a significant financing component for the period ended September 30, 2018 and 2017, respectively.

Other Expenses (Income), net. The $5.7 million of other income during the nine months ended September 30, 2018 relates primarily to a reclassification of $6.9 million of other comprehensive income to earnings as a result of a hedged forecasted transaction becoming probable to not occur due to a refinancing which repaid the hedged debt during 2018, offset by a loss on extinguishment of the related debt.

Income Tax Expense

	Nine Months Ended September 30,		Change	
	2018	2017	$	%
		(in thousands)		
Income tax expense (benefit)	$ 6,593	$ 30,698	$ (24,105)	(79)%

The decrease in income tax expense of $24.1 million primarily relates to a decrease in tax expense related to noncontrolling interests and increases in tax benefits associated with stock compensation deductions. Given our net operating loss carryforwards as of December 31, 2017 and September 30, 2018, we do not expect to pay income tax, until our net operating losses are fully utilized. As of December 31, 2017, our federal and state net operating loss carryforwards were $720.1 million and $630.7 million, respectively. If not utilized, the federal net operating loss will begin to expire in the year 2028 and the state net operating losses will begin to expire in the year 2024.

Net Loss Attributable to Noncontrolling Interests and Redeemable Noncontrolling Interests

	Nine Months Ended September 30,		Change	
	2018	**2017**	**$**	**%**
		(in thousands)		
Net loss attributable to noncontrolling interests and redeemable noncontrolling interests	$ (243,216)	$ (287,815)	$ 44,599	(15)%

The decrease in net loss attributable to noncontrolling interests and redeemable noncontrolling interests of $44.6 million was primarily a result of the addition of 4 funds since September 30, 2017, as well as the HLBV method used in determining the amount of net income or loss attributable to noncontrolling interests and redeemable noncontrolling interests, which generally allocates more loss to the noncontrolling interest in the first several years after fund formation.

Liquidity and Capital Resources

As of September 30, 2018, we had cash of $242.9 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, borrowings, cash generated from our sources of revenue and more recently, proceeds from secured, non-recourse loan arrangements for up to $705 million. 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.

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 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. The following table summarizes our cash flows for the periods indicated:

	Nine Months Ended September 30,	
	2018	2017
	(in thousands)	
Consolidated cash flow data:		
Net cash used in operating activities	$ (143,756)	$ (64,030)
Net cash used in investing activities	(574,260)	(564,349)
Net cash provided by financing activities	751,359	640,146
Net change in cash and restricted cash	$ 33,343	$ 11,767

Operating Activities

During the nine months ended September 30, 2018, we used $143.8 million in net cash in operating activities. The driver of our operating cash inflow consists of payments received from customers. During the nine months ended September 30, 2018, our operating cash outflows were $105.1 million from our net loss excluding non-cash and non-operating items. Changes in working capital resulted in a net cash outflow of $38.6 million.

During the nine months ended September 30, 2017, we used $64.0 million in net cash in operating activities. The driver of our operating cash inflow consists of payments received from customers. During the nine months ended September 30, 2017, our operating cash outflows were $79.3 million from our net loss excluding non-cash and non-operating items. Changes in working capital resulted in a net cash inflow of $15.3 million.

Investing Activities

During the nine months ended September 30, 2018, we used $574.3 million in cash in investing activities. Of this amount, we used $571.2 million to design, acquire and install solar energy systems and components under our long-term Customer Agreements, and $3.1 million for capitalized software projects and the acquisition of office equipment.

During the nine months ended September 30, 2017, we used $564.3 million in cash in investing activities. Of this amount, we used $558.4 million to design, acquire and install solar energy systems and components under our long-term Customer Agreements, and $6.0 million for capitalized software projects and the acquisition of office equipment.

Financing Activities

During the nine months ended September 30, 2018, we generated $751.4 million from financing activities. This was primarily driven by $483.6 million in net proceeds from fund investors, $254.5 million in proceeds from debt, net of debt issuance costs and repayments, offset by $6.4 million in repayments under finance lease obligations.

During the nine months ended September 30, 2017, we generated $640.1 million from financing activities. This was primarily driven by $437.2 million in net proceeds from fund investors, $198.0 million in proceeds from debt, net of debt issuance costs and repayments, offset by $7.6 million in payments for finance lease obligations.

Debt 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 8, *Indebtedness,* to our consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Equity Instruments

Warrant. In August 2017, we entered into an agreement with an affiliate ("Contractor") of Comcast Corporation ("Comcast") whereby Contractor will receive lead or sales fees for new customers it brings to us over a 40-month term. We also issued Comcast a warrant to purchase up to 11,793,355 shares of our common stock, at an exercise price of $0.01 per warrant share. The warrant would initially vest 50.05% when both (i) Contractor has earned a lead or sales fee with respect to 30,000 of installed solar energy systems, and (ii) Contractor or its affiliates have spent at least $10 million in marketing and sales in connection with the agreement. Thereafter, the warrant would vest in five additional increments for each additional 6,000 installed solar energy systems. On November 7, 2018 the warrant vesting schedule was modified so that it will initially vest either (i) as to 10.0% if Contractor has earned a lead or sales fee with respect to 6,000 of installed solar energy systems by September 30, 2019 or (ii) as to 13.3% if Contractor has earned a lead or sales fee with respect to 8,000 of installed solar energy systems by December 31, 2019, provided that, in either case, Contractor or its affiliates have spent at least $25.0 million in marketing and sales in connection with the agreement. Thereafter, the warrant will vest in additional 8.3% increments for each additional 5,000 installed solar energy systems. If the initial vesting conditions have not been met by December 31, 2019, the Warrant will expire. As of November 7, 2018, none of the shares under this amended warrant have vested and, therefore, the modification has no current financial statement effect as no expense has been recognized to date based on the terms of the award.

Investment Fund Commitments

As of September 30, 2018, we had undrawn committed capital of approximately $264.2 million which 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.

Contractual Obligations and Other Commitments

The following table summarizes our contractual obligations as of September 30, 2018 (in thousands):

	Payments Due by Period				
	Less Than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years	Total
			(in thousands)		
Contractual Obligations:					
Debt obligations (including future interest)	$ 112,174	$ 590,498	$ 669,840	$ 539,431	$ 1,911,943
Purchase commitments	22,864	136,700	—	—	159,564
Distributions payable to noncontrolling interests and redeemable noncontrolling interests [(1)]	15,387	—	—	—	15,387
Finance lease obligations (including accrued interest)	8,749	6,502	1,156	19	16,426
Operating lease obligations	9,000	10,195	4,652	321	24,168
Total contractual obligations	$ 168,174	$ 743,895	$ 675,648	$ 539,771	$ 2,127,488

(1) The foregoing table does not include the amounts we could be required to expend under our redemption obligations discussed above.

Off-Balance Sheet Arrangements

We include in our consolidated financial statements all assets and liabilities and results of operations of investment fund arrangements that we have entered into. We do not have any off-balance sheet arrangements.

Recent Accounting Pronouncements

See Note 2, *Summary of Significant Accounting Policies* , to our consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

Item 3. 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 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. For quantitative and qualitative disclosures about market risk, see Item 7A, "Authoritative and Qualitative Disclosures About Market Risk," of our annual report on Form 10-K for the year ended December 31, 2017. Our exposures to market risk have not changed materially since December 31, 2017.

Item 4. 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 Quarterly Report on Form 10-Q, 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 September 30, 2018. The term

“disclosure controls and procedures,” as defined in Rules 13a-15l and 15d-15l 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 were no changes in our internal control over financial reporting during the quarter ended September 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We implemented internal controls to ensure we adequately evaluated our contracts and properly assessed the impact of the new accounting standards related to revenue recognition and leases on our financial statements to facilitate their adoption on January 1, 2018. There were no significant changes to our internal control over financial reporting due to the adoption of the new standards.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings.

See Note 15, *Commitments and Contingencies*, to our consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q.

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 Quarterly Report on Form 10-Q, 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 Our Business and Our Industry

We need to raise capital to finance the continued growth of our residential 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 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 were 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 were 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 were to 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 were 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, stemming from the level of U.S. national debt, currency fluctuations, unemployment rates, the availability and cost of credit, the U.S. housing market, inflation levels, negative interest rates, energy costs and concerns over a slow economic recovery, 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.

Rising interest rates will adversely impact our business.

Rising interest rates may increase our cost of capital. 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 future reductions in government incentives and maintain the price competitiveness of our solar service offerings. Rising interest rates may have an adverse impact on our ability to offer attractive pricing on our solar service offerings to homeowners.

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 homeowners 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 homeowner 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 on our ability to secure third-party financing could ultimately have an adverse impact on the value proposition that we offer homeowners.

The solar energy industry is an emerging market that 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 will still take several years to fully develop and mature, and we cannot be certain that the market will grow at the rate we expect. For example, we have experienced increases in cancellations of our Customer Agreements in certain geographic markets during certain periods throughout 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 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. If this support diminishes, 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 homeowner 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 homeowners 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.

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 or changes in homeowner preferences would adversely impact our business.

Our ability to provide our solar service offerings to homeowners 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 (“ITCs”), 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 were unable to continue to monetize those benefits through these arrangements, we may be unable to provide and maintain our solar service offerings for homeowners 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
- non-renewal of these incentives or decreases in the associated benefits.

The federal government currently offers a 30% ITC (the “Commercial ITC”) under Section 48(a) of the Internal Revenue Code of 1986, as amended (the “Code”), for the installation of certain solar power facilities owned for business purposes. The depreciable basis of a solar facility is also reduced by 50% of the tax credit claimed. Similarly, the federal government currently offers a 30% investment tax credit (“Residential ITC”) for the installation of certain solar power facilities owned by residential taxpayers. Current law provides that the Commercial ITC will be 10% for both (i) solar property commencing construction after 2021 and (ii) solar property which commenced construction during or prior to 2021 but which is placed in service after 2023, and the Residential ITC will expire after 2021.

Potential investors must remain satisfied that the funding structures that we offer will 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 Internal Revenue Service (the "IRS") and the courts could reduce the willingness of investors to invest in funds associated with these solar energy systems. Moreover, corporate tax rate reductions could reduce the appetite for tax benefits overall, which could reduce the pool of available funds. Additionally, certain tax deductions, such as depreciation, will have less value to investors, requiring additional cash to be paid to investors to meet return demands. Accordingly, we cannot assure you that this type of financing will continue to be available to us. New investment fund structures or other financing mechanisms may also become available, and 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 were unable to finance our solar service offerings through tax-advantaged structures or if we were 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 homeowners on an economically viable basis, which would have a material adverse effect on our business, financial condition and results of operations.

If the Internal Revenue Service or the U.S. Department of the Treasury 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 or the U.S. Treasury grant 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 and U.S. Treasury grants. The IRS and the U.S. Treasury Department review these fair market values. With respect to U.S. Treasury grants, the U.S. Treasury Department reviews the reported fair market value in determining the amount initially awarded, and the IRS and the U.S. Treasury Department may also subsequently audit the fair market value and determine that amounts previously awarded must be repaid to the U.S. Treasury Department or that excess awards constitute taxable income for U.S. federal income tax purposes. 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 reported, we may owe our fund investors an amount equal to this difference, 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 or the U.S. Treasury Department further disagrees now or in the future with the amounts we reported regarding the fair market value of our solar energy systems, or if we receive an adverse outcome with respect to the Department of the Treasury Inspector General investigation discussed elsewhere in this “Risk Factors” section and in the section entitled “Part II, Item 1. Legal Proceedings” elsewhere in this Quarterly Report on Form 10-Q, it could have a material adverse effect on our business, financial condition and prospects. For example, a hypothetical five percent downward adjustment in the fair market value of the solar energy systems related to approximately $269.0 million in U.S. Treasury grants that we have received since the beginning of the U.S. Treasury grant program through December 31, 2014, would obligate us to repay approximately $14.0 million to our fund investors. One of our investment funds has recently been selected for audit by the IRS. In addition, three of our investors are currently being audited by the IRS, and these investor audits involve a review of the fair market value determination of our solar energy systems. If these investor audits result in an adverse finding, we may be subject to an indemnity obligation to these investors. Since we cannot determine how the IRS will evaluate system values used in claiming ITCs, we are unable to reliably estimate the maximum potential future payments that we would have to make under this obligation as of each balance sheet date.

We have historically benefited from declining costs in our industry, and our business and financial results may be harmed not only as a result of any increases in costs associated with our solar service offerings but also any failure of these costs to continue to decline 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, homeowner adoption of solar energy. While historically the prices of solar panels and raw materials have declined, the cost of solar panels and raw materials could increase in the future, and such products’ availability could decrease, due to a variety of factors, including tariffs and trade barriers, export regulations, regulatory or contractual limitations, industry market requirements and changes in technology and industry standards. Any such cost increases or decreases in availability could slow our growth and cause our financial results and operational metrics to suffer.

For example, in the past, we and our solar partners purchased a significant portion of the solar panels used in our solar service offerings from manufacturers based in China or containing components from China. In April 2017, Suniva, Inc., a U.S.-based solar panel manufacturer (“Suniva”), filed a petition for global safeguards with the U.S. International Trade Commission ("USITC"), which included requests for the imposition of tariffs on crystalline silicon photovoltaic ("CSPV") solar cells and the establishment of a minimum price for solar modules imported into the United States. Another solar panel manufacturer, SolarWorld AG, later joined Suniva’s petition. In January 2018, the President imposed a four-year tariff (the "Section 201 Module Tariff") on imported solar modules and cells after 2.5 gigawatts (GW) of imports. The Section 201 Module Tariff is initially 30%, stepping down 5% annually. This tariff could adversely affect our costs, our supply, or have other material adverse impacts on our business. For example, it could be reflected in the purchase price of the solar panels and components we and our solar partners purchase and could adversely impact our future access to solar panels and components. Furthermore, in September 2018, the U.S. Trade Representative ("USTR") granted SunPower Corporation ("SunPower"), which has since acquired SolarWorld, an exemption, making SunPower a domestic solar panel manufacturer that is not subject to the Section 201 Module Tariff. This could give SunPower, which offers home solar leasing to customers installing SunPower panels, a cost advantage over home solar leasing competitors like Sunrun that rely, in part, on imported solar panels that are currently subject to this tariff.

In addition, during 2018, the United States and China each imposed new tariffs, on various products imported from the other country. These U.S. tariffs include an additional 25% tariff on solar panels and cells that are manufactured in China and a tariff on inverters, certain batteries and other electrical equipment currently set at 10% then expected to increase to 25% on January 1, 2019. The United States also has, from time to time, announced potential tariffs on goods imported from other countries. 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 adoption and expansion of trade restrictions, the occurrence of a trade war, or other governmental action related to tariffs or trade agreements or policies has the potential to adversely impact our supply chain, our costs, our suppliers, and the U.S. economy, which could in turn adversely affect our business, financial condition and results of operation.

We may continue to make significant investments to drive growth in the future. Increases in any of these costs could adversely affect our results of operations and financial condition and harm our business and prospects. If we are unable to reduce our cost structure in the future, it could have a material adverse effect on our ability to be profitable and on our business and prospects.

We rely on net metering or related policies to offer competitive pricing to homeowners in all of our current markets, and changes to such policies may significantly reduce demand for electricity from our solar service offerings.

As of September 30, 2018, a substantial majority of states have adopted net metering policies. Net metering policies are designed to allow homeowners to serve their own load using on-site energy generation. 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 either eliminate them, cap them, or impose charges on homeowners that have net metering. For example, in October 2015, the Hawaii Public Utilities Commission (the "Hawaii Commission") issued an order that eliminates net metering for all new customers. Currently, the Hawaii Commission has three options for rooftop solar customers: (i) a program providing customers with a credit when they export power during certain periods of time; (ii) a program that allows customers to install quickly, but they are generally not allowed to export electricity to the electrical grid; and (iii) a program paying customers for exported power at all times but at a lower rate and allowing the utility the ability to shut off customers’ solar systems during grid emergencies. All existing net metering customers and customers who submitted net metering applications before October 12, 2015 are grandfathered indefinitely under the old rules. Some interim programs created by the Hawaii Commission are grandfathered for customers who applied in a timely fashion. We continue to build and service these systems.

In addition, in early 2016 we ceased new installations in Nevada in response to the elimination of net metering by the Public Utilities Commission of Nevada (“PUCN”). However, in September 2016, the PUCN issued an order grandfathering in customers under the prior net metering rules who had installed a solar energy system or had submitted a net metering application prior to December 31, 2015. Furthermore, in June 2017, the governor of Nevada signed legislation, AB 405, which restores net metering at a reduced credit -- starting at 95% of the retail rate and declining as solar penetration increases -- and grandfathers new customers for 20 years at the net metering rate in effect at the time they apply for interconnection. As another example, in December 2016, the Arizona Corporation Commission (“ACC”) issued a decision to eliminate net metering and reduce export rates for new solar customers. To carry out this decision, specific rate changes applicable to Arizona solar customers are being determined in utility rate cases. For example, in 2017, Arizona Public Service Company ("APS") filed a rate case seeking reduced credit for solar exports and higher fixed charges. Intervenors agreed upon a settlement, which the ACC accepted in August 2017. The ACC adopted similar rate changes for Tucson Electric Power ("TEP") and UNS Electric ("UNS"), eliminating net metering and reducing export rates for new solar customers. In addition, New Hampshire issued its net metering ("NEM") order in June 2017, which kept NEM with some minor changes and removed a previously existing 100 MW cap on NEM and grandfathers in customers under existing rates until 2040. In May 2018, the governor of Connecticut signed legislation which will end the state's existing net metering

program upon the conclusion of the Residential Solar Incentive Program (currently expected to occur in 2019) and replace it with two new yet-to-be-determined rate structures.

Some states set limits on the total percentage of a utility's customers that can adopt net metering. For example, South Carolina has a net metering cap and Duke Energy Carolinas announced in July 2018 that customers within its territory have reached the cap. If it is not increased or otherwise extended, the net metering cap is expected to be reached in the remainder of the state in the future. New York and New Jersey currently have no net metering cap; however, these states have caps that trigger commission review of net metering policies. 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 the future will not have access to the economic value proposition net metering allows. 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. Additionally, the imposition of charges that only or disproportionately impact homeowners that have solar systems, or the introduction of rate designs such as the "unbundled" rates mentioned above, would adversely impact our business.

Electric utility statutes and regulations and changes to 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. These statutes and regulations relate to electricity pricing, net metering, 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 to homeowners.

Utilities, their trade associations, and fossil fuel interests in the country, each of which has significantly greater economic 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.

We face competition from traditional energy companies as well as solar 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 homeowners 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, these competitors 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 storage businesses. Rate-basing means that utilities would receive guaranteed rates of return for their solar and storage 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 also face competition from other residential solar service providers. Some of these competitors have a higher degree of brand name recognition, differing business and pricing strategies, 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 homeowners, or competes 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 homeowners. We may also face competitive pressure from companies who offer lower priced consumer offerings than us.

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. These energy service companies are able to offer homeowners 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 homeowners, particularly those who wish to avoid long-term contracts or have an aesthetic or other objection to putting solar panels on their roofs.

We also 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 also 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, 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.

Regulations and policies related to rate design could deter potential homeowners from purchasing our solar service offerings, reduce the value of the electricity we produce, and reduce the savings that our homeowners 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 homeowners 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 – raising unavoidable fixed charges that a homeowner 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 Massachusetts Department of Public Utilities recently approved Eversource's proposed demand charges on net metering customers in the state. APS also offers residential demand charge rate plans and if our solar customers have subscribed to those plans, they may not realize typical savings. These forms of rate design would adversely impact our business by reducing the value of the electricity our solar energy systems produce and reducing the savings homeowners receive by purchasing our solar service offerings. These proposals could continue 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 products and could limit the number of markets in which our products are competitive with electricity provided by the utilities.

Our business currently depends on the availability of utility rebates, tax credits, exemption and other financial incentives in addition to other tax benefits. The expiration, elimination or reduction of these rebates and incentives 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 ITCs, as discussed above, as well as other tax credits, rebates and SRECs associated with solar energy generation. Some markets, such as New Jersey and Massachusetts, currently utilize SRECs. SRECs can be volatile and 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, the governor of New Jersey signed legislation to expand New Jersey's solar carve-out to 5.1% of kilowatt hours of electricity sold in the state through 2021. We rely on the incentives listed above to lower our cost of capital and to incent investors to invest in our funds, all of which enables us to lower the price we charge homeowners 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 (as discussed above with respect to the ITC), end 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.

The current administration’s proposed environmental policies may create regulatory uncertainty in the solar energy industry and may lead to a reduction or removal of various clean energy programs and initiatives designed to curtail climate change. Such a reduction or removal of incentives could diminish the market for solar energy. Tax reform legislation known as the Tax Cuts and Jobs Act was enacted in December 2017, reducing the corporate tax rate to 21%, and limiting interest deductibility and allowing full and immediate expensing of capital costs. A reduction in the corporate tax rate and the expensing of capital costs could diminish the capacity of potential fund investors to benefit from tax incentives, and could require additional cash to be distributed to such fund investors in lieu of tax benefits. Furthermore, the current administration has made public statements regarding overturning or modifying policies of, or regulations enacted by, the prior administration that placed limitations on coal and gas electric generation, mining and/or exploration. 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, solar energy systems are generally not considered in determining values for calculation of local and state real and personal property taxes as a result of applicable property tax exemptions. State and local tax exemptions can be changed by state legislatures and other regulators, and if solar energy systems were not excluded, the property taxes payable by homeowners would be higher, which could offset any potential savings our solar service offerings could offer, if the property taxes were to be imposed on third party owners of the solar panels, solar companies like Sunrun would be subject to higher costs. For example, Arizona Department of Revenue has determined that the rule that solar energy systems have no value and add no value does not apply to solar panels that are leased (as opposed to owned) and has subjected our leased solar panels to personal property taxes in that state. While we are challenging that determination, an adverse outcome will subject us and other solar companies to an increase in personal property taxes. If we pass this additional tax on to our customers in the form of higher prices, it could reduce or eliminate entirely the savings that these solar panels would otherwise provide to the homeowner. We are involved in ongoing litigation challenging the Arizona personal property tax determination. In May 2017, the Arizona Court of Appeals upheld the tax court’s ruling that the Arizona Department of Revenue had no legal authority to assess rooftop solar energy equipment, reversed the Tax Court’s ruling that the statute, Section 42-11054(C)(2), is unconstitutional, and ruled that the counties have no authority to tax rooftop solar equipment. The Arizona Department of Revenue appealed that decision. On March 16, 2018, the Arizona Supreme Court ruled that the Arizona Department of Revenue lacks statutory authority to value the Company’s leased solar panels, but remanded to the Tax Court to determine whether Section 42-13054 authorizes county assessors to value the Company’s leased solar panels and, if so, whether Section 42-11054(C)(2) nevertheless requires a zero valuation. There can be no assurances that this litigation will be resolved in a manner that is favorable to us or other solar companies. If this litigation is not resolved in a manner that is favorable to us and other solar companies, it will adversely impact our operations in Arizona. If we decide to pass the tax cost on to our customers, such price increase could adversely impact our ability to attract new customers in Arizona, and the savings that our current Arizona customers realize could be reduced or eliminated by the additional tax imposed, which will make our solar

service offerings less attractive to those customers and could increase the risk of default from those customers. In addition, South Carolina counties do not currently assess property tax on customer-owned residential solar energy systems, however, third-party-owned systems are subject to business personal property taxes. In Connecticut, a small number of municipalities have assessed property tax on third party owned solar systems, despite an applicable exemption under state law. In general, we rely on certain state and local tax exemptions that apply to the sale of equipment, sale of power, or both. These state and local tax exemptions can be changed by the state legislature and other regulators and such a change could adversely impact our business.

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 recently issued an order regulating distributed energy providers as if they were energy service companies, which increases the regulatory compliance burden for us in that state. If we were subject to the same regulatory authorities as utilities in other states or if new regulatory bodies were established to oversee our business, then 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 levels of rebates or other non-tax incentives available for homeowner-owned solar energy systems, whether third-party-owned systems are eligible at all for these incentives, and whether third-party-owned systems are eligible for net metering and the associated significant cost savings. Reductions in, or eliminations of, the current treatment of third-party arrangements could reduce demand for our solar service offerings, adversely impact our access to capital and cause us to increase the price we charge homeowners 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 homeowners until they are interconnected to the grid.

Interconnection regulations are based on claims from utilities regarding the amount of solar electricity 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, harming our growth rate and customer satisfaction scores. Similarly, the Hawaii Public Utilities Commission recently required the activation of some advanced inverter functionality that may require more expensive equipment and more oversight of the operation of the solar systems over time.

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 investors.

Our fund investors typically advance capital to us based on production capacity estimates. The models we use to calculate prepayments in connection with certain of our investment funds will be updated for each investment fund 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 leased, how much it cost, and when it went into service. In some cases, these true-up models will 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 investor's prepayments or to contribute additional assets to the investment fund. In addition, certain of our fund investors have the right to require us to purchase their interests in the 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.

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.

We believe that a homeowner's decision to buy solar energy from us is primarily driven by 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 as a result of new drilling techniques or other technological developments, a relaxation of associated regulatory standards, or broader economic or policy developments;
- energy conservation technologies and public initiatives to reduce electricity consumption; and
- development of new energy technologies that provide less expensive energy.

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 homeowners and our growth would be limited.

It is difficult to evaluate our business and prospects due to our limited operating history.

Until 2014, we focused our efforts primarily on the sale, financing and monitoring of solar energy systems for residential customers, with installation provided by our solar partners. In February 2014, we acquired the residential sales and installation business of Mainstream Energy Corporation, its fulfillment business AEE Solar and its racking business SnapNrack (collectively, "MEC"). We have limited experience managing the fulfillment and racking lines of the MEC business, and we may not be successful in maintaining or growing the revenue from these businesses. Further, we have limited experience, in comparison to our solar partner model, in our direct-to-consumer business, and as a result, we may fail to grow as quickly or achieve the revenue scale targeted in connection with such a model. We may also be unsuccessful in expanding our customer base through installation of our solar service offerings within our current markets or in new markets we may enter. Additionally, we cannot assure you that we will be successful in generating substantial revenue from our current solar service offerings or from any additional solar service offerings we may introduce in the future. Our limited operating history, combined with the rapidly evolving and competitive nature of our industry, may not provide an adequate basis for you to evaluate our results of operations and business prospects. In addition, we only have limited insight into emerging trends, such as alternative energy sources, commodity prices in the overall energy market, and legal and regulatory changes that impact the solar industry, any of which could adversely impact our business, prospects and results of operations.

We have incurred losses and may be unable to achieve or 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, 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 achieve profitability depends on a number of factors, including but not limited to:

- growing our customer base;
- 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;
- growing our direct-to-consumer business to scale; and
- reducing our operating costs by lowering our customer acquisition costs and optimizing our design and installation processes and supply chain logistics.

Even if we do achieve profitability, we may be unable to sustain or increase our profitability 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 an early-stage company 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 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section, the following factors could cause our results of operations and key performance indicators to fluctuate:

- the expiration or initiation of any governmental tax rebates or incentives;
- significant fluctuations in homeowner 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 financing sources;
- seasonal 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;
- 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; 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. In addition, energy production is greater in the second and third quarters of the year, causing variability in operating lease revenue throughout the year. Our incentives revenue is also highly variable due to associated revenue recognition rules, as discussed in greater detail in the section titled "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 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). 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 sold versus leased, 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.

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 and in a number of new locations in the future. This growth has placed, and any future growth may place, a significant strain on our management, operational and financial infrastructure. In particular, we will 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 homeowners, suppliers and other third parties and attract new homeowners and suppliers, as well as to manage multiple geographic locations.

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 homeowner 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 and reputation.

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 the working capital 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. 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.

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. 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.

The production and installation of solar energy systems depends heavily on suitable meteorological conditions. If meteorological 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 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. 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 economical overall or make individual systems less economical. Any of these events or conditions could harm our business, financial condition and results of operations.

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

As of September 30, 2018, approximately half of our customers were in California. Accordingly, our business and results of operations are 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. In addition, 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, including damage to our solar energy systems. A significant natural disaster, such as an earthquake or wildfire, 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.

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 to outright purchases of the solar energy system by the homeowner (i.e., a homeowner purchases the solar energy system outright instead of leasing the system 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. In 2017, 2016 and 2015, the majority of our customers chose our solar service offerings as opposed to buying a solar energy system outright. Our financial model is impacted by the volume of homeowners 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.

The federal government currently offers a 30% Residential ITC for the installation of certain solar power facilities owned by residential taxpayers. The Residential ITC is expected to ramp down from 30% to 26% for solar property commencing construction in 2020 and then further to 22% for solar property commencing construction in 2021. The Residential ITC is set to expire after 2021. Reductions in, eliminations of, or expirations of governmental incentives such as the Residential ITC could reduce the number of customers who choose to purchase our solar energy systems.

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 and other system components to adequately meet anticipated demand for our solar service offerings. Any shortage, delay 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 and other system components and batteries from a limited number of suppliers, making us susceptible to quality issues, shortages 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 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 are 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.

There have also been periods of industry-wide shortage of key components, including solar panels, in times of rapid industry growth. For example, 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. Further, 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.

As the primary entity that contracts with homeowners, 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 homeowners 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 homeowners' 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.

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. Homeowners 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 throughout 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 cancelled 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 will potentially be materially and adversely affected.

In addition, the installation of solar energy systems, energy-storage 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 homeowners and, as a result, could cause a significant reduction in demand for our solar service offerings.

While we have a variety of stringent quality standards that we apply in the selection of our solar partners, we do not control our suppliers and solar partners or their business practices. Accordingly, we cannot guarantee that they follow our standards or ethical business practices, such as fair wage practices and compliance with environmental, safety and other local laws. 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.

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 our solar energy systems, approximately half of which are located in California, are damaged as the result of a natural disaster beyond our control, losses could exceed or be excluded from, our insurance policy limits, and we could incur unforeseen costs that could harm our business and financial condition. We may also incur significant costs for taking other actions in preparation for, or in reaction to, such events. 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.

Disruptions to our solar production metering solution could negatively impact our revenues 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 of the cellular technology that we use to communicate with those meters. Many of our meters operate on either the 2G or 3G cellular data networks, which are expected to sunset before the term of our Customer Agreements with homeowners. 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.

Homeowners who buy energy from us under Customer Agreements 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. For example, in 2015 and 2014, we had to replace a significant number of defective inverters, the cost of which was borne by the manufacturer. However, our customers were without solar service for a period of time while the work was done, which impacted customer satisfaction. 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 homeowners. Further, we provide a performance guarantee with certain solar service offerings pursuant to which we compensate homeowners on an annual basis if their system does not meet the electricity production guarantees set forth in their agreement with us. Homeowners who buy energy from us under Customer Agreements are covered by production guarantees equal to the length of the term of these agreements, typically 20 years.

Because of our limited operating history, 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 homeowners 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.

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

If our solar service offerings, including our racking systems 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 consumers 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. 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 to the industry as a whole, and may have an adverse effect on our ability to attract homeowners, thus affecting our growth and financial performance.

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-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. Homeowners may choose to not renew or purchase for any reason, such as 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.

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 homeowners 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 homeowners' properties or cancel projects, our brand and reputation could be significantly impaired. We also depend greatly on referrals from homeowners for our growth. Therefore, our inability to meet or exceed homeowners' expectations would harm our reputation and growth through referrals. Further, we have 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. In addition, members of our direct sales force and our solar partners may engage in what is perceived as aggressive sales tactics that could be unappealing to customers, which could harm our brand and reputation with potential customers. If we cannot manage our hiring and training processes to avoid potential issues related to expanding our sales team or solar partners and maintain appropriate customer service levels, our business and reputation may be harmed and our ability to attract homeowners would suffer. In addition, if we were unable to achieve a similar level of brand recognition as our competitors, some of which currently have a broader brand footprint as a result of a larger direct sales force, more resources and longer operational history, we could lose recognition in the marketplace among prospective customers, 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 revenues. We cannot assure you that such marketing and branding expenses will result in the successful expansion of our brand recognition or increase our revenues.

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 homeowners' projects and successfully manage homeowner 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 may 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 homeowners 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 person is fully trained and productive at the standards that we have established. If we are unable to hire, develop and retain talented 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 homeowners' projects on time or manage homeowner 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.

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. In particular, we are dependent on the services of our chief executive officer and co-founder, Lynn Jurich, and our Chairman and co-founder, Edward Fenster. We also depend on our ability to retain and motivate key employees and attract qualified new employees. Neither our founders nor 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 may not realize the anticipated benefits of past or future acquisitions, and integration of these acquisitions may disrupt our business and management.

We acquired MEC in February 2014 and Clean Energy Experts, LLC ("CEE") in April 2015. We may in the future acquire additional companies, project pipelines, products, or technologies or enter into joint ventures or other strategic initiatives. We may not realize the anticipated benefits of past or future acquisitions, and any acquisition has numerous risks that are not within our control. These risks include the following, among others:

- difficulty in assimilating the operations 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;
- 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 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.

Mergers and acquisitions of companies 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 homeowner'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 our confidential information 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 were 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.

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.

The Office of the Inspector General of the U.S. Department of the Treasury has issued subpoenas to a number of significant participants in the rooftop solar energy installation industry, including us. The subpoena we received requires us to deliver certain documents in our possession relating to our participation in the U.S. Treasury grant program. These documents have been delivered to the Office of the Inspector General of the U.S. Department of Treasury, which is investigating the administration and implementation of the U.S. Treasury grant program.

In July 2012, we and other companies that are significant participants in both the solar industry and the cash grant program (under Section 1603 of the American Recovery and Reinvestment Act of 2009) received subpoenas from the U.S. Department of the Treasury's Office of the Inspector General. Our subpoena requested, among other things, documents that relate to our applications for U.S. Treasury grants and communications with certain other solar service companies or certain firms that appraise solar energy property for U.S. Treasury grant application purposes. The Inspector General is working with the Civil Division of the U.S. Department of Justice to investigate the administration and implementation of the U.S. Treasury grant program, including possible misrepresentations concerning the fair market value of the solar power systems submitted for grant under that program made in grant applications by companies in the solar industry, including us. We produced documents and testimony as requested by the Inspector General, and we intend to continue to cooperate fully with the Inspector General and the Department of Justice. We are not able to predict how long this review will be on-going. If, at the conclusion of the investigation, the Inspector General concludes that misrepresentations were made, the Department of Justice could decide to bring a civil action to recover amounts it believes were improperly paid to us. If it were successful in asserting this action, we could be required to pay damages and penalties for any funds received based on such misrepresentations (which, in turn, could require us to make indemnity payments to certain of our fund investors). Additionally, the period of time necessary to resolve the investigation is uncertain, and this matter could require significant management and financial resources that could otherwise be devoted to the operation of our business.

We are subject to legal proceedings, regulatory inquiries and litigation, and we may 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. For example, in addition to the pending U.S. Department of the Treasury investigation discussed above, in connection with its review of the Department of Treasury's Section 1603 program, which allows taxpayers to receive cash grants for certain qualified renewable energy projects, the United States Senate Committee on Finance and the House Committee on Ways and Means sent us an inquiry regarding our use of solar energy incentives, third-party financing, and methods of determining cost basis for solar energy properties, to which we have responded. 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 homeowners. We must comply with numerous federal, state and local laws and regulations that govern matters relating to our interactions with homeowners, including those pertaining to privacy and data security, consumer financial and credit transactions, home improvement contracts,

warranties and direct-to-home solicitation. 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. Our 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.

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 systems. The evaluation and installation of our energy-related products 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 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 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, 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.

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

Our Customer Agreements are typically for 20 years and require the homeowner to make monthly payments to us. Accordingly, we are subject to the credit risk of homeowners. As of September 30, 2018, the average FICO score of our customers under a lease or power purchase 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 to date homeowner defaults have been immaterial, we expect that the risk of homeowner defaults may increase as we grow our business. Due to the immaterial amount of homeowner 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 homeowner credit defaults, our revenues and our ability to raise new investment funds could be adversely affected. If economic conditions worsen, certain of our homeowners 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.

Obtaining a sales contract with a potential customer does not guarantee that a potential customer will not decide to cancel or that we will need to cancel due to a failed inspection, which could cause us to generate no revenue from a product 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 significant expense and generated no revenue.

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 securities rules and regulations. 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 control over financial reporting. To maintain and improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. 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.

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. Although we monitor our use of open source software to avoid subjecting our offerings to unintended conditions, 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 or unauthorized disclosure or theft of personal information we gather, store and use, or other hacking and phishing attacks on our systems, could harm our reputation and subject us to claims or litigation.

We receive, store and use personal information of homeowners, including names, addresses, e-mail 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 breach of our systems by an unauthorized party, employee theft or misuse, or otherwise, could harm our business. In addition, computer malware, viruses, social engineering (predominantly spear phishing attacks), and general hacking have become more prevalent, have occurred on our systems in the past, and could occur on our systems in the future. Inadvertent disclosure of such personal information, or if a third party were to gain unauthorized access to the personal information in our possession, could result in claims or litigation arising from damages suffered by such individuals. In addition, we could incur significant costs in complying with the multitude of federal, state and local laws regarding the unauthorized disclosure of personal information. Our efforts to protect such personal information may be unsuccessful due to software bugs or other technical malfunctions; employees, contractor, or vendor error

or malfeasance; or other threats that evolve. In addition, third parties may attempt to fraudulently induce employees or users to disclose sensitive information. Although we have developed systems and processes that are designed to protect the personal information we receive, store and use and to prevent or detect security breaches, we cannot assure you that such measures will provide absolute security. Finally, any perceived or actual unauthorized disclosure of such information could harm our reputation, substantially impair our ability to attract and retain homeowners and have an adverse impact on 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 which 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. For example, we introduced our Brightbox energy storage system in Hawaii and California and completed the first installation in Hawaii in May 2016. If Brightbox does not work as intended or if Brightbox is not adopted in the future at the rate we expect, our business, financial condition and results of operations could be adversely affected. 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 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 are obligated to maintain proper and effective internal controls over financial reporting. We may not complete our analysis of our internal controls over financial reporting in a timely manner, or these internal controls may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.

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 will need to include disclosure of any material weaknesses identified by our management in our internal controls over financial reporting. To date, our independent registered public accounting firm ("independent accounting firm") has not performed an audit of our internal controls over financial reporting as of any balance sheet date or for any period reported in our financial statements. However, as we will no longer be an emerging growth company, our management report on internal control over financial reporting with respect to the fiscal year ending December 31, 2018 will need to be attested to by our independent registered public accounting firm. We have commenced evaluating our internal controls and engaged our independent accounting firm to audit these controls. During the course of this evaluation or the audit, we or our independent accounting firm may identify weaknesses and deficiencies that we may not otherwise identify in a timely manner or at all. If our independent accounting firm is not able to complete the work required under Section 404 of the Sarbanes-Oxley Act on a timely basis, 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 may fail to establish and maintain effective internal control over financial reporting, in which case we may not detect errors on a timely basis and our consolidated financial statements may be materially misstated. In addition, we cannot guarantee that our internal control 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.

Historically, in connection with the audits of our consolidated financial statements for the years ended December 31, 2013 and 2012, we identified material weaknesses in our internal control over financial reporting relating to certain aspects of our financial statement close process and our accounting for income taxes. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis. These material weaknesses resulted from an aggregation of deficiencies.

In addition, in the 2013 consolidated financial statements, we incorrectly accounted for our deferred tax liabilities, prepaid tax asset and the related amortization as it related to income taxes incurred on intercompany transactions. The foregoing resulted in the restatement of our 2012 consolidated financial statements. Subsequent to the quarter ended March 31, 2015, we also identified and corrected an immaterial error related to the accounting for taxes on intercompany transactions.

While we were able to determine in our management's report for fiscal years 2016 and 2017 that our internal control over financial reporting was effective, we may not be able to complete our evaluation, testing and any required remediation in a timely fashion in future fiscal years. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting that we are unable to remediate before the end of the same fiscal year in which the material weakness is identified, we will be unable to assert that our internal controls are effective. If we are unable to assert that our internal control 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 the NASDAQ Stock Market, the Securities and Exchange Commission ("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"), 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. For example, in May 2014 the FASB issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (Topic 606), which will affect certain elements of our accounting for revenue and costs incurred to acquire contracts when this standard becomes effective for us in 2018. Other companies in our industry may be affected differently by the adoption of Topic 606 or other new accounting standards, including timing of the adoption of new accounting standards, adversely affecting the comparability of our financial statements. See Note 2, *Summary of Significant Accounting Policies,* for information about Topic 606.

We may be adversely affected by changes in U.S. tax laws.

On December 22, 2017, Congress and the current administration passed significant tax reform legislation including a change to the corporate tax rate. As part of this tax reform, 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 could reduce the value of certain benefits, such as depreciation, and reduce capacity for other benefits, such as tax credits. Limitations on, or elimination of, such tax benefits could significantly impact our ability to raise tax equity investment funds or impact the terms thereof, including the amount of cash distributable to third parties. At this time, the Company is estimating the potential impact on our tax equity investment funds, business, prospects and results of operations as a result of enactment, since the impact is dependent upon certain tax treatment elections and the specific timing of taxable income/losses in future years. The new legislation includes significant changes which require additional guidance to be issued by the IRS.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2017, we had U.S. federal net operating loss carryforwards of $720.1 million and state net operating loss carryforwards of $630.7 million, which begin expiring in varying amounts in 2028 and 2024, respectively, if unused. Under Sections 382 and 383 of the Code if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes, such as research 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% shareholders" that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. Any such limitations on our ability to use our net operating loss carryforwards and other tax assets could adversely impact our business, financial condition and results of operations.

We may be required to record a charge to earnings if our goodwill or intangible assets become impaired.

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. As of December 31, 2017, our market capitalization did not exceed our carrying value and we performed a step 1 analysis in accordance with ASU 350 *Intangibles - Goodwill and Other* and determined that our fair value exceeded our carrying value and thus we did not have an impairment related to our goodwill. 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.

Each of 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 46.0% of the outstanding shares of our common stock, based on the number of shares outstanding as of September 30, 2018. 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.

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;
- changes in tax and other incentives that we rely upon in order to raise tax equity investment funds;
- changes in the regulatory environment and utility policies and pricing, including those that could reduce the 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;
- any significant change in our management; and
- general economic conditions and slow or negative growth of our markets.

Further, in recent years the stock markets have experienced extreme 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 wide 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, may cause the market price of 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 which 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 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. 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 which 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. Alternatively, if a court were to find the choice of forum provision 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.

We do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. 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 stock issuances could result in significant dilution to our stockholders.

We may issue additional equity securities to raise capital, make acquisitions or for a variety of other purposes. Additional issuances of our stock may be made pursuant to the exercise or conversion of new or existing convertible debt securities, 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 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 could be substantial.

As an emerging growth company within the meaning of the Securities Act, we will utilize certain modified disclosure requirements, and we cannot be certain if these reduced requirements will make our common stock less attractive to investors.

We are an emerging growth company, and while we remain an emerging growth company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to “emerging growth companies.” These exemptions include not being required to have our independent registered public accounting firm audit our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We are currently utilizing the modified disclosure requirements available to emerging growth companies. As a result, our stockholders may not have access to certain information they may deem important. We no longer will be an “emerging growth company” after the earlier of (1) our fiscal year ended December 31, 2018, the date we become a "large accelerated filer" as defined in the Exchange Act, or (2) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the preceding three-year period.

Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Unregistered Sales of Equity Securities

None.

Issuer Purchases of Equity Securities

None.

Item 5. OTHER INFORMATION

None.

Item 6. EXHIBITS

The documents listed in the Exhibit Index of this Quarterly Report on Form 10-Q are incorporated by reference or are filed with this Quarterly Report on Form 10-Q, in each case as indicated therein (numbered in accordance with Item 601 of Regulation S-K).

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
10.1+	Key Employee Change in Control and Severance Plan and Summary Plan Description				
10.2¥	Consent and First Amendment to Second Amended and Restated Credit Agreement and Third Amendment to Amended and Restated Cash Diversion and Commitment Fee Guaranty dated as of July 18, 2018, among Sunrun Hera Portfolio 2015-A, Sunrun Inc., Investec Bank PLC (as administrative agent, issuing bank and as lender), and each of the additional lenders identified on the signature pages thereto.				
10.3¥	Consent and Second Amendment to Second Amended and Restated Credit Agreement and Fourth Amendment to Amended and Restated Cash Diversion and Commitment Fee Guaranty dated as of August 22, 2018, among Sunrun Hera Portfolio 2015-A, LLC, Sunrun Inc., Investec Bank PLC (as administrative agent, issuing bank and as lender) and each of the additional lenders identified on the signature pages thereto.				
10.4	Consent and Third Amendment to Amended and Restated Credit Agreement and Sixth Amendment to Cash Diversion and Commitment Fee Guaranty dated as of August 22, 2018, among Sunrun Hera Portfolio 2015-A, LLC, Sunrun Inc., Investec Bank PLC (as administrative agent, issuing bank and as lender) and each of the additional lenders identified on the signature pages thereto.				
31.1	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.				
31.2	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.				
32.1†	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.				
101.INS	XBRL Instance Document.				
101.SCH	XBRL Taxonomy Schema Linkbase Document.				
101.CAL	XBRL Taxonomy Definition Linkbase Document.				
101.DEF	XBRL Taxonomy Calculation Linkbase Document.				
101.LAB	XBRL Taxonomy Labels Linkbase Document.				
101.PRE	XBRL Taxonomy Presentation Linkbase Document.				

\+ 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.

† The certifications attached as Exhibit 32.1 that accompany this Quarterly Report on Form 10-Q 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 Quarterly Report on Form 10-Q, irrespective of any general incorporation language contained in such filing.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

SUNRUN INC.

Date: November 7, 2018

By: /s/ Lynn Jurich

Lynn Jurich
Chief Executive Officer
(Principal Executive Officer)

By: /s/ Bob Komin

Bob Komin
Chief Financial Officer
(Principal Accounting and Financial Officer)

Exhibit 10.1

SUNRUN INC.
KEY EMPLOYEE CHANGE IN CONTROL AND SEVERANCE PLAN
AND SUMMARY PLAN DESCRIPTION

Effective as of August 9, 2018

1. **Introduction**. The purpose of this Sunrun Inc. Key Employee Change in Control and Severance Plan (the '**Plan**") is to provide assurances of specified benefits to a select group of key employees of the Company whose employment is subject to being involuntarily terminated other than for death, Disability, or Cause or voluntarily terminated for Good Reason under the circumstances described in the Plan. This Plan is an "**employee welfare benefit plan**," as defined in Section 3(1) of ERISA. This Plan is governed by ERISA and, to the extent applicable, the laws of the State of California. This document constitutes both the written instrument under which the Plan is maintained and the required summary plan description for the Plan. With respect to Eligible Employees (as defined herein), this Plan supersedes any severance benefit plan, policy or practice previously maintained by the Company or any affiliate of the Company for Eligible Employees.

2. **Important Terms**. The following words and phrases, when the initial letter of the term is capitalized, will have the meanings set forth in this Section 2, unless a different meaning is plainly required by the context:

2.1. **"Administrator"** means the Company, acting through the Compensation Committee or another duly constituted committee of members of the Board, or any person to whom the Administrator has delegated any authority or responsibility with respect to the Plan pursuant to Section 11, but only to the extent of such delegation.

2.2. **"Base Pay"** means an Eligible Employee's annualized base salary (excluding incentive pay, premium pay, commissions, overtime, bonuses and other forms of variable compensation) in effect immediately prior to the termination of employment, and determined without giving effect to any reduction in base salary that would permit the Eligible Employee to resign for Good Reason or any reduction in base pay which occurs following a Change in Control.

2.3. **"Board"** means the Board of Directors of the Company.

2.4. **"Cause"** means, with respect to an Eligible Employee, the occurrence of any of the following: (a) an act of dishonesty by the Eligible Employee in connection with his or her responsibilities as an employee; (b) the Eligible Employee's conviction of, or plea of *nolo contendere* to, a felony or any crime involving fraud, embezzlement or any other act of moral turpitude; (c) the Eligible Employee's gross misconduct; (d) the Eligible Employee's unauthorized use or disclosure of any proprietary information or trade secrets of the Company or any other party to whom the Eligible Employee owes an obligation of nondisclosure as a result of his or her relationship with the Company; (e) the Eligible Employee's willful breach of any obligations under any written agreement or covenant with the Company; or (f) the Eligible Employee's continued failure to perform his or her employment duties after having received a written demand of performance from the Company which specifically sets forth the factual basis for the Company's belief that the Eligible Employee has not substantially performed his or her duties and has failed to cure such non-performance to the Company's satisfaction within ten (10) business days after receiving such notice.

2.5. **"Change in Control"** means the occurrence of any of the following events:

(a) A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than fifty percent (50%) of the total voting power of the stock of the Company; provided, however, that

for purposes of this subsection, the acquisition of additional stock by any one Person, who is considered to own more than fifty percent (50%) of the total voting power of the stock of the Company will not be considered a Change in Control; or

(b) A change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this clause (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(c) A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than fifty percent (50%) of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets: (A) a transfer to an entity that is controlled by the Company's stockholders immediately after the transfer, or (B) a transfer of assets by the Company to: (1) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock, (2) an entity, fifty percent (50%) or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (3) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the outstanding stock of the Company, or (4) an entity, at least fifty percent (50%) of the total value or voting power of which is owned, directly or indirectly, by a Person described in this subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this definition, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Code Section 409A, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and Internal Revenue Service guidance that has been promulgated or may be promulgated thereunder from time to time.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is to change the state of the Company's incorporation, or (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

2.6. **"Change in Control Period"** means the time period beginning on the date three (3) months prior to, and ending on the date that is twelve (12) months following, a Change in Control.

2.7. "**COBRA**" means the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended.

2.8. **"Code"** means the Internal Revenue Code of 1986, as amended.

2.9. **"Company"** means Sunrun Inc., a Delaware corporation, and any successor that assumes the obligations of the Company under the Plan, by way of merger, acquisition, consolidation or other transaction.

2.10. **“Compensation Committee”** means the Compensation Committee of the Board.

2.11. **“Eligible Employee”** means an employee of the Company or of any parent or subsidiary of the Company who (a) has been designated by the Administrator as eligible to participate in the Plan and provided with a Participation Agreement and (b) has timely and properly executed and delivered a Participation Agreement to the Company.

2.12. **“Disability”** means that the Eligible Employee has been unable to perform the Eligible Employee’s Company duties as the result of the Eligible Employee’s incapacity due to physical or mental illness, and such inability, at least twenty-six (26) weeks after its commencement or 180 days in any consecutive twelve (12) month period, is determined to be total and permanent by a physician selected by the Company or its insurers and acceptable to the Eligible Employee or the Eligible Employee’s legal representative (such agreement as to acceptability not to be unreasonably withheld). Termination resulting from Disability may only be effected after at least thirty (30) days’ written notice by the Company of its intention to terminate the Eligible Employee’s employment. In the event that the Eligible Employee resumes the performance of substantially all of the Eligible Employee’s duties hereunder before the termination of the Eligible Employee’s employment becomes effective, the notice of intent to terminate will automatically be deemed to have been revoked.

2.13. **“Effective Date”** means August 2, 2018.

2.14. **“Equity Awards”** means the Eligible Employee’s then-outstanding equity awards to purchase or otherwise receive an issuance of Shares.

2.15. **“ERISA”** means the Employee Retirement Income Security Act of 1974, as amended.

2.16. “**Family Members**” means any spouse and/or dependents of the Eligible Employee.

2.17. **“Good Reason”** means, the Eligible Employee’s resignation within thirty (30) days following the end of the Cure Period (as defined below) as a result of one or more of the following actions taken without the Eligible Employee’s express written consent: (a) a material reduction of the Eligible Employee’s duties, position or responsibilities, or the removal of the Eligible Employee from such position and responsibilities, either of which results in a material diminution of the Eligible Employee’s authority, duties or responsibilities, unless the Eligible Employee is provided with a comparable position (i.e., a position of equal or greater organizational level, duties, authority, compensation and status); provided, however, that a reduction in duties, position or responsibilities solely by virtue of the Company being acquired and made part of a larger entity (as, for example, when the Chief Executive Officer of the Company remains as such following a Change of Control but is not made the Chief Executive Officer of the acquiring corporation) will not constitute “Good Reason”; (b) a material reduction in the Eligible Employee’s Base Pay or Target Bonus (except any reduction that is implemented prior to a Change in Control and is generally applicable to the Company’s management team) and which constitutes a material reduction in the Eligible Employee’s base compensation; provided, however, that a reduction in the Eligible Employees Base Pay of ten percent (10%) or less in any one year will not be deemed a material reduction; or (c) a material change in the geographic location of the Eligible Employee’s primary work facility or location; provided, that a relocation of less than fifty (50) miles from the Eligible Employee’s primary work facility or location will not be considered a material change in geographic location. In order for an event to qualify as Good Reason, the Eligible Employee must not terminate employment with the Company without first providing the Company with written notice of the acts or omissions constituting the “Good Reason” condition within ninety (90) days of the initial existence of such condition constituting “Good Reason” and a reasonable cure period of thirty (30) days following the date of written notice (the “**Cure Period**”), and the “Good Reason” condition must not have been cured by the Company during the Cure Period.

2.18. **“Involuntary Termination”** means a termination of employment of an Eligible Employee under the circumstances described in Section 4.1 or 4.2 of the Plan.

2.19. "**Participation Agreement**" means the individual agreement (a form of which is shown in Appendix A) provided by the Administrator to an employee of the Company designating such employee as an Eligible Employee under the Plan, which has been signed and accepted by the employee.

2.20. **"Plan"** means the Sunrun Inc. Key Employee Change in Control and Severance Plan, as set forth in this document, and as hereafter amended from time to time.

2.21. **"Section 409A Limit"** means two (2) times the lesser of: (i) the Eligible Employee's annualized compensation based upon the annual rate of pay paid to the Eligible Employee during the Eligible Employee's taxable year preceding the Eligible Employee's taxable year of the Eligible Employee's termination of employment as determined under, and with such adjustments as are set forth in, Treasury Regulation 1.409A-1(b)(9)(iii)(A)(1) and any Internal Revenue Service guidance issued with respect thereto; or (ii) the maximum amount that may be taken into account under a qualified plan pursuant to Section 401(a)(17) of the Code for the year in which the Eligible Employee's employment is terminated.

2.22. **"Severance Benefits"** means the compensation and other benefits that the Eligible Employee will be provided in the circumstances described in Section 4 or as otherwise set forth in the Eligible Employee's Participation Agreement.

2.23. **"Share"** means a share of the Company's common stock.

2.24. **"Target Bonus"** means the greater of (i) the Eligible Employee's target bonus percentage multiplied by the Eligible Employee's Base Pay, and without giving effect to any reduction in target bonus percentage that would give rise to the right to resign for Good Reason or which is implemented following a Change in Control or (ii) the target bonus amount (as applicable), in each case, as in effect for the Eligible Employee during the Company's (or its successor's) fiscal year in which the Eligible Employee's Involuntary Termination occurs.

3. **Eligibility for Severance Benefits**. An individual is eligible for Severance Benefits under the Plan, as described in Section 4, only if he or she is an Eligible Employee on the date he or she experiences an Involuntary Termination.

4. **Involuntary Termination**.

4.1. **Termination Without Cause or Good Reason Resignation During the Change in Control Period** If during the Change in Control Period, (i) an Eligible Employee resigns his or her employment with the Company (or any parent or subsidiary of the Company) for Good Reason, or (ii) the Company (or any parent or subsidiary of the Company) terminates the Eligible Employee's employment for a reason other than Cause and other than due to the Eligible Employee's death or Disability, then, subject to the Eligible Employee's compliance with Section 6, the Eligible Employee will receive Severance Benefits from the Company as specified in Section 1 of the Eligible Employee's Participation Agreement.

4.2. **Termination Without Cause Other Than During the Change in Control Period**. If the Company (or any parent or subsidiary of the Company) terminates the Eligible Employee's employment for a reason other than Cause and other than due to the Eligible Employee's death or Disability and such termination occurs other than during the Change in Control Period, then, subject to the Eligible Employee's compliance with Section 6, the Eligible Employee will receive Severance Benefits from the Company as specified in Section 2 of the Eligible Employee's Participation Agreement.

4.3. **Limits on COBRA Premiums.** If the Eligible Employee becomes entitled to Severance Benefits and the Company determines in its sole discretion that it cannot provide the COBRA premium benefits without potentially violating applicable laws (including, without limitation, Section 2716 of the Public Health Service Act and the Employee Retirement Income Security Act of 1974, as amended), the Company will in lieu thereof provide to the Eligible Employee a taxable monthly payment in an amount equal to the monthly COBRA premium that the Eligible Employee would be required to pay to continue the group health coverage in effect on the date of the

Eligible Employee's Involuntary Termination (which amount will be based on the premium for the first month of COBRA coverage) for the applicable period of time set forth in the Eligible Employee's Participation Agreement following the termination, which payments will be made regardless of whether the Eligible Employee elects COBRA continuation coverage. COBRA premium benefits provided as Severance Benefits shall not include any amounts payable by the Eligible Employee under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are the sole responsibility of the Eligible Employee.

5. **Limitation on Payments**. In the event that the payments and benefits provided for in the Plan or other payments and benefits payable or provided to the Eligible Employee (i) constitute "**parachute payments**" within the meaning of Section 280G of the Code and (ii) but for this Section 5, would be subject to the excise tax imposed by Section 4999 of the Code, then the Eligible Employee's payments and benefits under the Plan or other payments or benefits (the "**280G Amounts**") will be either:

(a) delivered in full; or

(b) delivered as to such lesser extent that would result in no portion of the 280G Amounts being subject to the excise tax under Section 4999 of the Code;

whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by the Eligible Employee on an after-tax basis, of the greatest amount of 280G Amounts, notwithstanding that all or some portion of the 280G Amounts may be taxable under Section 4999 of the Code.

5.1. **Reduction Order**. In the event that a reduction of 280G Amounts is made in accordance with Section 5, the reduction will occur, with respect to the 280G Amounts considered parachute payments within the meaning of Section 280G of the Code, in the following order:

(a) reduction of cash payments in reverse chronological order (that is, the cash payment owed on the latest date following the occurrence of the event triggering the excise tax will be the first cash payment to be reduced);

(b) cancellation of equity awards that were granted "contingent on a change in ownership or control" within the meaning of Code Section 280G;

(c) reduction of the accelerated vesting of equity awards in the reverse order of date of grant of the awards (i.e., the vesting of the most recently granted equity awards will be cancelled first); and

(d) reduction of employee benefits in reverse chronological order (i.e., the benefit owed on the latest date following the occurrence of the event triggering the excise tax will be the first benefit to be reduced).

In no event will the Eligible Employee have any discretion with respect to the ordering of payment reductions.

5.2. **Nationally Recognized Firm Requirement**. Unless the Company and the Eligible Employee otherwise agree in writing, any determination required under this Section 5 will be made in writing by a nationally recognized accounting or valuation firm (the "**Firm**") selected by the Administrator, whose determination will be conclusive and binding upon the Eligible Employee and the Company for all purposes. For purposes of making the calculations required by this Section 5, the Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and the Eligible Employee will furnish to the Firm such information and documents as the Firm may reasonably request in order to make a determination under this Section 5. The Company will bear all costs for payment of the Firm's services in connection with any calculations contemplated by this Section 5.

6. **Conditions to Receipt of Severance**.

6.1. **Release Agreement**. As a condition to receiving the Severance Benefits under this Plan, each Eligible Employee will be required to sign and not revoke a separation and release of claims agreement in a form reasonably satisfactory to the Company (the "**Release**"). In all cases, the Release must become effective and irrevocable no later than the sixtieth (60th) day following the Eligible Employee's Involuntary Termination (the "**Release Deadline Date**"). If the Release does not become effective and irrevocable by the Release Deadline Date, the Eligible Employee will forfeit any right to the Severance Benefits. In no event will the Severance Benefits be paid or provided until the Release becomes effective and irrevocable.

6.2**. Company Property**. An Eligible Employee will not be entitled to any severance benefit under the Plan unless and until the Eligible Employee returns all Company Property no later than the Release Deadline Date. For this purpose, "Company Property" means all Company and affiliate documents (and all copies thereof) and other Company and affiliate property which the Eligible Employee had in his or her possession at any time, including, but not limited to, Company and affiliate files, notes, drawings, records, plans, forecasts, reports, studies, analyses, proposals, agreements, financial information, research and development information, sales and marketing information, operational and personnel information, specifications, code, software, databases, computer-recorded information, tangible property and equipment (including, but not limited to, computers, facsimile machines, mobile telephones, servers), credit cards, entry cards, identification badges and keys; and any materials of any kind which contain or embody any proprietary or confidential information of the Company or any affiliate (and all reproductions thereof in whole or in part).

6.3. **Other Requirements**. An Eligible Employee's receipt of Severance Benefits will be subject to the Eligible Employee continuing to comply with the provisions of this Section 6 and the terms of any confidentiality, proprietary information and inventions agreement and such other appropriate agreement between the Eligible Employee and the Company. Severance Benefits under this Plan will terminate immediately for an Eligible Employee if the Eligible Employee, at any time, violates any such agreement and/or the provisions of this Section 6.

7. **Timing of Severance Benefits**. Provided that the Release becomes effective and irrevocable by the Release Deadline Date and subject to any changes in timing required by Section 9, the severance payments and benefits under this Plan will be paid, or in the case of installments, will commence, on the Company's first regularly scheduled payroll date following the effective date of the Release but in no event later than ten (10) business days following the effective date of the Release (such payment date, the "**Severance Start Date**"), and any severance payments or benefits otherwise payable to the Eligible Employee during the period immediately following the Eligible Employee's termination of employment with the Company through the Severance Start Date pursuant to the payment schedule set forth in the Participation Agreement will be paid in a lump sum to the Eligible Employee on the Severance Start Date, with any remaining payments to be made on the schedule provided in the Participation Agreement.

8. **Non-Duplication of Benefits**. Notwithstanding any other provision in the Plan to the contrary, if the Eligible Employee is entitled to any severance, change in control or similar benefits outside of the Plan by operation of applicable law or under another Company-sponsored plan, policy, contract, or arrangement, his or her benefits under the Plan will be reduced by the value of the severance, change in control or similar benefits that the Eligible Employee receives by operation of applicable law or under any Company-sponsored plan, policy, contract, or arrangement, all as determined by the Administrator in its discretion. Any such reductions that the Administrator determines to make pursuant to this Section 8 shall be made such that any benefit under the Plan shall be reduced solely by any similar type of benefit under such legal requirement, policy or practice (i.e., any cash severance benefits under the Plan shall be reduced solely by any cash payments or severance benefits under such legal requirement, policy or practice, and any continued insurance benefits under the Plan shall be reduced solely by any continued insurance benefits under such legal requirement, policy or practice). The Administrator's decision to apply such reductions to the severance benefits of one Eligible Employee and the amount of such reductions shall in no way obligate the Company to apply the same reductions in the same amounts to the severance benefits of any other Eligible Employee, even if similarly situated. In the Company's sole discretion, such reductions may be applied on a retroactive basis, with severance benefits previously paid being re-characterized as payments pursuant to the Company's statutory or other legal obligation.

9. **Section 409A**.

9.1. Notwithstanding anything to the contrary in this Plan, no severance payments or benefits to be paid or provided to an Eligible Employee, if any, under this Plan that, when considered together with any other severance payments or separation benefits, are considered deferred compensation under Section 409A of the Code, and the final regulations and any guidance promulgated thereunder ("**Section 409A**") (together, the "**Deferred Payments**") will be paid or provided until the Eligible Employee has a "separation from service" within the meaning of Section 409A ("**Separation from Service**"). Similarly, no severance payable to an Eligible Employee, if any, under this Plan that otherwise would be exempt from Section 409A pursuant to Treasury Regulation Section 1.409A-1(b)(9) will be payable until the Eligible Employee has a Separation from Service.

9.2. It is intended that none of the severance payments or benefits under this Plan will constitute Deferred Payments but rather will be exempt from Section 409A as a payment that would fall within the "short-term deferral period" as described in Section 9.4 below or resulting from an involuntary separation from service as described in Section 9.5 below. In no event will an Eligible Employee have discretion, directly or indirectly, to determine the taxable year of payment of any Deferred Payment. If the Company (or, if applicable, the successor entity thereto) determines that any payments or benefits under this Plan are Deferred Payments and the Separation from Service occurs at a time during the calendar year when the Release could become effective in the calendar year following the calendar year in which Separation from Service occurs, then regardless of when the Release is returned to the Company and becomes effective, the Release will not be deemed effective any earlier than the Release Deadline Date for purposes of the timing of any payments made or benefits provided under the Plan.

9.3. Notwithstanding anything to the contrary in this Plan, if an Eligible Employee is a "specified employee" within the meaning of Section 409A at the time of the Eligible Employee's separation from service (other than due to death), then the Deferred Payments, if any, that are payable within the first six (6) months following the Eligible Employee's separation from service, will become payable on the date six (6) months and one (1) day following the date of the Eligible Employee's separation from service. All subsequent Deferred Payments, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, in the event of the Eligible Employee's death following the Eligible Employee's separation from service, but before the six (6) month anniversary of the separation from service, then any payments delayed in accordance with this paragraph will be payable in a lump sum as soon as administratively practicable after the date of the Eligible Employee's death and all other Deferred Payments will be payable in accordance with the payment schedule applicable to each payment or benefit. Each payment and benefit payable under this Plan is intended to constitute a separate payment under Section 1.409A-2(b)(2) of the Treasury Regulations.

9.4. Any amount paid under this Plan that satisfies the requirements of the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations will not constitute Deferred Payments for purposes of Section 9.1 above.

9.5. Any amount paid under this Plan that qualifies as a payment made as a result of an involuntary separation from service pursuant to Section 1.409A-1(b)(9)(iii) of the Treasury Regulations that does not exceed the Section 409A Limit will not constitute Deferred Payments for purposes of Section 9.1 above.

9.6. The foregoing provisions are intended to comply with or be exempt from the requirements of Section 409A so that none of the payments and benefits to be provided under the Plan will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply or be exempt. Notwithstanding anything to the contrary in the Plan, including but not limited to Sections 11 and 14, the Company reserves the right to amend the Plan as it deems necessary or advisable, in its sole discretion and without the consent of the Eligible Employees, to comply with Section 409A or to avoid income recognition under Section 409A prior to the actual payment of benefits under the Plan or imposition of any additional tax. In no event will the Company reimburse an Eligible Employee for any taxes that may be imposed on the Eligible Employee as result of Section 409A.

10. **Withholdings**. The Company will withhold from any payments or benefits under the Plan all applicable U.S. federal, state, local and non-U.S. taxes required to be withheld and any other required payroll deductions.

11. **Administration**. The Company is the administrator of the Plan (within the meaning of section 3(16)(A) of ERISA). The Plan will be administered and interpreted by the Administrator (in his or her sole discretion). The Administrator is the "**named fiduciary**" of the Plan for purposes of ERISA and will be subject to the fiduciary standards of ERISA when acting in such capacity. Any decision made or other action taken by the Administrator with respect to the Plan, and any interpretation by the Administrator of any term or condition of the Plan, or any related document, will be conclusive and binding on all persons and be given the maximum possible deference allowed by law. In accordance with Section 2.1, the Administrator (a) may, in its sole discretion and on such terms and conditions as it may provide, delegate in writing to one or more officers of the Company all or any portion of its authority or responsibility with respect to the Plan, and (b) has the authority to act for the Company (in a non-fiduciary capacity) as to any matter pertaining to the Plan; *provided, however,* that any Plan amendment or termination or any other action that reasonably could be expected to increase materially the cost of the Plan must be approved by the Board.

12. **Eligibility to Participate**. To the extent that the Administrator has delegated administrative authority or responsibility to one or more officers of the Company in accordance with Sections 2.1 and 11, each such officer will not be excluded from participating in the Plan if otherwise eligible, but he or she is not entitled to act upon or make determinations regarding any matters pertaining specifically to his or her own benefit or eligibility under the Plan, or with respect to the timing of payment of his or her own benefits. The Administrator will act upon and make determinations regarding any matters pertaining specifically to the benefit or eligibility of each such officer under the Plan.

13. **Amendment or Termination**. Subject to the limitations specified below, the Company, by action of the Administrator, reserves the right to amend or terminate or the Plan or any Participation Agreement at any time, without advance notice to any Eligible Employee and without regard to the effect of the amendment or termination on any Eligible Employee or on any other individual. Notwithstanding the foregoing, (i) any termination of or amendment to the Plan or any Participation Agreement that (a) causes an individual or group of individuals to cease to be an Eligible Employee or (b) reduces or alters to the detriment of the Eligible Employee the Severance Benefits potentially payable to that Eligible Employee (including, without limitation, imposing additional conditions or modifying the timing of payment), will not be effective unless it both is approved by the Administrator and communicated to the affected individual(s) in writing at least six (6) months prior to the effective date of the amendment or termination and (ii) once an Eligible Employee has incurred an Involuntary Termination, no amendment or termination of the Plan or any Participation Agreement may, without that Eligible Employee's written consent, reduce or alter to the detriment of the Eligible Employee, the Severance Benefits payable to that Eligible Employee. In addition, notwithstanding the preceding, upon or after a Change in Control, the Company may not, without an affected Eligible Employee's written consent, amend or terminate the Plan or any Participation in any way, nor take any other action, that (i) prevents that Eligible Employee from becoming eligible for the Severance Benefits under the Plan, or (ii) reduces or alters to the detriment of the Eligible Employee the Severance Benefits payable, or potentially payable, to an Eligible Employee under the Plan (including, without limitation, imposing additional conditions). Any action of the Company in amending or terminating the Plan or any Participation Agreement will be taken in a non-fiduciary capacity and will be in writing.

14. **Claims and Appeals**.

14.1. **Claims Procedure**. Any employee or other person who believes he or she is entitled to any payment under the Plan may submit a claim in writing to the Administrator within ninety (90) days of the earlier of (i) the date the claimant learned the amount of his or her benefits under the Plan or (ii) the date the claimant learned that he or she will not be entitled to any benefits under the Plan. If the claim is denied (in full or in part), the claimant will be provided a written notice explaining the specific reasons for the denial and referring to the provisions of the Plan on which the denial is based. The notice also will describe any additional information needed to support the claim and the Plan's procedures for appealing the denial. The denial notice will be provided within ninety (90) days after the claim is received. If special circumstances require an extension of time (up to ninety

(90) days), written notice of the extension will be given within the initial ninety (90) day period. This notice of extension will indicate the special circumstances requiring the extension of time and the date by which the Administrator expects to render its decision on the claim.

14.2. **Appeal Procedure**. If the claimant's claim is denied, the claimant (or his or her authorized representative) may apply in writing to the Administrator for a review of the decision denying the claim. Review must be requested within sixty (60) days following the date the claimant received the written notice of their claim denial or else the claimant loses the right to review. The claimant (or representative) then has the right to review and obtain copies of all documents and other information relevant to the claim, upon request and at no charge, and to submit issues and comments in writing. The Administrator will provide written notice of its decision on review within sixty (60) days after it receives a review request. If additional time (up to sixty (60) days) is needed to review the request, the claimant (or representative) will be given written notice of the reason for the delay. This notice of extension will indicate the special circumstances requiring the extension of time and the date by which the Administrator expects to render its decision. If the claim is denied (in full or in part), the claimant will be provided a written notice explaining the specific reasons for the denial and referring to the provisions of the Plan on which the denial is based. The notice also will include a statement that the claimant will be provided, upon request and free of charge, reasonable access to, and copies of, all documents and other information relevant to the claim and a statement regarding the claimant's right to bring an action under Section 502(a) of ERISA.

15. **Attorneys' Fees**. The parties shall each bear their own expenses, legal fees and other fees incurred in connection with this Plan. Provided, however, in the event that an Eligible Employee is required to incur attorneys' fees in order to obtain any payments or benefits under this Plan, and provided that the Eligible Employee prevails on at least one material issue related to his or her claim(s) under the Plan, then the Company will reimburse the attorneys' fees incurred by the Eligible Employee. The reimbursements will be made in accordance with the Company's normal reimbursement policies following final adjudication of the Eligible Employee's claims, provided however, that (a) the reimbursements are payable only during the Eligible Employee's lifetime, (b) the reimbursements will be made on or before the last day of the Eligible Employee's taxable year following the taxable year in which the expenses were incurred, (c) the right to reimbursement, if any, is not subject to liquidation or exchange for another benefit, and (d) the amount of expenses eligible for reimbursement during an Eligible Employee's taxable year will not affect the expenses eligible for reimbursement to be provided in any other taxable year.

16. **Source of Payments**. All Severance Benefits will be paid in cash from the general funds of the Company; no separate fund will be established under the Plan, and the Plan will have no assets. No right of any person to receive any payment under the Plan will be any greater than the right of any other general unsecured creditor of the Company.

17. **Inalienability**. In no event may any current or former employee of the Company or any of its subsidiaries or affiliates sell, transfer, anticipate, assign or otherwise dispose of any right or interest under the Plan. At no time will any such right or interest be subject to the claims of creditors nor liable to attachment, execution or other legal process.

18. **No Enlargement of Employment Rights**. Neither the establishment or maintenance or amendment of the Plan, nor the making of any benefit payment hereunder, will be construed to confer upon any individual any right to continue to be an employee of the Company. The Company expressly reserves the right to discharge any of its employees at any time, with or without cause. However, as described in the Plan, an Eligible Employee may be entitled to benefits under the Plan depending upon the circumstances of his or her termination of employment.

19. **Successors**. Any successor to the Company of all or substantially all of the Company's business and/or assets (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or other transaction) will assume the obligations under the Plan and agree expressly to perform the obligations under the Plan in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under the Plan, the term "Company" will include any successor to the Company's business and/or assets which become bound by the terms of the Plan by operation of law, or otherwise.

20. **Applicable Law**. The provisions of the Plan will be construed, administered and enforced in accordance with ERISA and, to the extent applicable, the internal substantive laws of the state of California (but not its conflict of laws provisions).

21. **Severability**. If any provision of the Plan is held invalid or unenforceable, its invalidity or unenforceability will not affect any other provision of the Plan, and the Plan will be construed and enforced as if such provision had not been included.

22. **Headings**. Headings in this Plan document are for purposes of reference only and will not limit or otherwise affect the meaning hereof.

23. **Indemnification**. The Company hereby agrees to indemnify and hold harmless the officers and employees of the Company, and the members of its Board, from all losses, claims, costs or other liabilities arising from their acts or omissions in connection with the administration, amendment or termination of the Plan, to the maximum extent permitted by applicable law. This indemnity will cover all such liabilities, including judgments, settlements and costs of defense. The Company will provide this indemnity from its own funds to the extent that insurance does not cover such liabilities. This indemnity is in addition to and not in lieu of any other indemnity provided to such person by the Company.

24. **Additional Information**.

Plan Name:	Sunrun Inc. Key Employee Change in Control and Severance Plan
Plan Sponsor:	Sunrun Inc. c/o Chad Herring 595 Market Street, 29th Floor San Francisco, CA 94105
Identification Numbers:	**EIN:** 26-2841711 **PLAN:** 501
Plan Year:	Company's fiscal year
Plan Administrator:	Sunrun Inc. *Attention:* Administrator of the Sunrun Inc. Key Employee Change in Control and Severance Plan 595 Market Street, 29th Floor San Francisco, CA 94105 415-580-6900
Agent for Service of Legal Process:	Sunrun Inc. *Attention:* General Counsel 595 Market Street, 29th Floor San Francisco, CA 94105 415-580-6900 Service of process also may be made upon the Administrator.
Type of Plan	Severance Plan/Employee Welfare Benefit Plan
Plan Costs	The cost of the Plan is paid by the Employer.

26. **Statement of ERISA Rights**.

As an Eligible Employee under the Plan, you have certain rights and protections under ERISA:

(a) You may examine (without charge) all Plan documents, including any amendments and copies of all documents filed with the U.S. Department of Labor. These documents are available for your review in the Company's Human Resources Department.

(b) You may obtain copies of all Plan documents and other Plan information upon written request to the Administrator. A reasonable charge may be made for such copies.

In addition to creating rights for Eligible Employees, ERISA imposes duties upon the people who are responsible for the operation of the Plan. The people who operate the Plan (called "**fiduciaries**") have a duty to do so prudently and in the interests of you and the other Eligible Employees. No one, including the Company or any other person, may fire you or otherwise discriminate against you in any way to prevent you from obtaining a benefit under the Plan or exercising your rights under ERISA. If your claim for a severance benefit is denied, in whole or in part, you must receive a written explanation of the reason for the denial. You have the right to have the denial of your claim reviewed. (The claim review procedure is explained in Section 15 above.)

Under ERISA, there are steps you can take to enforce the above rights. For example, if you request materials and do not receive them within thirty (30) days, you may file suit in a federal court. In such a case, the court may require the Administrator to provide the materials and to pay you up to $110 a day until you receive the materials, unless the materials were not sent due to reasons beyond the control of the Administrator. If you have a claim which is denied or ignored, in whole or in part, you may file suit in a federal court. If it should happen that you are discriminated against for asserting your rights, you may seek assistance from the U.S. Department of Labor, or you may file suit in a federal court.

In any case, the court will decide who will pay court costs and legal fees. If you are successful, the court may order the person you have sued to pay these costs and fees. If you lose, the court may order you to pay these costs and fees, for example, if it finds that your claim is frivolous.

If you have any questions regarding the Plan, please contact the Administrator. If you have any questions about this statement or about your rights under ERISA, you may contact the nearest area office of the Employee Benefits Security Administration (formerly the Pension and Welfare Benefits Administration), U.S. Department of Labor, listed in your telephone directory, or the Division of Technical Assistance and Inquiries, Employee Benefits Security Administration, U.S. Department of Labor, 200 Constitution Avenue, N.W. Washington, D.C. 20210. You also may obtain certain publications about your rights and responsibilities under ERISA by calling the publications hotline of the Employee Benefits Security Administration.

Appendix A

Sunrun Inc. Key Employee Change in Control and Severance Plan
Form of Participation Agreement

Sunrun Inc. (the "**Company**") is pleased to inform you, ____________ , that you have been selected to participate in the Company's Change in Control and Severance Plan (the "**Plan**"). A copy of the Plan was delivered to you with this Participation Agreement. Your participation in the Plan is subject to all of the terms and conditions of the Plan. Capitalized terms used in this Participation Agreement but not otherwise defined have the meanings set forth in the Plan. Any benefits described in this Participation Agreement are qualified by and subject to the additional terms and conditions set forth in the Plan. In the event of any inconsistency between the terms of this Participation Agreement and the terms of the Plan, the terms of the Plan control.

In order to actually become a participant in the Plan (an Eligible Employee), you must complete and sign this Participation Agreement and return it to [NAME] no later than [DATE].

1. Severance Benefits for Termination Without Cause or Good Reason Resignation During the Change in Control Period

If you become eligible for Severance Benefits under Section 4.1 of the Plan (due to a termination of your employment without Cause during the Change in Control Period or your Good Reason resignation during the Change in Control Period, and other than due to your death or Disability, as described more fully in the Plan), then subject to the terms and conditions of the Plan, you will receive:

a. ***Cash Severance Benefits.*** A cash severance benefit equal to the sum of: (a) [ ] of your annualized Base Pay and (b) [ ]% of your Target Bonus, payable to you in a single lump sum on the Severance Start Date.

b. ***Health Benefits.*** Payment or reimbursement of premiums for continued health coverage under COBRA (or taxable lump sum payment in lieu of thereof, as applicable, and as described in Section 4.3 of the Plan) will be provided for a period of [ ] months following your separation from service with the Company.

c. ***Equity Award Vesting Acceleration.*** Accelerated vesting of your Equity Awards with respect to [ ] of the then-unvested and outstanding Shares subject to your Equity Awards, with such vesting acceleration effective upon the Severance Start Date (or immediately prior to a Change in Control, if later than the Severance Start Date). If, however, an outstanding Equity Award is to vest or the amount of the award to vest would otherwise be determined based on the achievement of performance criteria, then the Equity Award will vest assuming the performance criteria had been achieved at [ ]% of the target levels for the relevant performance period(s).

d. ***Extended Post-Termination Exercise Period.*** Your outstanding and vested stock options and stock appreciation rights as of your termination of employment date will remain exercisable until the [ ]-month anniversary of the termination of employment date; provided, however, that the post-termination exercise period for any individual stock option or stock appreciation right will not extend beyond the earlier of its original maximum term or the tenth (10th) anniversary of the original date of grant, subject to earlier termination upon a Change in Control or similar corporate transaction as set forth in the applicable equity plan.

2. **Severance Benefits for Termination Without Cause Other than During the Change in Control Period**

If you become eligible for Severance Benefits under Section 4.2 of the Plan (due to a termination of your employment without Cause which occurs other than during the Change in Control Period, and which is not due to your death or Disability, as described more fully in the Plan), then subject to the terms and conditions of the Plan, you will receive:

a. ***Cash Severance Benefits.*** A cash severance benefit equal to [the sum of: (a) [ ] months of your annualized Base Pay, plus (b) a pro-rated amount of the average aggregate amount of the actual bonus payments paid to you during each of the two fiscal years immediately preceding the fiscal year in which your Involuntary Termination date occurs [provided, however, that if the duration of your employment with the Company (or any parent or subsidiary of the Company) did not entitle you to a bonus in a prior fiscal year, such portion instead will be determined using a pro-rated amount of your Target Bonus in the year of your Involuntary Termination]]. For purposes of calculating your pro-rata bonus under clause (b), the pro-rata portion (or percentage) will calculated by reference to the number of days that elapsed in the fiscal year of your termination of employment between the first day of such fiscal year and the date of your termination of employment divided by 365. Such cash severance benefit will be paid in continued and equal installments in accordance with the Company's then current regular payroll practice during the period immediately following your Separation from Service that is equal to the number of months set forth in clause (a) above; provided, however, that (A) no amounts will be payable to you prior to the Severance Start Date, and (B) to the extent such cash severance benefits are exempt from Section 409A, the Company retains the right to elect to instead pay such amounts in a single lump sum on the Severance Start Date.

b. ***Health Benefits.*** Payment or reimbursement of premiums for continued health coverage under COBRA (or taxable lump sum payment in lieu of thereof, as applicable, and as described in Section 4.3 of the Plan) will be provided for a period of [ ] months following your separation from service with the Company.

[c. ***Equity Award Vesting Acceleration.*** Accelerated vesting of your Equity Awards with respect to [ ] of the then-unvested and outstanding Shares subject to your Equity Awards, with such vesting acceleration effective as of the Severance Start Date. If, however, an outstanding Equity Award is to vest or the amount of the award to vest would otherwise be determined based on the achievement of performance criteria, then the Equity Award will vest assuming the performance criteria had been achieved at [ ]% of the target levels for the relevant performance period(s).][1]

In no event will you receive severance benefits under both Section 1 and Section 2 of this Participation Agreement. For the avoidance of doubt, if (A) you incur a termination without Cause prior to a Change in Control that qualifies you for cash severance benefits under Section 4.2 of the Plan as described in Section 2 of this Participation Agreement and (B) a Change in Control occurs within the three (3)-month period following your termination without Cause that qualifies you for the superior benefits under Section 4.1 of the Plan as described in Section 1 of this Participation Agreement, then you will cease to receive continued installment payments of cash severance benefits under Section 2 of this Participation Agreement and will instead be entitled to a lump-sum payment of the cash severance benefit amount calculated under Section 1 of this Participation Agreement less the amount of any cash severance benefit amounts already paid to you under Section 2 of this Participation Agreement, and which amount will be paid to you no later than ten (10) days following the Change in Control.

In order to receive any Severance Benefits for which you otherwise become eligible under the Plan, you must sign and deliver to the Company the Release, which must have become effective and irrevocable prior to the Release Deadline Date. Also, as explained in the Plan, your Severance Benefits (if any) will be reduced if necessary to avoid your Severance Benefits from becoming subject to "golden parachute" excise taxes under the Internal Revenue Code, if such reduction would result in your receipt of a greater net after tax economic benefit.

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[1] This provision only applicable to those certain Eligible Employees who sign and return their individual Participation Agreement to the Company prior to August 31, 2018.

By your signature below, you and the Company agree that your participation in the Plan is governed by this Participation Agreement and the provisions of the Plan. Your signature below confirms that: (1) you have received a copy of the Change in Control and Severance Plan and Summary Plan Description; (2) you have carefully read this Participation Agreement and the Change in Control and Severance Plan and Summary Plan Description; and (3) decisions and determinations by the Administrator under the Plan will be final and binding on you and your successors.

SUNRUN INC.	**[ELIGIBLE EMPLOYEE NAME]**
Signature	Signature
Name	Date
Title	

Attachment: Sunrun Inc. Key Employee Change in Control and Severance Plan

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

Exhibit 10.2

**CONSENT AND FIRST AMENDMENT TO
SECOND AMENDED AND RESTATED CREDIT AGREEMENT AND
THIRD AMENDMENT TO AMENDED AND RESTATED
CASH DIVERSION AND COMMITMENT FEE GUARANTY**

This CONSENT AND FIRST AMENDMENT TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT AND THIRD AMENDMENT TO AMENDED AND RESTATED CASH DIVERSION AND COMMITMENT FEE GUARANTY, dated as of July 18, 2018 (this "Amendment"), is entered into among the undersigned in connection with (a) that certain Second Amended and Restated Credit Agreement, dated as of March 27, 2018, among Sunrun Hera Portfolio 2015-A, LLC, a Delaware limited liability company, as Borrower (the "Borrower"), the financial institutions as Lenders from time to time party thereto (the "Lenders"), and Investec Bank PLC, as Administrative Agent for the Lenders (in such capacity, the "Administrative Agent") and as Issuing Bank (in such capacity, the "Issuing Bank") (the "Credit Agreement" and as amended by this Amendment, the "Amended Credit Agreement") and (b) the Cash Diversion and Commitment Fee Guaranty (as in effect prior to the date hereof, the "Guaranty" and as amended by this Amendment, the "Amended Guaranty"). Capitalized terms which are used but not otherwise defined herein shall have the meanings ascribed to such terms in the Amended Credit Agreement and the rules of construction set forth in Section 1.02 of the Credit Agreement apply to this Amendment.

W I T N E S S E T H

WHEREAS, the Borrower wishes to obtain, and the Administrative Agent and the Required Lenders wish to provide, consent to the acquisition by the Borrower of Sunrun Ulysses Manager 2018, LLC, a Delaware limited liability company and a Tax Equity Holdco (such acquisition, the "Tax Equity Holdco Acquisition"); and

WHEREAS, the Borrower and the Sponsor also wish to make, and the undersigned also wish to agree to make, certain additional amendments to the Credit Agreement and the Guaranty as provided herein.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

I. Amendments to the Credit Agreement. Subject to the satisfaction of the conditions set forth in Article IV below, the following amendments to the Credit Agreement are hereby accepted and agreed by the parties hereto:

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

1. Amendment to Section 1.01. The following defined terms in Section 1.01 of the Credit Agreement are hereby amended and restated in their entirety as follows:

> "“Ulysses 2018 LLC Agreement” shall mean that certain Amended and Restated Operating Agreement of Sunrun Ulysses Owner 2018, LLC, dated as of March 20, 2018, entered into by and between Sunrun Ulysses Manager 2018, LLC and [***]."

2. New Section 7.20. Article VII of the Credit Agreement is hereby amended by inserting the following as a new Section 7.20:

> “The Borrower shall not cause or otherwise permit any [***] Project (as defined in the Ulysses 2018 LLC Agreement) to be treated as an Eligible Project.”

3. New Section 7.21. Article VII of the Credit Agreement is hereby amended by inserting the following as a new Section 7.21:

> “The Borrower shall not cause or otherwise permit any New Home Project (as defined in the Ulysses 2018 LLC Agreement) to be treated as an Eligible Project unless and until (i) such New Home Project has become a “Former New Home Project” (as defined in the Ulysses 2018 LLC Agreement), (ii) such Former New Home Project meets the conditions set forth in the definition of “Eligible Project” and (iii) a Final Inspection and Approval for such Former New Home Project has occurred.”

II. Amendment to the Cash Diversion and Commitment Fee Guaranty. Subject to the satisfaction of the conditions set forth in Article IV below, the definition of “Cash Diversion” in Section 1.01 of the Guaranty is hereby amended by (i) replacing the period at the end of clause (w) with the text “; and” and (ii) inserting the following as a new clause (x):

> “(x) if, for any quarterly period preceding a Calculation Date, expenses, including, without limitation, operations and maintenance expenses and payments under any production guarantee, incurred in connection with any and all [***] Projects (as defined in the Ulysses 2018 LLC Agreement) exceed aggregate revenues from such [***] Projects, in the amount of such excess.”

III. Limited Consent. At the request of the Borrower and subject to the satisfaction of the conditions set forth in Article IV below, the Administrative Agent and each of the undersigned Lenders hereby consents and agrees to the Tax Equity Holdco Acquisition, for which consent of the Administrative Agent and the Required Lenders is required pursuant to Section 2.05(b)(iii) of the Amended Credit Agreement (the “Consent”). The Consent granted pursuant to this Article III is limited precisely as written and shall not extend to any other provision of the Credit Agreement or the Amended Credit Agreement.

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IV. Conditions Precedent to Effectiveness. The amendments contained in Articles I and II and the Consent contained in Article III shall not be effective until the date (such date, the "Amendment Effective Date") that:

1. the Administrative Agent shall have received copies of this Amendment executed by the Borrower, the Sponsor and the Required Lenders, and acknowledged by the Administrative Agent; and

2. the Borrower shall have paid all fees, costs and expenses of the Administrative Agent and the Lenders incurred in connection with the execution and delivery of this Amendment (including third-party fees and out-of-pocket expenses of the Lenders' counsel and other advisors or consultants retained by the Administrative Agent).

V. Representations and Warranties. Each of the Borrower and, as applicable, the Sponsor represents and warrants to each Agent and each Lender Party that the following statements are true, correct and complete in all respects as of the Amendment Effective Date:

1. Power and Authority; Authorization. Each of the Borrower and the Sponsor has all requisite power and authority to execute, deliver and perform its obligations under this Amendment and the Borrower has all requisite power and authority to perform its obligations under the Amended Credit Agreement and the Sponsor has all requisite power and authority to perform its obligations under the Amended Guaranty. Each of the Borrower and the Sponsor has duly authorized, executed and delivered this Amendment.

2. Enforceability. Each of this Amendment and the Amended Credit Agreement is a legal, valid and binding obligation of the Borrower, enforceable against the Borrower in accordance with its terms, except to the extent that enforceability may be limited by (i) applicable bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting the enforcement of creditors' rights, (ii) the effect of general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law) or (iii) implied covenants of good faith and fair dealing. Each of this Amendment and the Amended Guaranty is a legal, valid and binding obligation of the Sponsor, enforceable against the Sponsor in accordance with its terms, except to the extent that enforceability may be limited by (i) applicable bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting the enforcement of creditors' rights, (ii) the effect of general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law) or (iii) implied covenants of good faith and fair dealing

3. Credit Agreement and Guaranty Representations and Warranties. Each of the representations and warranties set forth in the Credit Agreement (with respect to the Borrower) and the Guaranty (with respect to the Sponsor) is true and correct in all respects both before and after giving effect to this Amendment, except to the extent that any such representation and warranty relates solely to any earlier date, in which case such representation and warranty is true and correct in all respects as of such earlier date.

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

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4. Defaults. No event has occurred or is continuing as of the date hereof, or will result from the transactions contemplated hereby as of the date hereof, that would constitute an Event of Default or a Default.

VI. Limited Amendment. Except as expressly set forth herein, this Amendment shall not, by implication or otherwise, limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Lenders or the other Secured Parties under the Credit Agreement or any other Loan Document, and shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement or any other provision of the Credit Agreement or any other Loan Document, and each of the Borrower and the Sponsor acknowledges and agrees that each of the Loan Documents to which it is a party or otherwise bound shall continue in full force and effect and that all of its obligations thereunder shall be valid and enforceable and shall not be impaired or limited by the execution or effectiveness of this Amendment. From and after the Amendment Effective Date, all references to (i) the Credit Agreement in any Loan Document shall, unless expressly provided otherwise, refer to the Amended Credit Agreement and (ii) the Guaranty in any Loan Document shall, unless expressly provided otherwise, refer to the Amended Guaranty.

VII. Miscellaneous.

1. Counterparts. This Amendment may be executed in one or more duplicate counterparts and by facsimile or other electronic delivery and by different parties on different counterparts, each of which shall constitute an original, but all of which shall constitute a single document and when signed by all of the parties listed below shall constitute a single binding document.

2. Severability. In case any one or more of the provisions contained in this Amendment should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby, and the parties hereto shall enter into good faith negotiations to replace the invalid, illegal or unenforceable provision.

3. Governing Law, etc.. THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED UNDER, THE LAWS OF THE STATE OF NEW YORK. The provisions in Sections 12.08(b) through (d) and Section 12.09 of the Amended Credit Agreement shall apply, *mutatis mutandis*, to this Amendment and the parties hereto.

4. Loan Document. This Amendment shall be deemed to be a Loan Document for all purposes of the Amended Credit Agreement and each other Loan Document.

5. Headings. Paragraph headings have been inserted in this Amendment as a matter of convenience for reference only and it is agreed that such paragraph headings are not a part of this Amendment and shall not be used in the interpretation of any provision of this Amendment.

6. Execution of Documents. The undersigned Lenders hereby authorize and instruct the Administrative Agent to execute and deliver this Amendment.

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

[*Signature Pages Follow*]

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their duly authorized officers as of the day and year first above written.

SUNRUN HERA PORTFOLIO 2015-A, LLC,
as Borrower

By: Sunrun Hera Portfolio 2015-B, LLC
Its: Sole Member

By: Sunrun Hera Holdco 2015, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

SUNRUN INC.,
as Guarantor

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

[Signature Page to Consent and Amendment (2nd A&R AF Credit Agreement)]

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

INVESTEC BANK PLC,
as Administrative Agent

By: /s/ Andrew Nosworthy
Name: Andrew Nosworthy
Title: Authorised Signatory

By: /s/ Steven Cowland
Name: Steven Cowland
Title: Authorised Signatory

[Signature Page to Consent and Amendment (2nd A&R AF Credit Agreement)]

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

INVESTEC BANK PLC,
as Issuing Bank

By: /s/Andrew Nosworthy
Name: Andrew Nosworthy
Title: Authorised Signatory

By: /s/ Steven Cowland
Name: Steven Cowland
Title: Authorised Signatory

[Signature Page to Consent and Amendment (2nd A&R AF Credit Agreement)]

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

INVESTEC BANK PLC,
as Lender

By: /s/Andrew Nosworthy
Name: Andrew Nosworthy
Title: Authorised Signatory

By: /s/ Steven Cowland
Name: Steven Cowland
Title: Authorised Signatory

[Signature Page to Consent and Amendment (2nd A&R AF Credit Agreement)]

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

KEYBANK NATIONAL ASSOCIATION,
as Lender

By: /s/ Lisa A. Ryder
Name: Lisa A. Ryder
Title: Senior Vice President

[Signature Page to Consent and Amendment (2nd A&R AF Credit Agreement)]

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SUNTRUST BANK,
as Lender

By: /s/ Nina Johnson
Name: Nina Johnson
Title: Director

[Signature Page to Consent and Amendment (2nd A&R AF Credit Agreement)]

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SUNRUN GAIA PORTFOLIO 2016-A, LLC,
as Lender

By: Sunrun Gaia Holdco 2016, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

[Signature Page to Consent and Amendment (2nd A&R AF Credit Agreement)]

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

ABN AMRO CAPITAL USA LLC,
as Lender

By: /s/ Paul Snow
Name: Paul Snow
Title: Vice President

By: /s/ John Sullivan
Name: John Sullivan
Title: Managing Director

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

EAST WEST BANK,
as Lender

By: /s/ Christopher Simeone
Name: Christopher Simeone
Title: First Vice President

[Signature Page to Consent and Amendment (2nd A&R AF Credit Agreement)]

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Exhibit 10.3

CONSENT AND SECOND AMENDMENT TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT AND FOURTH AMENDMENT TO AMENDED AND RESTATED CASH DIVERSION AND COMMITMENT FEE GUARANTY

This CONSENT AND SECOND AMENDMENT TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT AND FOURTH AMENDMENT TO AMENDED AND RESTATED CASH DIVERSION AND COMMITMENT FEE GUARANTY, dated as of August 22, 2018 (this "Amendment"), is entered into among the undersigned in connection with (a) that certain Second Amended and Restated Credit Agreement, dated as of March 27, 2018, among Sunrun Hera Portfolio 2015-A, LLC, a Delaware limited liability company, as Borrower (the "Borrower"), the financial institutions as Lenders from time to time party thereto (the "Lenders"), and Investec Bank PLC, as Administrative Agent for the Lenders (in such capacity, the "Administrative Agent") and as Issuing Bank (in such capacity, the "Issuing Bank") (as in effect prior to the date hereof, the "Credit Agreement" and as amended by this Amendment, the "Amended Credit Agreement") and (b) the Cash Diversion and Commitment Fee Guaranty (as in effect prior to the date hereof, the "Guaranty" and as amended by this Amendment, the "Amended Guaranty"). Capitalized terms which are used but not otherwise defined herein shall have the meanings ascribed to such terms in the Amended Credit Agreement and the rules of construction set forth in Section 1.02 of the Credit Agreement apply to this Amendment.

W I T N E S S E T H

WHEREAS, the Borrower wishes to obtain, and the Administrative Agent and the Required Lenders wish to provide, consent to the acquisition by the Borrower of Sunrun Sirius Manager 2018, LLC, a Delaware limited liability company and a Tax Equity Holdco (such acquisition, the "Tax Equity Holdco Acquisition"); and

WHEREAS, the Borrower and the Sponsor also wish to make, and the undersigned also wish to agree to make, certain additional amendments to the Credit Agreement and the Guaranty as provided herein.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

I. Amendments to the Credit Agreement. Subject to the satisfaction of the conditions set forth in Article IV below, the following amendments to the Credit Agreement are hereby accepted and agreed by the parties hereto:

1. Amendments to Section 1.01.

(a) The definition of "Eligible Project" in Section 1.01 of the Credit Agreement is hereby amended by (i) deleting "and" at the end of clause (ix), (ii) replacing the period at the end of clause (x) with the text "; and" and (iii) inserting the following as a new clause (xi):

> "(xi) with respect to each Project located in the Commonwealth of Puerto Rico, the designation of such Project as an Eligible Project does not result in the Portfolio Value attributable to Projects located in the Commonwealth of Puerto Rico exceeding [***] percent ([***]%) of the Portfolio Value."

(b) The following defined term in Section 1.01 of the Credit Agreement is hereby amended and restated in its entirety as follows:

> "“Project State” shall mean each state of the United States of America, Washington, D.C. or the Commonwealth of Puerto Rico, to the extent approved under the applicable Tax Equity Documents."

(c) The following are hereby added as new defined terms to Section 1.01 of the Credit Agreement in the appropriate alphabetical order:

> "“Sirius 2018 LLC Agreement” shall mean that certain Amended and Restated Limited Liability Company Agreement of Sunrun Sirius Owner 2018, LLC, dated as of June 28, 2018, entered into by and between Sunrun Sirius Manager 2018, LLC and [***]."
>
> "“Sirius 2018 Purchase Agreement” shall mean that certain Master Purchase Agreement, dated as of June 28, 2018, entered into between Sponsor and Sunrun Sirius Owner 2018, LLC."

2. Amendment to Section 6.13(h). The first sentence of Section 6.13(h) of the Credit Agreement is hereby amended and restated in its entirety as follows:

> "On an annual basis, not later than (i) solely with respect to calendar year 2018, October 15, 2018, and (ii) otherwise, forty-five (45) days before renewal of the Borrower's property insurance policies, the Borrower shall cause a nationally recognized insurance or other applicable expert to perform and deliver, with a copy to the Administrative Agent, a probable maximum loss analysis (or analyses) with respect to the properties of the Borrower and the Relevant Parties."

3. New Section 7.22. Article VII of the Credit Agreement is hereby amended by inserting the following as a new Section 7.22:

> "The Borrower shall not cause or otherwise permit any [***] Project (as defined in the Sirius 2018 Purchase Agreement) to be treated as an Eligible Project."

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

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4. New Section 7.23. Article VII of the Credit Agreement is hereby amended by inserting the following as a new Section 7.23:

"The Borrower shall not cause or otherwise permit any New Home Project (as defined in the Sirius 2018 Purchase Agreement) to be treated as an Eligible Project unless and until (i) the Customer Agreement for such New Home Project has been transferred by the home builder the homebuyer, (ii) such Former New Home Project meets the conditions set forth in the definition of "Eligible Project" and (iii) there has occurred an inspection of the residential structure or building associated with such New Home Project conducted by an official of the applicable Governmental Authority when such structure or building is completed and ready for occupancy."

II. Amendment to the Cash Diversion and Commitment Fee Guaranty. Subject to the satisfaction of the conditions set forth in Article IV below, the definition of "Cash Diversion" in Section 1.01 of the Guaranty is hereby amended by (i) deleting "and" at the end of clause (w), (ii) deleting the period at the end of clause (x) and (iii) inserting the following as a new clause (y) and (z) :

"(y) if, for any quarterly period preceding a Calculation Date, expenses, including, without limitation, operations and maintenance expenses and payments under any production guarantee, incurred in connection with any and all [***] Projects (as defined in the Sirius 2018 Purchase Agreement) exceed aggregate revenues from such [***] Projects, in the amount of such excess; and

(z) the failure of Sunrun or the Class B Member (as such are terms defined in the Sirius 2018 LLC Agreement) to contribute any or all amounts required pursuant to the proviso in Section 5.06(b) of the Sirius 2018 LLC Agreement."

III. Limited Consent. At the request of the Borrower and subject to the satisfaction of the conditions set forth in Article IV below, the Administrative Agent and each of the undersigned Lenders hereby consents and agrees to the Tax Equity Holdco Acquisition, for which consent of the Administrative Agent and the Required Lenders is required pursuant to Section 2.05(b)(iii) of the Amended Credit Agreement (the "Consent"). The Consent granted pursuant to this Article III is limited precisely as written and shall not extend to any other provision of the Credit Agreement or the Amended Credit Agreement.

IV. Conditions Precedent to Effectiveness. The amendments contained in Articles I and II and the Consent contained in Article III shall not be effective until the date (such date, the "Amendment Effective Date") that:

1. the Administrative Agent shall have received copies of this Amendment executed by the Borrower, the Sponsor and the Lenders, and acknowledged by the Administrative Agent; and

2. the Borrower shall have paid all fees, costs and expenses of the Administrative Agent and the Lenders incurred in connection with the execution and delivery of this Amendment

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(including third-party fees and out-of-pocket expenses of the Lenders' counsel and other advisors or consultants retained by the Administrative Agent).

V. Representations and Warranties. Each of the Borrower and, as applicable, the Sponsor represents and warrants to each Agent and each Lender Party that the following statements are true, correct and complete in all respects as of the Amendment Effective Date:

1. Power and Authority; Authorization. Each of the Borrower and the Sponsor has all requisite power and authority to execute, deliver and perform its obligations under this Amendment and the Borrower has all requisite power and authority to perform its obligations under the Amended Credit Agreement and the Sponsor has all requisite power and authority to perform its obligations under the Amended Guaranty. Each of the Borrower and the Sponsor has duly authorized, executed and delivered this Amendment.

2. Enforceability. Each of this Amendment and the Amended Credit Agreement is a legal, valid and binding obligation of the Borrower, enforceable against the Borrower in accordance with its terms, except to the extent that enforceability may be limited by (i) applicable bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting the enforcement of creditors' rights, (ii) the effect of general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law) or (iii) implied covenants of good faith and fair dealing. Each of this Amendment and the Amended Guaranty is a legal, valid and binding obligation of the Sponsor, enforceable against the Sponsor in accordance with its terms, except to the extent that enforceability may be limited by (i) applicable bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting the enforcement of creditors' rights, (ii) the effect of general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law) or (iii) implied covenants of good faith and fair dealing.

3. Credit Agreement and Guaranty Representations and Warranties. Each of the representations and warranties set forth in the Credit Agreement (with respect to the Borrower) and the Guaranty (with respect to the Sponsor) is true and correct in all respects both before and after giving effect to this Amendment, except to the extent that any such representation and warranty relates solely to any earlier date, in which case such representation and warranty is true and correct in all respects as of such earlier date.

4. Defaults. No event has occurred or is continuing as of the date hereof, or will result from the transactions contemplated hereby as of the date hereof, that would constitute an Event of Default or a Default.

VI. Limited Amendment. Except as expressly set forth herein, this Amendment shall not, by implication or otherwise, limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Lenders or the other Secured Parties under the Credit Agreement or any other Loan Document, and shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement or any other provision of the Credit Agreement or any other Loan Document, and each of the Borrower and the Sponsor acknowledges and agrees that each of the Loan Documents to which it is a party or otherwise bound shall continue in full force and effect and that all of its obligations thereunder shall be valid and

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enforceable and shall not be impaired or limited by the execution or effectiveness of this Amendment. From and after the Amendment Effective Date, all references to (i) the Credit Agreement in any Loan Document shall, unless expressly provided otherwise, refer to the Amended Credit Agreement and (ii) the Guaranty in any Loan Document shall, unless expressly provided otherwise, refer to the Amended Guaranty.

VII. Miscellaneous.

1. Counterparts. This Amendment may be executed in one or more duplicate counterparts and by facsimile or other electronic delivery and by different parties on different counterparts, each of which shall constitute an original, but all of which shall constitute a single document and when signed by all of the parties listed below shall constitute a single binding document.

2. Severability. In case any one or more of the provisions contained in this Amendment should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby, and the parties hereto shall enter into good faith negotiations to replace the invalid, illegal or unenforceable provision.

3. Governing Law, etc.. THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED UNDER, THE LAWS OF THE STATE OF NEW YORK. The provisions in Sections 12.08(b) through (d) and Section 12.09 of the Amended Credit Agreement shall apply, *mutatis mutandis*, to this Amendment and the parties hereto.

4. Loan Document. This Amendment shall be deemed to be a Loan Document for all purposes of the Amended Credit Agreement and each other Loan Document.

5. Headings. Paragraph headings have been inserted in this Amendment as a matter of convenience for reference only and it is agreed that such paragraph headings are not a part of this Amendment and shall not be used in the interpretation of any provision of this Amendment.

6. Execution of Documents. The undersigned Lenders hereby authorize and instruct the Administrative Agent to execute and deliver this Amendment.

[*Signature Pages Follow*]

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IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their duly authorized officers as of the day and year first above written.

SUNRUN HERA PORTFOLIO 2015-A, LLC,
as Borrower

By: Sunrun Hera Portfolio 2015-B, LLC
Its: Sole Member

By: Sunrun Hera Holdco 2015, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

SUNRUN INC.,
as Guarantor

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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INVESTEC BANK PLC,
as Administrative Agent

By: ___/s/ Oliver Fricot___
Name: Oliver Fricot
Title: Authorised Signatory

By: ___/s/ James Haggie___
Name: James Haggie
Title: Authorised Signatory

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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INVESTEC BANK PLC,
as Issuing Bank

By: ___/s/ Oliver Fricot___
Name: Oliver Fricot
Title: Authorised Signatory

By: ___/s/ James Haggie__
Name: James Haggie
Title: Authorised Signatory

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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INVESTEC BANK PLC,
as Lender

By: ___/s/ Oliver Fricot___
Name: Oliver Fricot
Title: Authorised Signatory

By: ___/s/ James Haggie__
Name: James Haggie
Title: Authorised Signatory

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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KEYBANK NATIONAL ASSOCIATION,
as Lender

By: /s/ Lisa A. Ryder
Name: Lisa A. Ryder
Title: Senior Vice President

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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SUNTRUST BANK,
as Lender

By: /s/ Nina Johnson
Name: Nina Johnson
Title: Director

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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SILICON VALLEY BANK,
as Lender

By: ___/s/ Tai Pimputkar___
Name: Chaitali ("Tai") Pimputkar
Title: Vice President II

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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DEUTSCHE BANK AG, NEW YORK BRANCH,
as Lender

By: /s/ Nicole Byrns
Name: Nicole Byrns
Title: Director

DEUTSCHE BANK AG, NEW YORK BRANCH,
as Lender

By: /s/ Kyle Hatzes
Name: Kyle Hatzes
Title: Vice President

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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ING CAPITAL LLC,
as Lender

By: ___/s/ Thomas Cantello__
Name: Thomas Cantello
Title: Managing Director

By: ___/s/ Stefano Palombo__
Name: Stefano Palmbo
Title: Vice President

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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SUNRUN GAIA PORTFOLIO 2016-A, LLC,
as Lender

By: Sunrun Gaia Holdco 2016, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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MIGDAL MAKEFET PENSION AND PROVIDENT FUNDS LTD.,
as Lender

By: /s/ Asaf Shoman and Ruth Levy
Name: Asaf Shoman and Ruth Levy
Title: CIO and Head of Credit

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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MIGDAL INSURANCE COMPANY LTD,
as Lender

By: /s/ Asaf Shoham and Ruth Levy
Name: Asaf Shoham and Ruth Levy
Title: CIO and Head of Credit

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ABN AMRO CAPITAL USA LLC,
as Lender

By: ___/s/ Paul Snow___
Name: Paul Snow
Title: Vice President

By: ___/s/ Javier Ramirez___
Name: Javier Ramirez
Title: Director

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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BANKUNITED, N.A.,
as Lender

By: /s/ Justin Albright
Name: Justin Albright
Title: Senior Vice President

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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EAST WEST BANK,
as Lender

By: ___/s/ Christopher Simeone___
Name: Christopher Simeone
Title: First Vice President

[Signature Page to Consent and Second Amendment (2nd A&R AF Credit Agreement)]

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Exhibit 10.4

CONSENT AND THIRD AMENDMENT TO
SECOND AMENDED AND RESTATED CREDIT AGREEMENT AND FIFTH AMENDMENT TO AMENDED AND RESTATED CASH DIVERSION AND COMMITMENT FEE GUARANTY

This CONSENT AND THIRD AMENDMENT TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT AND FIFTH AMENDMENT TO AMENDED AND RESTATED CASH DIVERSION AND COMMITMENT FEE GUARANTY, dated as of September 25, 2018 (this "Amendment"), is entered into among the undersigned in connection with (a) that certain Second Amended and Restated Credit Agreement, dated as of March 27, 2018, among Sunrun Hera Portfolio 2015-A, LLC, a Delaware limited liability company, as Borrower (the "Borrower"), the financial institutions as Lenders from time to time party thereto (the "Lenders"), and Investec Bank PLC, as Administrative Agent for the Lenders (in such capacity, the "Administrative Agent") and as Issuing Bank (in such capacity, the "Issuing Bank") (as in effect prior to the date hereof, the "Credit Agreement" and as amended by this Amendment, the "Amended Credit Agreement") and (b) the Cash Diversion and Commitment Fee Guaranty (as in effect prior to the date hereof, the "Guaranty" and as amended by this Amendment, the "Amended Guaranty"). Capitalized terms which are used but not otherwise defined herein shall have the meanings ascribed to such terms in the Amended Credit Agreement and the rules of construction set forth in Section 1.02 of the Credit Agreement apply to this Amendment.

W I T N E S S E T H

WHEREAS, the Borrower wishes to obtain, and the Administrative Agent and the Required Lenders wish to provide, consent to the acquisition by the Borrower of (i) Sunrun Solar Owner Holdco VIII, LLC, a Delaware limited liability company and a Tax Equity Holdco, (ii) Sunrun Solar Owner Holdco XI, LLC, a California limited liability company and a Tax Equity Holdco, (iii) Sunrun Solar Owner Holdco XII, LLC, a Delaware limited liability company and a Tax Equity Holdco, (iv) Sunrun Solar Owner Holdco XVII, LLC, a Delaware limited liability company and a Tax Equity Holdco, and (v) Sunrun Solar Owner Holdco XVIII, LLC, a Delaware limited liability company and a Tax Equity Holdco (such acquisitions, collectively, the "Tax Equity Holdco Acquisitions"); and

WHEREAS, the Borrower and the Sponsor also wish to make, and the undersigned also wish to agree to make, certain additional amendments to the Credit Agreement and the Guaranty as provided herein.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

I. Amendments to the Credit Agreement. Subject to the satisfaction of the conditions set forth in Article IV below, the following amendments to the Credit Agreement are hereby accepted and agreed by the parties hereto:

1. Amendments to Section 1.01.

(a) The definition of "Collections" in Section 1.01 of the Credit Agreement is hereby amended by inserting the text "(other than Owner XI and Tenant XI, but only until the "Investor Member" under the applicable Tax Equity Documents first becomes an Affiliate of the Borrower)" immediately following the text "any Inverted Lease Opco" in clause (ii) thereof.

(b) The definition of "Major Decision" in Section 1.01 of the Credit Agreement is hereby amended by inserting the text ", Owner XI or Tenant XI" after the text "Partnership Flip Opco" in each instance where it appears.

(c) The definition of "Tax Equity Guaranty" in Section 1.01 of the Credit Agreement is hereby amended by replacing the period at the end thereof with the text "or any "Investor Member" in Tenant XI."

(d) The following defined term in Section 1.01 of the Credit Agreement is hereby amended and restated in its entirety as follows:

> ""Inverted Lease Opco Membership Interests" shall mean with respect to any Inverted Lease Opco (other than Owner XI and Tenant XI, but only until the "Investor Member" under the applicable Tax Equity Documents first becomes an Affiliate of the Borrower), the outstanding limited liability company interests issued by any such Inverted Lease Opco (including all Economic Interests and Voting Rights) and (b) with respect to Owner XI and Tenant XI (but only until the "Investor Member" under the applicable Tax Equity Documents first becomes an Affiliate of the Borrower), the outstanding managing member interests (including all such Economic Interests and Voting Rights applicable to the managing member) issued by any such Inverted Lease Opco."

(e) The following defined term in Section 1.01 of the Credit Agreement is hereby amended and restated in its entirety as follows:

> "Tax Equity Class A Member " shall mean (a) with respect to any Partnership Flip Opco, a member of such Partnership Flip Opco other than a Tax Equity Holdco and (b) with respect to Tenant XI, the "Investor Member" as defined in the Tax Equity Limited Liability Company Agreement of Tenant XI.

(f) The following are hereby added as new defined terms to Section 1.01 of the Credit Agreement in the appropriate alphabetical order:

> ""Owner XI" shall mean Sunrun Solar Owner XI, LLC, a California limited liability company."

"“Tenant XI” shall mean Sunrun Solar Tenant XI, LLC, a California limited liability company."

"“Holdco XI” shall mean Sunrun Solar Owner Holdco XI, LLC, a California limited liability company."

2. Amendment to Section 2.05(b)(i)(B). Section 2.05(b)(i)(B) of the Credit Agreement is hereby amended and restated in its entirety as follows:

> “(B) other than with respect to the “Owner VIII Fund” (as identified on Schedule 5.03(e)), if the Partnership Flip Fund proposed is an IRR Partnership Flip Fund, an audit of the financial model for such IRR Partnership Flip Fund by the Model Auditor; and”

3. Amendment to Section 3.01(c). Section 3.01(c) of the Credit Agreement is hereby amended by inserting the text “(other than Owner XI and Tenant XI, but only until the “Investor Member” under the applicable Tax Equity Documents first becomes an Affiliate of the Borrower)” immediately following the text “and the Inverted Lease Opcos”.

4. Amendment to Section 5.03(d). The second sentence of Section 5.03(d) of the Credit Agreement is hereby amended and restated in its entirety as follows:

> “Except for (i) the call rights of the Tax Equity Holdcos under the Tax Equity Documents, with respect to the membership interests of the Tax Equity Class A Members in the Tax Equity Opcos and (ii) the withdrawal right set forth in Section 9.05 of the Tax Equity Limited Liability Company Agreement of Tenant XI, there are no outstanding options, warrants or rights for conversion into or acquisition, purchase or transfer of any of the membership interests in a Tax Equity Opco.”

5. New Section 5.27. Article V of the Credit Agreement is hereby amended by inserting the following as a new Section 5.27:

> “The “Flip Point” (as defined in the Tax Equity Limited Liability Company Agreement of Sunrun Solar Owner VIII, LLC) shall occur no later than October 31, 2018.”

6. Amendment to Section 6.01(a)(i). Section 6.01(a)(i) of the Credit Agreement is hereby amended by inserting the text “except that the Financial Statements of Owner XI and Tenant XI shall be provided as consolidated into Holdco XI” immediately following the text "“Other Financial Information"".

7. Amendment to Section 6.01(a)(ii). Section 6.01(a)(ii) of the Credit Agreement is hereby amended by adding the following sentence to the end thereof:

> “The Financial Statements of Owner XI and Tenant XI shall be consolidated into Holdco XI.”

8. New Section 7.24. Article VII of the Credit Agreement is hereby amended by inserting the following as a new Section 7.24:

"The Borrower shall (a) cause all Projects owned by Owner XI that are subject to Prepaid Customer Agreements to be transferred to the Sponsor or an Affiliate of the Sponsor that is not a direct or indirect subsidiary of the Borrower by no later than the date falling 30 days after the first Payment Date occurring after the call option set forth in the Limited Liability Company Agreement or Owner XI becomes exercisable and (b) have caused to be prepaid prior to the date of such transfer any Loans required to be prepaid as a result of any such Project becoming subject to a Prepaid Customer Agreement pursuant to Section 4.03(b) or 4.03(f), as applicable."

II. Amendment to the Cash Diversion and Commitment Fee Guaranty. Subject to the satisfaction of the conditions set forth in Article IV below, the definition of "Cash Diversion" in Section 1.01 of the Guaranty is hereby amended by (i) deleting "and" at the end of clause (y), (ii) deleting the period at the end of clause (z) and replacing it with ";" and (iii) inserting the following as new clauses (aa), (bb), (cc), (dd) and (ee):

"(aa) solely in respect of the Tax Equity Limited Liability Company Agreements of Sunrun Solar Owner XII, LLC and Sunrun Solar Owner XVII, LLC, payments to Customers (or credits against payments due from Customers) in respect of any "performance guarantee" or similar warranty in respect of any Customer Agreement;

(bb) with respect to any of the funds designated as the "Owner VIII Fund", the "Owner XVIII Fund", the "Owner XII Fund" and the "Owner XVII Fund" by the Borrower on Schedule 5.03(e) of the Credit Agreement, any liability for U.S. federal income taxes (and associated interest and penalties) assessed against or imposed on any such applicable Partnership Flip Opco as a result of the application of the Budget Act or any subsequent law or guidance, but only if the applicable LLC Agreement does not contain an Acceptable Audit Election Provision;

(cc) any claims for indemnification by or in respect of the "Master Tenant Member" under the Tax Equity Limited Liability Company Agreement of Sunrun Solar Owner XI, LLC or the "Investor Member" under the Tax Equity Limited Liability Company Agreement of Sunrun Solar Owner XI, LLC;

(dd) any credit or similar setoff to any Customer that requires the Tax Equity Holdco to make a capital contribution to Owner XI or Tenant XI; and

(ee) any Taxes relating to or attributable to income of any Person other than Sunrun Solar Owner XVII, LLC that are imposed on or collected from Sunrun Solar Owner Holdco XVII, LLC under Treasury Regulations section 1.1502-6 (or any analogous provision of state, local or non-US law)."

III. Limited Consent. At the request of the Borrower and subject to the satisfaction of the conditions set forth in Article IV below, the Administrative Agent and each of the undersigned Lenders hereby consents and agrees to the Tax Equity Holdco Acquisitions, for which consent of the Administrative Agent and the Required Lenders is required pursuant to Sections 2.05(b)(iii) and 2.05(c)(iii) of the Amended Credit Agreement (the "Consent"). The Consent granted pursuant to this Article III is limited precisely as written and shall not extend to any other provision of the Credit Agreement or the Amended Credit Agreement.

IV. Conditions Precedent to Effectiveness. The amendments contained in Articles I and II and the Consent contained in Article III shall not be effective until the date (such date, the "Amendment Effective Date") that:

1. the Administrative Agent shall have received copies of this Amendment executed by the Borrower, the Sponsor and the Required Lenders, and acknowledged by the Administrative Agent;

2. the Borrower shall have paid all fees, costs and expenses of the Administrative Agent and the Lenders incurred in connection with the execution and delivery of this Amendment (including third-party fees and out-of-pocket expenses of the Lenders' counsel and other advisors or consultants retained by the Administrative Agent);

3. the Borrower shall have designated on Schedule 5.03(e) of the Credit Agreement (a) Sunrun Solar Tenant XI, LLC as an "Inverted Lease Tenant" and (b) both Sunrun Solar Owner XI, LLC and Sunrun Solar Tenant XI, LLC as "Inverted Lease Opcos"; and

4. the Administrative Agent shall have received copies of a consent to collateral assignment in respect of Sunrun Solar Owner XI, LLC and Sunrun Solar Tenant XI, LLC in substantially the form attached hereto as Exhibit A (the "Fund XI Consent"), executed by each of the parties named therein and which shall be deemed a "Collateral Document" for all purposes under the Loan Documents.

V. Representations and Warranties. Each of the Borrower and, as applicable, the Sponsor represents and warrants to each Agent and each Lender Party that the following statements are true, correct and complete in all respects as of the Amendment Effective Date:

1. Power and Authority; Authorization. Each of the Borrower and the Sponsor has all requisite power and authority to execute, deliver and perform its obligations under this Amendment and the Borrower has all requisite power and authority to perform its obligations under the Amended Credit Agreement and the Sponsor has all requisite power and authority to perform its obligations under the Amended Guaranty. Each of the Borrower and the Sponsor has duly authorized, executed and delivered this Amendment.

2. Enforceability. Each of this Amendment and the Amended Credit Agreement is a legal, valid and binding obligation of the Borrower, enforceable against the Borrower in accordance with its terms, except to the extent that enforceability may be limited by (i) applicable bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting the enforcement of creditors'

rights, (ii) the effect of general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law) or (iii) implied covenants of good faith and fair dealing. Each of this Amendment and the Amended Guaranty is a legal, valid and binding obligation of the Sponsor, enforceable against the Sponsor in accordance with its terms, except to the extent that enforceability may be limited by (i) applicable bankruptcy, insolvency, moratorium, reorganization or other similar laws affecting the enforcement of creditors' rights, (ii) the effect of general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law) or (iii) implied covenants of good faith and fair dealing.

3. Credit Agreement and Guaranty Representations and Warranties. Each of the representations and warranties set forth in the Credit Agreement (with respect to the Borrower) and the Guaranty (with respect to the Sponsor) is true and correct in all respects both before and after giving effect to this Amendment, except to the extent that any such representation and warranty relates solely to any earlier date, in which case such representation and warranty is true and correct in all respects as of such earlier date.

4. Defaults. No event has occurred or is continuing as of the date hereof, or will result from the transactions contemplated hereby as of the date hereof, that would constitute an Event of Default or a Default.

VI. Limited Amendment. Except as expressly set forth herein, this Amendment shall not, by implication or otherwise, limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Lenders or the other Secured Parties under the Credit Agreement or any other Loan Document, and shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement or any other provision of the Credit Agreement or any other Loan Document, and each of the Borrower and the Sponsor acknowledges and agrees that each of the Loan Documents to which it is a party or otherwise bound shall continue in full force and effect and that all of its obligations thereunder shall be valid and enforceable and shall not be impaired or limited by the execution or effectiveness of this Amendment. From and after the Amendment Effective Date, all references to (i) the Credit Agreement in any Loan Document shall, unless expressly provided otherwise, refer to the Amended Credit Agreement and (ii) the Guaranty in any Loan Document shall, unless expressly provided otherwise, refer to the Amended Guaranty.

VII. Miscellaneous.

1. Counterparts. This Amendment may be executed in one or more duplicate counterparts and by facsimile or other electronic delivery and by different parties on different counterparts, each of which shall constitute an original, but all of which shall constitute a single document and when signed by all of the parties listed below shall constitute a single binding document.

2. Severability. In case any one or more of the provisions contained in this Amendment should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby, and the parties

hereto shall enter into good faith negotiations to replace the invalid, illegal or unenforceable provision.

3. Governing Law, etc. THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED UNDER, THE LAWS OF THE STATE OF NEW YORK. The provisions in Sections 12.08(b) through (d) and Section 12.09 of the Amended Credit Agreement shall apply, *mutatis mutandis*, to this Amendment and the parties hereto.

4. Loan Document. This Amendment shall be deemed to be a Loan Document for all purposes of the Amended Credit Agreement and each other Loan Document.

5. Headings. Paragraph headings have been inserted in this Amendment as a matter of convenience for reference only and it is agreed that such paragraph headings are not a part of this Amendment and shall not be used in the interpretation of any provision of this Amendment.

6. Execution of Documents.

(a) The undersigned Lenders hereby authorize and instruct the Administrative Agent to execute and deliver this Amendment; and

(b) The undersigned Lenders and the Administrative Agent hereby authorize and instruct the Collateral Agent to execute and deliver the Fund XI Consent.

[*Signature Pages Follow*]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed and delivered by their duly authorized officers as of the day and year first above written.

SUNRUN HERA PORTFOLIO 2015-A, LLC,
as Borrower

By: Sunrun Hera Portfolio 2015-B, LLC
Its: Sole Member

By: Sunrun Hera Holdco 2015, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

SUNRUN INC.,
as Guarantor

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

INVESTEC BANK PLC,
as Administrative Agent

By: ___/s/ Andrew Nosworthy___
Name: Andrew Nosworthy
Title: Authorised Signatory

By: ___/s/ Andrew Neill___
Name: Andrew Neill
Title: Authorised Signatory

INVESTEC BANK PLC,
as Issuing Bank

By: /s/ Andrew Nosworthy
Name: Andrew Nosworthy
Title: Authorised Signatory

By: /s/ Andrew Neill
Name: Andrew Neill
Title: Authorised Signatory

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

INVESTEC BANK PLC,
as Lender

By: /s/ Andrew Nosworthy
Name: Andrew Nosworthy
Title: Authorised Signatory

By: /s/ Andrew Neill
Name: Andrew Neill
Title: Authorised Signatory

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

KEYBANK NATIONAL ASSOCIATION,
as Lender

By: /s/ Lisa A. Ryder
Name: Lisa A. Ryder
Title: Senior Vice President

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

SUNTRUST BANK,
as Lender

By: /s/ Nina Johnson
Name: Nina Johnson
Title: Director

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

SILICON VALLEY BANK,
as Lender

By: /s/ Tai Pimputkar
Name: Chaitali ("Tai") Pimputkar
Title: Vice President II

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

DEUTSCHE BANK AG, NEW YORK BRANCH,
as Lender

By: /s/ Nicole Byrns
Name: Nicole Byrns
Title: Director

By: /s/ Vilas Kuchinad
Name: Vilas Kuchinad
Title: Director

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

SUNRUN GAIA PORTFOLIO 2016-A, LLC,
as Lender

By: Sunrun Gaia Holdco 2016, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By: /s/ Robert Komin, Jr.
Name: Robert Komin, Jr.
Title: Chief Financial Officer

MIGDAL MAKEFET PENSION AND PROVIDENT FUNDS LTD.,
as Lender

By: /s/ Asaf Shoham and Ruth Levy
Name: Asaf Shoham and Ruth Levy
Title: CIO and Head of Credit

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

MIGDAL INSURANCE COMPANY LTD,
as Lender

By: /s/ Asaf Shoham and Ruth Levy
Name: Asaf Shoham and Ruth Levy
Title: CIO and Head of Credit

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

ABN AMRO CAPITAL USA LLC,
as Lender

By: /s/ Remco Jongkind
Name: Remco Jongkind
Title: Managing Director

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

BANKUNITED, N.A.,
as Lender

By: /s/ Justin Albright
Name: Justin Albright
Title: Senior Vice President

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

EAST WEST BANK,
as Lender

By: ___/s/ Christopher Simeone___
Name: Christopher Simeone
Title: First Vice President

[Signature Page to Consent and Third Amendment (2nd A&R AF Credit Agreement)]

ANNEX I

Exhibit A

Form of Fund XI Consent

MULTI-PARTY AGREEMENT

This **MULTI-PARTY AGREEMENT** ("Agreement") is entered into as of September 25, 2018, by and among **DEUTSCHE BANK TRUST COMPANY AMERICAS**, as collateral agent for the secured parties in respect of the TLA Credit Agreement and TLA Collateral Agency Agreement (each as defined below) (in such capacity, and together with its successors and permitted assigns, the "TLA Collateral Agent"), **DEUTSCHE BANK TRUST COMPANY AMERICAS**, as collateral agent for the secured parties in respect of the TLB Credit Agreement and TLB Collateral Agency Agreement (each as defined below) (in such capacity, and together with its successors and permitted assigns, the "TLB Collateral Agent" and, together with the TLA Collateral Agent, each a Collateral Agent), **SUNRUN HERA PORTFOLIO 2015-A, LLC**, a limited liability company organized under the laws of the State of Delaware (the "TLA Borrower"), **SUNRUN HERA PORTFOLIO 2015-B, LLC**, a limited liability company organized under the laws of the State of Delaware (the "TLB Borrower"), **SUNRUN SOLAR OWNER HOLDCO XI, LLC**, a California limited liability company ("Holdco XI"), **SUNRUN SOLAR OWNER XI, LLC**, a California limited liability company ("Owner XI"), **SUNRUN SOLAR TENANT XI, LLC**, a California limited liability company ("Tenant XI" and, together with Owner XI, each a "Company") and **[INVESTOR]**, a Delaware limited liability company ("Investor").

RECITALS

WHEREAS, Holdco XI and Tenant XI have entered into that certain Operating Agreement, dated as of June 13, 2013, with respect to Owner XI, as amended by that certain First Amendment to Operating Agreement, dated as of November 20, 2013 but effective as of September 30, 2013, as amended by that certain Second Amendment to Operating Agreement, dated as of April 1, 2014, as amended by that certain Third Amendment to Operating Agreement, dated as of August 29, 2014, as amended by that certain Fourth Amendment to Operating Agreement, dated as of April 28, 2015, and as amended by that certain Fifth Amendment to Operating Agreement, dated as of November 30, 2016 (as may be further amended, restated, supplemented or otherwise modified from time-to-time, the "Owner XI Operating Agreement");

WHEREAS, Holdco XI and Investor have entered into that certain Operating Agreement, dated as of June 13, 2013, with respect to Tenant XI, as amended by that certain First Amendment to Operating Agreement, dated as of November 20, 2013 but effective as of September 30, 2013, as amended by that certain Second Amendment to Operating Agreement, dated as of April 1, 2014, as amended by that certain Third Amendment to Operating Agreement, dated as of August 29, 2014, as amended by that certain Fourth Amendment to Operating Agreement, dated as of December 29, 2014, as amended by that certain Fifth Amendment to Operating Agreement, dated as of April 28, 2015, and as amended by that certain Sixth Amendment to Operating Agreement, dated as of November 30, 2016 (as may be further amended, restated, supplemented or otherwise modified

from time-to-time, the "Tenant XI Operating Agreement" and, together with the Owner XI Operating Agreement, each an "Operating Agreement");

WHEREAS, as of the date hereof, (a) Sunrun Hera Holdco 2015, LLC is the owner of 100% of the membership interests in TLB Borrower (the "TLB Borrower Membership Interests"), (b) TLB Borrower is the owner of 100% of the membership interests in TLA Borrower (the "TLA Borrower Membership Interests"), (c) TLA Borrower is the owner of 100% of the membership interests in Holdco XI (the "Holdco XI Interests"), (d) Holdco XI is (i) the owner of a variable percentage of the membership interests in Owner XI, currently equal to a 50.01% percentage interest (the "Holdco XI Owner Interests"), (ii) the managing member of Owner XI, (iii) the owner of a variable percentage of the membership interests in Tenant XI, currently equal to a 0.01% percentage interest (the "Holdco XI Tenant Interests" and, together with the Holdco XI Owner Interests, the "Managing Member Membership Interests") and (iv) the managing member of Tenant XI, (e) Tenant XI is the owner of a variable percentage of the membership interests in Owner XI, currently equal to a 49.99% interest and (f) Investor is the owner of a variable percentage of the membership interests in Tenant XI, currently equal to a 99.99% interest;

WHEREAS, the TLA Borrower has entered or is about to enter into financing arrangements with certain lenders from time to time party thereto (hereinafter, the "TLA Lenders"), INVESTEC BANK, PLC, as administrative agent for the TLA Lenders (in such capacity, and together with its successors and permitted assigns, the "TLA Administrative Agent") and certain other secured parties under, among other documents, (i) that certain Second Amended and Restated Credit Agreement, dated as of March 27, 2018 (as the same has been or may be amended, restated, supplemented or otherwise modified from time to time, the "TLA Credit Agreement") amongst the TLA Borrower, the TLA Lenders, the TLA Administrative Agent and the issuing bank party thereto from time to time and (ii) that certain Collateral Agency and Intercreditor Agreement, dated as of January 15, 2016 (as the same has been or may be amended, restated, supplemented or otherwise modified from time to time, the "TLA Collateral Agency Agreement") amongst the TLA Borrower, the TLA Collateral Agent, Deutsche Bank Trust Company Americas, as collateral agent and each other secured party thereto from time to time (each secured party including the TLA Lenders, a "TLA Secured Party"), pursuant to which TLA Lenders may from time to time make loans and advances and together with the other TLA Secured Parties shall provide other financial accommodations to the TLA Borrower, secured by security interests (collectively, the "TLA Security Interests") granted in favor of the TLA Collateral Agent over, among other things, all right, title and interest in (i) the TLA Borrower Membership Interests granted by TLB Borrower, (ii) the Holdco XI Membership Interests granted by TLA Borrower and (iii) the Managing Member Membership Interests granted by Holdco XI, including, in each case and without limitation, the rights to payment of distributions on account thereof;

WHEREAS, the TLB Borrower has entered or is about to enter into financing arrangements with certain lenders from time to time party thereto (hereinafter, the "TLB Lenders" and, together with the TLA Lenders, the "Lenders"), INVESTEC BANK, PLC, as administrative agent for the TLB Lenders (in such capacity, and together with its successors and permitted assigns, the "TLB Administrative Agent" and, together with the TLA Credit Agreement, each an "Administrative Agent") and certain other secured parties under, among other documents, (i) that certain Amended and Restated Credit Agreement, dated as of March 27, 2018 (as the same has been or may be amended, restated, supplemented or otherwise modified from time to time, the "TLB Credit

Agreement" and, together with the TLA Credit Agreement, each a "Credit Agreement") amongst the TLB Borrower, the TLB Lenders and the TLB Administrative Agent and (ii) that certain Collateral Agency and Intercreditor Agreement, dated as of January 15, 2016 (as the same has been and may be amended, restated, supplemented or otherwise modified from time to time, the "TLB Collateral Agency Agreement") amongst the TLB Borrower, the TLB Collateral Agent, Deutsche Bank Trust Company Americas, as collateral agent and each other secured party thereto from time to time (each secured party including the TLB Lenders, a "TLB Secured Party", and collectively with each TLA Secured Party, each a "Secured Party"), pursuant to which TLB Lenders may from time to time make loans and advances and together with the other TLB Secured Parties shall provide other financial accommodations to the TLB Borrower, secured by security interests (collectively, the "TLB Security Interests") granted in favor of the TLB Collateral Agent over, among other things, the TLB Borrower Membership Interests granted by Sunrun Hera Holdco 2014, LLC, including without limitation the rights to payment of distributions on account thereof;

WHEREAS, in order to induce each Collateral Agent the Lenders and the other Secured Parties to extend to Borrower financing arrangements pursuant to the Credit Agreements, each Collateral Agent requires that TLA Borrower, TLB Borrower, Holdco XI, Owner XI, Tenant XI and Investor enter into this Agreement, for the benefit of each Collateral Agent, Administrative Agent and the Secured Parties.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, TLA Borrower, TLB Borrower, Holdco XI, Owner XI, Tenant XI, Investor and each Collateral Agent agree as follows:

1. <u>Acknowledgement of Pledged Equity</u>

(a) TLB Borrower represents and warrants that the TLB Borrower Membership Interests in Term Loan B Borrower and all proceeds thereof are pledged to the TLB Collateral Agent pursuant to the TLB Security Interests, and each are subject to the security interest and lien of the TLB Collateral Agent, for the benefit of the TLB Secured Parties, as security for all existing and hereafter arising obligations, liabilities and indebtedness arising under the TLB Credit Agreement and any other related Loan Documents as defined therein.

(b) TLA Borrower and Holdco XI represent and warrant that the TLA Borrower Membership Interests, the Holdco XI Interests, the Holdco XI Owner Interests and the Holdco XI Tenant Interests (collectively, the "TLA Pledged Interests"), and all proceeds thereof are pledged to the TLA Collateral Agent pursuant to the TLA Security Interests, and each are subject to the security interest and lien of the TLA Collateral Agent, for the benefit of the TLA Secured Parties, as security for all existing and hereafter arising obligations, liabilities and indebtedness arising under the TLA Credit Agreement and any other related Loan Documents as defined therein.

(c) Investor, Owner XI and Tenant XI acknowledge receipt of this notice and hereby consent to:

(i) the grant of the TLA Security Interests over (A) the TLA Pledged Interests and (B) all proceeds of the foregoing. Investor, Owner XI and Tenant XI acknowledge and agree that, after an Event of Default (as defined in the TLA Credit Agreement), the TLA Collateral Agent may elect (in its sole discretion) to exercise certain remedies with respect to such TLA Pledged Interests, including, but not limited to, the foreclosure of the TLA Collateral Agent's security interests and liens thereon and the retention or disposition of such TLA Pledged Interests; provided, that, a foreclosure on the (x) TLA Borrower Membership Interests shall be subject to the conditions set forth in clauses (B), (F) and (G) below and (y) Managing Member Membership Interests of Owner XI or Tenant XI (or both) shall be subject to the satisfaction of each of the following conditions: (A) the subsequent owner (including the TLA Collateral Agent or its nominee or designee) shall (1) agree to be bound by all of the terms and provisions of the applicable Operating Agreement(s) and deliver to Investor a customary assumption agreement with respect to obligations under the applicable Operating Agreement, and (2) confirm that the applicable representations and warranties set forth in Article IV of each Operating Agreement are true and correct with respect to it, (B) during the Recapture Period (as defined in the applicable Operating Agreement), the entity consummating the foreclosure is not a tax-exempt entity within the meaning of Section 168(h) of the Code (as defined in the applicable Operating Agreement), (C) such foreclosure will not cause Owner XI or Tenant XI to be classified as an entity other than a partnership (or cause Owner XI or Tenant XI to be treated as a publicly traded partnership taxable as a corporation) for purposes of the Code (as defined in the applicable Operating Agreement), (D) any consents, approvals or permits from a governmental authority required in connection with such transfer shall have been obtained, (E) such foreclosure does not violate any provision of Applicable Law (as defined in the applicable Operating Agreement) in any material respect, (F) the subsequent owner is not engaged in any pending action, suit or proceeding against Investor, it being understood that the foreclosure on the TLA Pledged Interests, shall not, in itself, be deemed to be any such action, suit or proceeding and (G) the entity consummating the foreclosure is not described or designated in the Specially Designated Nationals and Blocked Persons List of the Office of Foreign Assets Control and satisfies the requirements of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (including the "know your customer" and similar regulations thereunder). Any subsequent disposition of TLA Pledged Interests by the TLA Collateral Agent, its nominees or designees shall be subject to Investor's consent, unless such disposition is to a person who is a Qualified Replacement Manager.

(ii) the grant of the TLB Security Interests over (A) the TLB Borrower Membership Interests and (B) all proceeds of the foregoing. Investor, Owner XI and Tenant XI acknowledge and agree that, after an "Event of Default" (as defined in the TLB Credit Agreement) the TLB Collateral Agent may elect (in its sole discretion) to exercise certain remedies with respect to the TLB Borrower Membership Interests, including, but not limited to, the foreclosure of the TLB Collateral Agent's security interests and liens thereon and the retention or disposition of such TLB Borrower Membership Interests; provided, that, a foreclosure on the TLB Borrower Membership Interests shall be subject to the satisfaction

of the following conditions: (A) during the Recapture Period (as defined in the applicable Operating Agreement), the entity consummating the foreclosure is not a tax-exempt entity within the meaning of Section 168(h) of the Code (as defined in the applicable Operating Agreement), (B) the subsequent owner is not engaged in any pending action, suit or proceeding against Investor, it being understood that the foreclosure on the TLB Borrower Membership Interests shall not, in itself, be deemed to be any such action, suit or proceeding, and (C) the entity consummating the foreclosure is not described or designated in the Specially Designated Nationals and Blocked Persons List of the Office of Foreign Assets Control and satisfies the requirements of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (including the "know your customer" and similar regulations thereunder). Any subsequent disposition of TLB Borrower Membership Interests by the TLB Collateral Agent, its nominees or designees shall be subject to Investor's consent, unless such disposition is to a person who is a Qualified Replacement Manager.

2. **Assignment**. This Agreement shall be binding upon Borrower, Holdco XI, Owner XI, Tenant XI and Investor and their respective successors and assigns and inure to the benefit of the Administrative Agent and Investor and their respective successors and assigns. This Agreement cannot be changed, modified or terminated without the express written consent of all of the parties hereto. Each Collateral Agent may, at any time, in its sole discretion, assign all of its right, title and interest in and to this Agreement to its successors and assigns and any such assignees shall be bound by this Agreement.

3. **Notices**. All demands, notices and communications hereunder, except as otherwise provided herein, shall be in writing and shall be deemed to have been duly given on the date received if personally delivered at or mailed by certified or registered mail, postage prepaid, sent by a nationally recognized overnight courier service such as Federal Express to:

(a) in the case of Borrower, Holdco XI, Owner XI or Tenant XI:

c/o Sunrun Inc.
595 Market St., 29th Floor
San Francisco, CA 94105
Facsimile: 415.727.3500
Attn: General Counsel

(b) with copy to, in the case of Owner XI or Tenant XI:

Sunrun Solar Owner Holdco XI, LLC
c/o Sunrun Inc.
595 Market St., 29th Floor
San Francisco, CA 94105
Facsimile: 415.727.3500
Attn: General Counsel

(c) in the case of the Administrative Agent

Investec Bank PLC,
as Administrative Agent
2 Gresham Street
Attn: Shelagh Kirkland

(d) in the case of Investor:

[to be inserted]

Any party wishing to change the person designated to receive notices or the address for notices may do so by complying with the provisions of this Section 4. Any notice given before such a change is not invalidated by the change

4. **Governing Law**. This Agreement is to be governed by the laws of the State of New York, excluding its conflict of laws provisions (other than Sections 5-1401 of the New York General Obligations Law).

5. **Counterparts**. This Agreement may be executed in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, and all of which when taken together shall constitute one and the same agreement. Delivery of an executed counterpart of a signature page of this Agreement by facsimile, portable document format (.pdf), or other electronic imaging means shall be effective as delivery of a manually executed counterpart of this Agreement.

6. **Additional Definitions**. The following terms shall have the following meanings when used herein:

"Relevant Experience" shall mean at least three (3) years of experience (either directly or through such Person's direct or indirect parent) as (i) the owner or manager or (ii) the operator or manager of, not less than one hundred (100) MWs of solar generation facilities in the United States.

"Qualified Replacement Manager" means a Person (i) that has, or has contracted with a person who has, the Relevant Experience and (ii) who is not a Disqualified Person (as defined in the applicable Operating Agreements).

[*Remainder of page intentionally blank; signature pages follow.*]

TLA BORROWER:

SUNRUN HERA PORTFOLIO 2015-A, LLC,
a Delaware limited liability company

By: Sunrun Hera Portfolio 2015-B, LLC
Its: Sole Member

By: Sunrun Hera Holdco 2015, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By:_________________________
Name: Robert Komin Jr.
Title: Chief Financial Officer

TLB BORROWER:

SUNRUN HERA PORTFOLIO 2015-B, LLC,
a Delaware limited liability company

By: Sunrun Hera Holdco 2015, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By:_________________________
Name: Robert Komin Jr.
Title: Chief Financial Officer

HOLDCO XI:

SUNRUN SOLAR OWNER HOLDCO XI, LLC,
a California limited liability company

By: Sunrun Hera Portfolio 2015-A, LLC
Its: Sole Member

By: Sunrun Hera Portfolio 2015-B, LLC
Its: Sole Member

By: Sunrun Hera Holdco 2015, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By:_________________________
Name: Robert Komin Jr.
Title: Chief Financial Officer

OWNER XI:

SUNRUN SOLAR OWNER XI, LLC,
a California limited liability company

By: Sunrun Solar Owner Holdco XI, LLC,
Its: Managing Member

By: Sunrun Hera Portfolio 2015-A, LLC
Its: Sole Member

By: Sunrun Hera Portfolio 2015-B, LLC
Its: Sole Member

By: Sunrun Hera Holdco 2015, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By:_________________________
Name: Robert Komin Jr.
Title: Chief Financial Officer

TENANT XI:

SUNRUN SOLAR TENANT XI, LLC,
a California limited liability company

By: Sunrun Solar Owner Holdco XI, LLC,
Its: Managing Member

By: Sunrun Hera Portfolio 2015-A, LLC
Its: Sole Member

By: Sunrun Hera Portfolio 2015-B, LLC
Its: Sole Member

By: Sunrun Hera Holdco 2015, LLC
Its: Sole Member

By: Sunrun Inc.
Its: Sole Member

By:_________________________
Name: Robert Komin Jr.
Title: Chief Financial Officer

INVESTOR:

[INVESTOR],
a Delaware limited liability company

By:_________________________
Name:
Title:

TLA COLLATERAL AGENT:

DEUTSCHE BANK TRUST COMPANY AMERICAS,
as TLA Collateral Agent

By:________________________
Name:
Title:

TLB COLLATERAL AGENT:

DEUTSCHE BANK TRUST COMPANY AMERICAS,
as TLB Collateral Agent

By:_________________________
Name:
Title:

Exhibit 31.1

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, Lynn Jurich, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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: November 7, 2018

By: /s/ Lynn Jurich

Lynn Jurich
Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

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, Bob Komin, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q 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: November 7, 2018

By: /s/ Bob Komin

Bob Komin
Chief Financial Officer
(Principal Accounting and Financial Officer)

Exhibit 32.1

Certifications Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002
(18 U.S.C. Section 1350)

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 Quarterly Report on Form 10-Q for the period ended September 30, 2018 (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: November 7, 2018

By: /s/ Lynn Jurich

Lynn Jurich
Chief Executive Officer and Director
(Principal Executive Officer)

By: /s/ Bob Komin

Bob Komin
Chief Financial Officer
(Principal Accounting and Financial Officer)