

Vivint Solar, Inc.
Form 10-Q
November 06, 2018

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended September 30, 2018

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

Commission File Number: 001-36642

VIVINT SOLAR, INC.

(Exact name of registrant as specified in its charter)

Delaware	45-5605880
(State or other jurisdiction of	(I.R.S. Employer
incorporation or organization)	Identification Number)
1800 West Ashton Blvd.	
Lehi, UT	84043
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (877) 404-4129

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

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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, smaller reporting company, or an emerging growth company. See the definitions 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 1, 2018, the registrant had 119,319,921 shares of common stock, \$0.01 par value per share, outstanding.

Vivint Solar, Inc.

Quarterly Report on Form 10-Q

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PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

Vivint Solar, Inc.

Condensed Consolidated Balance Sheets

(In thousands, except par value and footnote 1)

(Unaudited)

	September 30, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 188,627	\$ 108,452
Accounts receivable, net	19,910	19,665
Inventories	15,780	22,597
Prepaid expenses and other current assets	24,662	34,049
Total current assets	248,979	184,763
Restricted cash and cash equivalents	68,341	46,486
Solar energy systems, net	1,858,743	1,673,532
Property and equipment, net	11,082	15,078
Intangible assets, net	676	862
Prepaid tax asset, net	—	505,883
Other non-current assets, net	28,696	37,325
TOTAL ASSETS⁽¹⁾	\$ 2,216,517	\$ 2,463,929
LIABILITIES, REDEEMABLE NON-CONTROLLING INTERESTS AND EQUITY		
Current liabilities:		
Accounts payable	\$ 44,909	\$ 40,736
Accounts payable—related party	83	163
Distributions payable to non-controlling interests and redeemable non-controlling interests	11,236	16,437
Accrued compensation	25,789	20,992
Current portion of long-term debt	10,515	13,585
Current portion of deferred revenue	25,480	41,846
Current portion of capital lease obligation	2,305	4,166
Accrued and other current liabilities	37,328	29,675
Total current liabilities	157,645	167,600
Long-term debt, net of current portion	1,143,957	925,964
Deferred revenue, net of current portion	12,728	29,200
Capital lease obligation, net of current portion	648	1,599
Deferred tax liability, net	413,076	342,382
Other non-current liabilities	12,522	13,674

Total liabilities ⁽¹⁾	1,740,576	1,480,419
Commitments and contingencies (Note 17)		
Redeemable non-controlling interests	121,820	122,444
Stockholders' equity:		
Common stock, \$0.01 par value—1,000,000 authorized, 119,316 shares issued and outstanding as of September 30, 2018; 1,000,000 authorized, 115,099 shares issued and outstanding as of December 31, 2017	1,193	1,151
Additional paid-in capital	570,506	559,788
Accumulated other comprehensive income	95	6,905
(Accumulated deficit) retained earnings	(266,767)	213,107
Total stockholders' equity	305,027	780,951
Non-controlling interests	49,094	80,115
Total equity	354,121	861,066
TOTAL LIABILITIES, REDEEMABLE NON-CONTROLLING INTERESTS AND EQUITY	\$ 2,216,517	\$ 2,463,929

⁽¹⁾The Company's assets as of September 30, 2018 and December 31, 2017 include \$1,738.0 million and \$1,516.2 million consisting of assets of variable interest entities, or VIEs, that can only be used to settle obligations of the VIEs. These assets include solar energy systems, net, of \$1,636.3 million and \$1,486.0 million as of September 30, 2018 and December 31, 2017; cash and cash equivalents of \$78.9 million and \$17.3 million as of September 30, 2018 and December 31, 2017; accounts receivable, net, of \$11.1 million and \$5.1 million as of September 30, 2018 and December 31, 2017; other non-current assets, net of \$9.5 million and \$6.8 million as of September 30, 2018 and December 31, 2017; prepaid expenses and other current assets of \$1.8 million and \$1.0 million as of September 30, 2018 and December 31, 2017; and restricted cash and cash equivalents of \$0.4 million and \$0 as of September 30, 2018 and December 31, 2017. The Company's liabilities as of September 30, 2018 and December 31, 2017 included \$36.2 million and \$58.4 million of liabilities of VIEs whose creditors have no recourse to the Company. These liabilities include distributions payable to non-controlling interests and redeemable non-controlling interests of \$11.2 million and \$16.4 million as of September 30, 2018 and December 31, 2017; deferred revenue of \$11.2 million and \$36.0 million as of September 30, 2018 and December 31, 2017; long-term debt of \$8.3 million and \$0 as of September 30, 2018 and December 31, 2017; accrued and other current liabilities of \$4.5 million as of September 30, 2018 and December 31, 2017; and other non-current liabilities of \$1.0 million and \$1.4 million as of September 30, 2018 and December 31, 2017. For further information see Note 12—Investment Funds.

See accompanying notes to condensed consolidated financial statements.

Vivint Solar, Inc.

Condensed Consolidated Statements of Operations

(In thousands, except per share data)

(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Revenue:				
Operating leases and incentives	\$53,470	\$45,909	\$139,349	\$119,711
Solar energy system and product sales	24,346	29,230	87,515	81,537
Total revenue	77,816	75,139	226,864	201,248
Cost of revenue:				
Cost of revenue—operating leases and incentives	42,135	34,731	122,188	103,564
Cost of revenue—solar energy system and product sales	17,700	22,168	62,735	63,664
Total cost of revenue	59,835	56,899	184,923	167,228
Gross profit	17,981	18,240	41,941	34,020
Operating expenses:				
Sales and marketing	15,841	9,808	40,999	28,037
Research and development	475	896	1,472	2,687
General and administrative	29,803	19,379	71,533	60,259
Amortization of intangible assets	142	139	408	418
Total operating expenses	46,261	30,222	114,412	91,401
Loss from operations	(28,280)	(11,982)	(72,471)	(57,381)
Interest expense, net	18,715	16,148	46,973	47,707
Other (income) expense, net	(1)	195	(6,371)	1,186
Loss before income taxes	(46,994)	(28,325)	(113,073)	(106,274)
Income tax expense	25,698	9,375	79,693	23,932
Net loss	(72,692)	(37,700)	(192,766)	(130,206)
Net loss attributable to non-controlling interests and redeemable				
non-controlling interests	(64,824)	(44,605)	(190,038)	(155,383)
Net (loss attributable) income available to common stockholders	\$(7,868)	\$6,905	\$(2,728)	\$25,177
Net (loss attributable) income available per share to common				
stockholders:				
Basic	\$(0.07)	\$0.06	\$(0.02)	\$0.22
Diluted	\$(0.07)	\$0.06	\$(0.02)	\$0.21
Weighted-average shares used in computing net (loss attributable)				
income available per share to common stockholders:				
Basic	118,767	114,505	116,871	112,554
Diluted	118,767	119,465	116,871	117,825

See accompanying notes to condensed consolidated financial statements.

Vivint Solar, Inc.

Condensed Consolidated Statements of Comprehensive Income

(In thousands)

(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Net (loss attributable) income available to common stockholders	\$(7,868)	\$6,905	\$(2,728)	\$25,177
Other comprehensive income (loss):				
Unrealized gains (losses) on cash flow hedging instruments				
(net of tax effect of \$1,076, \$(331), \$2,247 and \$(1,076))	2,890	(497)	6,037	(1,612)
Less: Interest (expense) income on derivatives recognized into				
earnings (net of tax effect of \$(145), \$62, \$6,016 and \$5)	(390)	94	16,165	8
Total other comprehensive income (loss)	3,280	(403)	(10,128)	(1,604)
Comprehensive (loss) income	\$(4,588)	\$6,502	\$(12,856)	\$23,573

See accompanying notes to condensed consolidated financial statements.

Vivint Solar, Inc.

Condensed Consolidated Statements of Cash Flows

(In thousands)

(Unaudited)

	Nine Months Ended September 30,	
	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$(192,766)	\$(130,206)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	50,839	44,671
Amortization of intangible assets	408	418
Deferred income taxes	80,121	98,493
Stock-based compensation	9,884	9,501
Loss on solar energy systems and property and equipment	4,439	5,024
Non-cash interest and other expense	15,317	7,355
Reduction in lease pass-through financing obligation	(3,549)	(3,545)
(Gains) losses on interest rate swaps	(1,279)	1,193
Changes in operating assets and liabilities:		
Accounts receivable, net	(245)	(16,859)
Inventories	6,817	(8,517)
Prepaid expenses and other current assets	8,931	16,289
Prepaid tax asset, net	—	(62,972)
Other non-current assets, net	(8,042)	(5,921)
Accounts payable	941	994
Accrued compensation	4,390	1,500
Deferred revenue	(6,441)	11,673
Accrued and other liabilities	7,177	6,235
Net cash used in operating activities	(23,058)	(24,674)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Payments for the cost of solar energy systems	(233,548)	(211,225)
Payments for property and equipment	(129)	(672)
Proceeds from disposals of solar energy systems and property and equipment	2,335	1,952
Purchase of intangible assets	(223)	—
Proceeds from state tax credits	—	2,216
Net cash used in investing activities	(231,565)	(207,729)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from investment by non-controlling interests and redeemable non-controlling interests	194,921	162,291
Distributions paid to non-controlling interests and redeemable non-controlling interests	(41,729)	(33,774)
Proceeds from long-term debt	917,748	306,750
Payments on long-term debt	(693,782)	(164,935)
Payments for debt issuance and deferred offering costs	(21,209)	(13,677)

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Proceeds from lease pass-through financing obligation	2,491	2,467
Principal payments on capital lease obligations	(2,663)	(3,413)
Proceeds from issuance of common stock	876	603
Net cash provided by financing activities	356,653	256,312
NET INCREASE IN CASH AND CASH EQUIVALENTS, INCLUDING RESTRICTED AMOUNTS	102,030	23,909
CASH AND CASH EQUIVALENTS, INCLUDING RESTRICTED AMOUNTS—Beginning of period	154,938	123,439
CASH AND CASH EQUIVALENTS, INCLUDING RESTRICTED AMOUNTS—End of period	\$256,968	\$147,348
NONCASH INVESTING AND FINANCING ACTIVITIES:		
Accrued distributions to non-controlling interests and redeemable non-controlling interests	\$(5,201)	\$(4,512)
Costs of solar energy systems included in changes in accounts payable, accounts payable—related		
party, accrued compensation and accrued and other liabilities	\$4,682	\$(1,901)
Vehicles acquired under capital leases	\$1,079	\$715
Receivable for state tax credits recorded as a reduction to solar energy system costs	\$7	\$82

See accompanying notes to condensed consolidated financial statements.

Vivint Solar, Inc.

Notes to Condensed Consolidated Financial Statements

(Unaudited)

1. Organization

Vivint Solar, Inc. and its subsidiaries are collectively referred to as the “Company.” The Company most commonly offers solar energy to residential customers through long-term customer contracts, such as power purchase agreements (“PPAs”) and legal-form leases (“Solar Leases”). The Company also offers its customers the option to purchase solar energy systems (“System Sales”) through third-party loan offerings or a cash purchase. The Company enters into customer contracts through a sales organization that primarily uses a direct-to-home sales model. The long-term customer contracts under PPAs and Solar Leases are typically for 20 years and require the customer to make monthly payments to the Company.

The Company has formed various investment funds and entered into long-term debt facilities to monetize the recurring customer payments under its long-term customer contracts and the investment tax credits, accelerated tax depreciation and other incentives associated with residential solar energy systems. The Company uses the cash received from the investment funds, long-term debt facilities and cash generated from operations, including System Sales, to finance a portion of the Company’s variable and fixed costs associated with installing solar energy systems.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States (“GAAP”) and applicable rules and regulations of the Securities and Exchange Commission (“SEC”) 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 dated as of March 7, 2018. The unaudited condensed consolidated financial statements were prepared on the same basis as the audited consolidated financial statements and, in the opinion of management, reflect all adjustments (all of which were considered of normal recurring nature) considered necessary to present fairly the Company’s financial results. The results of the 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 for any other interim period or other future year.

The unaudited condensed consolidated financial statements reflect the accounts and operations of the Company and those of its subsidiaries in which the Company has a controlling financial interest. The Company uses a qualitative approach in assessing the consolidation requirement for variable interest entities (“VIEs”). This approach focuses on determining whether the Company has the power to direct the activities of the VIE that most significantly affect the VIE’s economic performance and whether the Company has the obligation to absorb losses, or the right to receive benefits, that could potentially be significant to the VIE. All of these determinations involve significant management judgments and estimates. The Company has determined that it is the primary beneficiary in the operational VIEs in which it has an equity interest. The Company evaluates its relationships with the VIEs on an ongoing basis to ensure that it continues to be the primary beneficiary. All intercompany transactions and balances have been eliminated in consolidation. For additional information, see Note 12—Investment Funds.

Certain prior period amounts have been reclassified to conform to current year presentation. These reclassifications did not have a significant impact on the consolidated financial statements.

Use of Estimates

The preparation of the condensed consolidated financial statements requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. The Company regularly makes significant estimates and assumptions including, but not limited to, investment tax credits ("ITCs"); revenue recognition; solar energy systems, net; the impairment analysis of long-lived assets; stock-based compensation; the provision for income taxes; the valuation of derivative financial instruments; the recognition and measurement of loss contingencies; and non-controlling interests and redeemable non-controlling interests. The Company bases its estimates on historical experience and on various other assumptions believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ materially from those estimates.

Liquidity

In order to grow, the Company requires cash to finance the deployment of solar energy systems. As of the date of this filing, the Company will require additional sources of cash beyond current cash balances, and currently available financing facilities to fund long-term planned growth. If the Company is unable to secure additional financing when needed, or upon desirable terms, the Company may be unable to finance installation of customers' systems in a manner consistent with past performance, cost of capital could increase, or the Company may be required to significantly reduce the scope of operations, any of which would have a material adverse effect on its business, financial condition, results of operations and prospects. While the Company believes additional financing is available and will continue to be available to support current levels of operations, the Company believes it has the ability and intent to reduce operations to the level of available financial resources for at least the next 12 months from the date of this report, if necessary.

Revenue from Contracts with Customers

The Company adopted ASU 2014-09, Revenue from Contracts with Customers, and its various updates ("Topic 606") effective January 1, 2018 using the modified retrospective method with a cumulative adjustment to retained earnings as of January 1, 2018. As such, only the current period presented in the Company's condensed consolidated statements of operations has been reported using the new revenue standard. The Company has applied Topic 606 to all customer contracts not completed by the initial date of application.

The Company currently accounts for PPAs, Solar Leases, and associated rebates and incentives as minimum lease payments from operating leases under ASC 840, Leases. However, the Company has determined that these agreements do not meet the definition of a lease under ASC 842, Leases, and these agreements will be accounted for in accordance with Topic 606 after the adoption of ASC 842. The revenue associated with these contracts with customers is currently shown together on the condensed consolidated statement of operations as revenue from operating leases and incentives. The Company will adopt ASC 842 effective January 1, 2019. The Company has determined that under Topic 606 there will be no change from current revenue recognition practices for its PPA revenue stream. For the Company's Solar Leases, the Company has concluded that the impact of adopting Topic 606 will be immaterial. Revenue from all of the Company's Solar Leases will be recognized on a straight-line basis over the contractual term; currently a significant majority of Solar Leases are already recognized on a straight-line basis. The Company has also concluded that there will be no material change related to the timing of revenue recognition for rebates and incentives.

The Company has analyzed the impact of Topic 606 on System Sales and other product sales and has concluded that the revenue recognition associated with these product sales did not change in the condensed consolidated financial statements. The Company will continue to show this revenue stream as solar energy system and product sales in the condensed consolidated statement of operations. The Company's principal performance obligation for System Sales is to design and install a solar energy system that is interconnected to the local power grid and granted permission to operate to the customer. When the solar energy system has been granted permission to operate, the customer retains all of the significant risks and rewards of ownership of the solar energy system. For certain System Sales, the Company provides limited post-sale services to monitor the productivity of the solar energy system for 20 years after it has been placed in service. The Company collects cash during the installation process and recognizes revenue for System Sales and other product sales at the placed-in-service date or product delivery date less any revenue allocated to monitoring services. The Company allocates a portion of the transaction price to the monitoring services by estimating the fair market price that the Company would charge for these services if offered separately from the sale of the solar energy system. As of September 30, 2018 and December 31, 2017, the Company had allocated deferred revenue of \$3.0 million and \$2.1 million to monitoring services that will be recognized over the term of the monitoring services. All costs to obtain and fulfill contracts associated with System Sales and other product sales are

expensed as a cost of revenue when the Company has fulfilled its performance obligation and the products have been placed into service or delivered to the customer.

The Company has assessed the impact of Topic 606 as it relates to the sales of ITCs through its lease pass-through fund arrangement. The Company has concluded that revenue related to the sale of ITCs through its lease pass-through arrangement is recognized when the related solar energy systems are placed in service as the Company has completed its performance obligation to transfer ITCs to the fund investors at that time. The fund investors contributed cash to the investment fund during the installation process as payment for the ITCs. The transaction price for the ITCs was estimated using the tax credit rate of 30% multiplied by the fair market value of the solar energy systems that were placed into service in the lease pass-through fund. All of the related solar energy systems were placed in service and all related revenue would have been recognized prior to September 30, 2016 under Topic 606. Prior to the adoption of Topic 606, the Company recognized this revenue evenly over the five-year ITC recapture period. This earlier recognition of the ITC lease pass-through revenue decreased revenue for the three and nine months ended September 30, 2018 by \$1.6 million and \$4.8 million and would have decreased revenue for the three and nine months ended September 30, 2017 by \$1.6 million and \$4.8 million. As all ITC sales revenue would have been recognized prior to September 30, 2016 under Topic 606, there is no deferred revenue related to ITC sales recorded after the adoption date of January 1, 2018, and there would have been no deferred revenue as of December 31, 2017. As shown below, the cumulative adjustment related to ITC revenue recognized into retained earnings, net of tax, as of January 1, 2018 was \$19.2 million.

As noted above, the Company adopted Topic 606 on a modified retrospective basis. However, if the Company adjusted the comparative period to reflect the adoption of Topic 606, the following adjustments would have been made to the condensed consolidated statement of operations for the three and nine months ended September 30, 2017 (in thousands, except per share data):

	Three Months Ended September 30, 2017			Nine Months Ended September 30, 2017		
	As Previously			As Previously		
	Revenue			Revenue		
	Reported	Adjustment	As Adjusted	Reported	Adjustment	As Adjusted
Revenue	\$75,139	\$ (1,561)	\$ 73,578	\$201,248	\$ (4,790)	\$ 196,458
Income tax expense	9,375	(424)	8,951	23,932	(1,299)	22,633
Net income available to common shareholders	6,905	(1,137)	5,768	25,177	(3,491)	21,686
Diluted earnings per share	0.06	(0.01)	0.05	0.21	(0.03)	0.18

Additionally, the following adjustments would have been made to the condensed consolidated balance sheet as of December 31, 2017 (in thousands):

	As Previously		Revenue
	Reported	Adjustment	As Adjusted
Current portion of deferred revenue	\$ 41,846	\$ (7,707)	\$ 34,139
Deferred revenue, net of current portion	29,200	(18,690)	10,510
Deferred tax liability, net	342,382	7,160	349,542
Retained earnings	213,107	(19,237)	193,870

Income Taxes

The Company adopted ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory (“ASU 2016-16”), effective January 1, 2018 using the modified retrospective method by removing the prepaid tax asset, net and recording a cumulative adjustment to retained earnings of \$493.1 million and to deferred tax liability, net of \$12.8 million as of January 1, 2018. As such, only the current periods presented in the Company’s condensed consolidated statements of operations have been reported using the new accounting standard. The Company now accounts for the income tax consequences of these intra-entity transfers, both current and deferred, as a component of income tax expense and deferred tax liability, net during the period in which the transfers occur.

The adoption of ASU 2016-16 had the following effect on the Company’s condensed consolidated statement of operations for the three and nine months ended September 30, 2018 (in thousands, except per share data):

	Three Months Ended September 30, 2018			Nine Months Ended September 30, 2018		
	Pre-Adoption			Pre-Adoption		
	Effect of			Effect of		
	Accounting	Adoption	As Reported	Accounting	Adoption	As Reported
Income tax expense	\$8,514	\$17,184	\$25,698	\$32,893	\$46,800	\$79,693
Net loss	(55,508)	(17,184)	(72,692)	(145,966)	(46,800)	(192,766)

Net loss attributable to common shareholders	9,316	(17,184)	(7,868)	44,072	(46,800)	(2,728)
Basic earnings per share	0.08	(0.15)	(0.07)	0.38	(0.40)	(0.02)
Diluted earnings per share	0.08	(0.15)	(0.07)	0.36	(0.38)	(0.02)

The Company adopted ASU 2018-02, Income Statement—Reporting Comprehensive Income (Topic 220):

Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income (“ASU 2018-02”), effective January 1, 2018. As permitted by ASU 2018-02, the Company has elected to reclassify the income tax effects of the Tax Cuts and Jobs Act (the “TCJA”) on items within accumulated other comprehensive income (“AOCI”) to retained earnings. The Company applied the amendments in this update in the period of adoption. The total amount the Company reclassified to retained earnings as a result of adopting ASU 2018-02 was approximately \$1.5 million. After applying this update, the Company had no stranded tax effects remaining in AOCI.

Derivative Financial Instruments

The Company adopted ASU 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities (“ASU 2017-12”), effective January 1, 2018. This update made targeted improvements to accounting for hedging activities by simplifying certain documentation and assessment requirements and eliminating the requirement to separately measure and report hedge ineffectiveness. The Company applied this update using a modified retrospective method to eliminate the separate measurement of hedge ineffectiveness by recording a cumulative-effect adjustment to retained earnings as of January 1, 2018. The net amount the Company recorded to retained earnings as a result of adopting ASU 2017-12 was approximately \$1.8 million.

Restricted Cash

The Company adopted ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force) (“ASU 2016-18”), effective January 1, 2018. This update clarified that transfers between cash and restricted cash are not reported as cash flow activities in the statements of cash flows. As such, restricted cash amounts are included with cash and cash equivalents in the beginning-of-period and end-of-period total amounts on the statements of cash flows. The Company applied this update retrospectively, which resulted in an adjustment to the beginning-of-period and end-of-period total amounts on the condensed consolidated statement of cash flows for the nine months ended September 30, 2017 to include restricted cash balances from those periods.

Recent Accounting Pronouncements

In July 2018, the Financial Accounting Standards Board (the “FASB”) issued ASU 2018-10 and ASU 2018-11, which clarify aspects of the guidance in ASU 2016-02, Leases (Topic 842). The objective of ASU 2016-02 is to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. This update primarily changes the recognition by lessees of lease assets and liabilities for leases currently classified as operating leases. Lessor accounting remains largely unchanged. This update is effective in fiscal years beginning after December 15, 2018 for public business entities. The amendments are required to be applied using a modified retrospective approach. However, ASU 2018-11 provides an additional transition method under which an entity will apply the updates in ASU 2016-02 as of the adoption date with a cumulative-effect adjustment to the opening balance of retained earnings. Under this additional transition method, periods ending prior to January 1, 2019 will be presented in accordance with ASC 840, and periods ending after January 1, 2019 will be presented in accordance with ASC 842. The Company will adopt this standard effective January 1, 2019 and plans to utilize the transition method permitted by ASU 2018-11. The Company has operating leases that will be affected by this update and the Company is still evaluating the full impact on its condensed consolidated financial statements and related disclosures. The impact is not expected to be significant to the Company’s condensed consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. This update expands the scope of Topic 718 to include share-based payments to nonemployees. Under current guidance, the measurement date for nonemployee equity awards is not established until the nonemployee’s performance is complete. This update states that the measurement date for nonemployee equity awards will now be established at the grant date. This amendment is effective for annual periods beginning after December 15, 2018 and is applied through a modified retrospective method with a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption. The Company has outstanding nonemployee equity awards that will be affected by this update. The impact to the Company will not be known until the date of adoption, as it will depend on the Company’s stock price on the adoption date. However, the Company currently marks all nonemployee awards to market at each reporting period and as such, the impact is not expected to be significant.

In August 2018, the FASB issued ASU 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. This update clarifies that entities should capitalize implementation costs incurred in cloud computing arrangements that are service contracts. Entities expense the capitalized costs over the term of the hosting arrangement. The service element of a hosting arrangement that is a service contract is not affected by this update, meaning service costs will continue to be expensed as incurred. This amendment is effective for fiscal periods beginning after December 15, 2019 for public business entities. The amendments in this update should be applied prospectively to all implementation costs incurred after the date of adoption or retrospectively. The Company is evaluating the impact of this update and currently anticipates using the prospective transition method.

3. Fair Value Measurements

The Company measures and reports its cash equivalents at fair value. The following tables set forth the fair value of the Company's financial assets and liabilities measured on a recurring basis by level within the fair value hierarchy (in thousands):

September 30, 2018				
	Level 1	Level 2	Level 3	Total
Financial Assets				
Interest rate swaps	\$—	\$131	\$ —	\$131
Financial Liabilities				
Interest rate swaps	\$—	\$1,280	\$ —	\$1,280

December 31, 2017				
	Level 1	Level 2	Level 3	Total
Financial Assets				
Interest rate swaps	\$—	\$14,028	\$ —	\$14,028
Financial Liabilities				
Interest rate swaps	\$—	\$1,280	\$ —	\$1,280

The interest rate swaps (Level 2) were valued using a discounted cash flow model which incorporates an assessment of the risk of non-performance by the interest rate swap counterparties and the Company. The valuation model uses various observable inputs including contractual terms, interest rate curves, credit spreads and measures of volatility. During the nine months ended September 30, 2018, the Company settled the interest rate swaps associated with its 2016 Term Loan Facility and Aggregation Facility. The settlement of the interest rate swaps on the 2016 Term Loan Facility, which were designated as hedges, resulted in a \$22.5 million realized gain that was recorded as a reduction to interest expense. The settlement of the interest rate swaps on the Aggregation Facility, which were not designated as hedges, resulted in a \$2.0 million realized gain that was recorded as other income.

The carrying values and fair values of the Company's long-term debt were as follows (in thousands):

	September 30, 2018		December 31, 2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Floating-rate long-term debt	\$521,081	\$521,080	\$757,044	\$757,044
Fixed-rate long-term debt	658,992	674,822	199,063	238,618
Total	\$1,180,073	\$1,195,902	\$956,107	\$995,662

The Company's outstanding principal balance of long-term debt is carried at cost. The Company estimated the fair values of its floating-rate debt facilities (Level 2) to approximate their carrying values as interest accrues at floating rates based on market rates. The Company's fixed-rate debt facilities (Level 2) were valued using quoted prices for the fixed rate debt facilities that are publicly traded, or quoted prices for corporate debt with similar terms for debt facilities that are not publicly traded.

4. Inventories

Inventories consisted of the following (in thousands):

	September 30, 2018	December 31, 2017
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Solar energy systems held for sale	\$ 14,801	\$ 21,971
Photovoltaic installation products	979	626
Total inventories	\$ 15,780	\$ 22,597

Solar energy systems held for sale are solar energy systems under construction that have yet to be interconnected to the power grid and that will be sold to customers. Solar energy systems held for sale are stated at the lower of cost, on a first-in, first-out basis, or net realizable value. Photovoltaic installation products are stated at the lower of cost, on an average cost basis, or net realizable value.

5. Solar Energy Systems

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

	September 30, 2018	December 31, 2017
System equipment costs	\$ 1,604,598	\$ 1,437,419
Initial direct costs related to solar energy systems	404,845	336,136
	2,009,443	1,773,555
Less: Accumulated depreciation and amortization	(178,180)	(129,640)
	1,831,263	1,643,915
Solar energy system inventory	27,480	29,617
Solar energy systems, net	\$ 1,858,743	\$ 1,673,532

Solar energy system inventory represents the solar components and materials used in the installation of solar energy systems prior to being installed on customers' roofs. As such, no depreciation is recorded related to this line item. The Company recorded depreciation and amortization expense related to solar energy systems of \$17.0 million and \$14.5 million for the three months ended September 30, 2018 and 2017. The Company recorded depreciation and amortization expense related to solar energy systems of \$48.5 million and \$41.0 million for the nine months ended September 30, 2018 and 2017.

6. Property and Equipment

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

	Estimated Useful Lives	September 30, 2018	December 31, 2017
Vehicles acquired under capital leases	3-5 years	\$ 8,957	\$ 15,113
Leasehold improvements	1-12 years	12,309	15,071
Furniture and computer and other equipment	3 years	4,171	6,492
		25,437	36,676
Less: Accumulated depreciation and amortization		(14,355)	(21,598)
Property and equipment, net		\$ 11,082	\$ 15,078

The Company recorded depreciation and amortization expense related to property and equipment of \$0.9 million and \$1.9 million for the three months ended September 30, 2018 and 2017. The Company recorded depreciation and amortization expense related to property and equipment of \$3.9 million and \$6.4 million for the nine months ended September 30, 2018 and 2017.

The Company leases fleet vehicles that are accounted for as capital leases and are included in property and equipment, net. Of total property and equipment depreciation and amortization, depreciation on vehicles under capital leases of \$0.3 million and \$0.7 million was capitalized in solar energy systems, net for the three months ended September 30, 2018 and 2017. The Company capitalized depreciation on vehicles under capital leases of \$1.6 million and \$2.7 million in solar energy systems, net for the nine months ended September 30, 2018 and 2017.

7. Intangible Assets

Intangible assets, net consisted of the following (in thousands):

	September 30, 2018	December 31, 2017
Cost:		
Internal-use software	\$ 1,422	\$ 1,314
Developed technology	522	522
Trademarks/trade names	201	201
Customer relationships	164	164
Total carrying value	2,309	2,201
Accumulated amortization:		
Internal-use software	(1,076)	(872)
Developed technology	(307)	(258)
Trademarks/trade names	(95)	(79)
Customer relationships	(155)	(130)
Total accumulated amortization	(1,633)	(1,339)
Total intangible assets, net	\$ 676	\$ 862

The Company recorded amortization expense of \$0.1 million for each of the three-month periods ended September 30, 2018 and 2017, which was included in amortization of intangible assets. The Company recorded amortization expense of \$0.4 million for each of the nine-month periods ended September 30, 2018 and 2017.

8. Accrued Compensation

Accrued compensation consisted of the following (in thousands):

	September 30, 2018	December 31, 2017
Accrued payroll	\$ 16,640	\$ 13,064
Accrued commissions	9,149	7,928
Total accrued compensation	\$ 25,789	\$ 20,992

9. Accrued and Other Current Liabilities

Accrued and other current liabilities consisted of the following (in thousands):

	September 30, 2018	December 31, 2017
Accrued unused commitment fees and interest	\$ 12,220	\$ 7,445
Accrued professional fees	5,813	3,977
Current portion of lease pass-through financing obligation	5,017	4,931
Sales, use and property taxes payable	3,227	3,046

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Accrued workers' compensation	3,189	1,446
Accrued inventory	2,926	4,122
Workmanship accrual	1,800	1,359
Current portion of deferred rent	935	937
Other accrued expenses	2,201	2,412
Total accrued and other current liabilities	\$ 37,328	\$ 29,675

10. Debt Obligations

Debt obligations consisted of the following as of September 30, 2018 (in thousands, except interest rates):

	Principal Borrowings Outstanding	Unamortized Debt Issuance Costs Current Long-term	Net Carrying Value Current Long-term	Unused Borrowing Capacity	Interest Rate	Maturity Date
Solar asset backed notes, Series 2018-1	\$466,000	\$(61) \$(9,372)	\$2,980 \$453,587	\$—	*	October 2028
Solar asset backed notes, Series 2018-2 ⁽¹⁾⁽²⁾	342,833	(7) (7,692)	293 334,841	—	5.2 %	August 2023
2017 Term loan facility	191,705	(170) (4,711)	6,615 180,209	—	6.0	January 2035
Forward flow loan facility	11,748	(18) (3,445)	611 7,674	118,252	5.0	⁽³⁾ February 2023
Credit agreement Revolving lines of credit ⁽⁴⁾	1,287	(1) (124)	16 1,146	—	6.5	
Aggregation facility	30,000	— —	— 30,000	345,000	5.4	September 2020
Working capital facility ⁽⁵⁾	136,500	— —	— 136,500	—	5.3	March 2020
Total debt	\$1,180,073	\$(257) \$(25,344)	\$10,515 \$1,143,957	\$463,252		

Debt obligations consisted of the following as of December 31, 2017 (in thousands, except interest rates):

	Principal Borrowings Outstanding	Unamortized Debt Issuance Costs Current Long-term	Net Carrying Value Current Long-term	Unused Borrowing Capacity	Interest Rate	Maturity Date
2017 Term loan facility	\$197,764	\$(176) \$(4,990)	\$6,644 \$185,954	\$—	6.0 %	January 2035
2016 Term loan facility	287,919	(141) (7,623)	4,962 275,193	—	4.3	August 2021
Subordinated HoldCo facility	197,625	(35) (3,451)	1,965 192,174	—	9.3	March 2020
Credit agreement Revolving lines of credit ⁽⁴⁾	1,299	(2) (140)	14 1,143	—	6.5	February 2023
Aggregation facility	135,000	— —	— 135,000	240,000	4.7	September 2020
Working capital facility ⁽⁵⁾	136,500	— —	— 136,500	—	4.8	March 2020
Total debt	\$956,107	\$(354) \$(16,204)	\$13,585 \$925,964	\$240,000		

* The Series 2018-1 Notes are comprised of Class A and Class B Notes. Class A Notes accrue interest at 4.73%. Class B Notes accrue interest at 7.37%.

(1) The Series 2018-2 Notes are comprised of Class A and Class B Notes. Class B Notes accrue interest at a rate of LIBOR plus 4.75%. Class A Notes accrue interest at a variable spread over LIBOR that results in a weighted average spread for all 2018-2 Notes of 2.95%.

(2) The interest rate of this facility is partially hedged to an effective interest rate of 6.0% for \$326.8 million of the principal borrowings. See Note 11—Derivative Financial Instruments.

- (3) The maturity date for this facility is 20 years from the end date of the borrowing availability period when all borrowings are aggregated into one term loan, which will be no later than October 31, 2019.
- (4) Revolving lines of credit are not presented net of unamortized debt issuance costs.
- (5) Facility is recourse debt, which refers to debt that is collateralized by the Company's general assets. All of the Company's other debt obligations are non-recourse, which refers to debt that is only collateralized by specified assets or subsidiaries of the Company.

The Company's debt facilities include customary events of default, conditions to borrowing and covenants, including covenants that restrict, subject to certain exceptions, the Company's ability to incur indebtedness, incur liens, make investments, make fundamental changes to their business, dispose of assets, make certain types of restricted payments or enter into certain related party transactions. Additionally, the Company is required to maintain certain financial measurements and interest rate swaps for certain debt facilities. These restrictions do not impact the Company's ability to enter into investment funds, including those that are similar to those entered into previously. The Company's debt facilities are secured by net cash flows from long-term customer contracts. The Company was in compliance with all debt covenants as of September 30, 2018.

Solar Asset Backed Notes, Series 2018-1

In June 2018, a wholly owned subsidiary of the Company issued an aggregate principal amount of \$400.0 million of Solar Asset Backed Notes, Series 2018-1, Class A (the "2018-1 Class A Notes") and an aggregate principal amount of \$66.0 million of Solar Asset Backed Notes, Series 2018-1, Class B (the "2018-1 Class B Notes" and together with the 2018-1 Class A Notes, the "2018-1 Notes"). The 2018-1 Class A Notes accrue interest at a fixed rate of 4.73% and have an anticipated repayment date of October 30, 2028. The 2018-1 Class B Notes accrue interest at a fixed rate of 7.37% and have an anticipated repayment date of October 30, 2028.

In addition to customary events of default and covenants, the 2018-1 Notes are subject to unscheduled prepayment events that generally are customary in nature for solar securitizations of this type, including (1) asset coverage ratios falling below certain levels, (2) a debt service coverage ratio falling below certain levels, (3) the failure to maintain insurance, and (4) the failure to repay the notes in full prior to the anticipated repayment date for such class of notes. The occurrence of an unscheduled prepayment event or an event of default could result in the more rapid repayment of the 2018-1 Notes, and the occurrence of an event of default could, in certain instances, result in the liquidation of the collateral securing the 2018-1 Notes. The 2018-1 Notes are secured by, and payable solely from the cash flow generated by the membership interests in certain indirectly owned subsidiaries of the Company, each of which subsidiaries is the managing member of a project company that owns a pool of photovoltaic systems and related Solar Leases and PPAs and ancillary rights and agreements that were originated by a wholly owned subsidiary of the Company. As of September 30, 2018, the Company had \$13.5 million in required reserves outstanding in collateral accounts with the administrative agent, which are included in restricted cash and cash equivalents.

Solar Asset Backed Notes, Series 2018-2

In June 2018, a wholly owned subsidiary of the Company issued an aggregate principal amount of \$296.0 million of Solar Asset Backed Notes, Series 2018-2, Class A (the “2018-2 Class A Notes”) and an aggregate principal amount of \$49.0 million of Solar Asset Backed Notes, Series 2018-2, Class B (the “2018-2 Class B Notes” and together with the 2018-2 Class A Notes, the “2018-2 Notes”). The 2018-2 Class A Notes accrue interest at a variable spread over the London Interbank Offered Rate (“LIBOR”) that is intended to result in a weighted average spread for all 2018-2 Notes of 2.95%. The 2018-2 Class B Notes accrue interest at a spread over LIBOR of 4.75% or, if no 2018-2 Class A Notes are outstanding, 2.95%. The Company entered into an interest rate swap concurrent with the issuance of the 2018-2 Notes that results in an implied all-in interest rate of approximately 5.95%. See Note 11—Derivative Financial Instruments. The 2018-2 Notes have a stated maturity of August 29, 2023.

The 2018-2 Notes have the same events of default, covenants and unscheduled prepayment events as the 2018-1 Notes. In addition, the 2018-2 Notes are subject to unscheduled prepayment events relating to certain change of control events and certain liquidity requirements. As of September 30, 2018, the Company had \$23.9 million in required reserves outstanding in collateral accounts with the administrative agent, which are included in restricted cash and cash equivalents.

2016 Term Loan Facility

In June 2018, the Company used proceeds from the issuance of the 2018-1 Notes and 2018-2 Notes to pay off the outstanding balance of \$282.3 million on the credit facility entered into by a wholly owned subsidiary of the Company in August 2016 (the “2016 Term Loan Facility”) and terminated the credit agreement. The outstanding balance was comprised of \$281.8 million of principal and \$0.5 million of accrued interest. The termination of the 2016 Term Loan Facility was accounted for as a debt extinguishment. As such, the remaining \$6.9 million of unamortized debt issuance costs related to the 2016 Term Loan Facility were recognized in interest expense during the nine months ended September 30, 2018. There was no prepayment fee associated with the termination of the 2016 Term Loan Facility.

Subordinated HoldCo Facility

In June 2018, the Company used proceeds from the issuance of the 2018-1 Notes and 2018-2 Notes to pay off the outstanding balance of \$206.4 million on the credit facility entered into by a wholly owned subsidiary of the Company in March 2016 (the “Subordinated HoldCo Facility”) and terminated the financing agreement. The outstanding balance was comprised of \$196.6 million of principal, \$3.9 million of accrued interest, and a prepayment fee of \$5.9 million, which was calculated as 3.0% of the outstanding principal balance. The termination of the Subordinated HoldCo

Facility was accounted for as a debt extinguishment. As such, the remaining \$2.9 million of unamortized debt issuance costs related to the Subordinated HoldCo Facility were recognized in interest expense during the nine months ended September 30, 2018. The prepayment fee of \$5.9 million was also recognized in interest expense during the nine months ended September 30, 2018.

2017 Term Loan Facility

In January 2017, a wholly owned subsidiary of the Company entered into a long-term fixed rate credit agreement (the “2017 Term Loan Facility”). Interest on borrowings accrues at an annual fixed rate equal to 6.0% and is payable in arrears. Certain principal payments are due on a quarterly basis, subject to the occurrence of certain events. As of September 30, 2018, the Company had \$19.4 million in required reserves outstanding in collateral accounts with the administrative agent, which were included in restricted cash and cash equivalents.

Forward Flow Loan Facility

In August 2018, a subsidiary which is indirectly owned by the Company together with investors, entered into a loan agreement (the “Forward Flow Loan Facility”) pursuant to which the Company may borrow up to an aggregate principal amount of \$130.0 million. The borrower may make multiple borrowings under the Forward Flow Loan Facility during the availability period, which is expected to continue into late 2019. After the availability period, all outstanding loans under the Forward Flow Loan Facility will be aggregated into a single term loan with a maturity date 20 years after the date of aggregation. Interest on each loan will accrue at an annual rate equal to the U.S. swap rate for the weighted-average life of such loan, plus an applicable margin equal to the greater of (a) 1.9% plus a spread adjustment based on the risk premium on the borrowing date relative to the market index-based risk premium on the closing date and (b) 1.5%. Scheduled principal payments are due on a quarterly basis, at the end of January, April, July and October of each year. Upon the occurrence of certain events, the Company will be required to make prepayments of the loans, including payment of a make-whole amount in certain circumstances. As of September 30, 2018, the Company had \$0.4 million in required reserves outstanding in collateral accounts with the administrative agent, which were included in restricted cash and cash equivalents.

Credit Agreement

In February 2016, a wholly owned subsidiary of the Company entered into a fixed rate credit agreement (the “Credit Agreement”). Principal and interest payments under the Credit Agreement are paid quarterly over the term of the loan. Interest accrues on borrowings at a fixed rate of 6.50%.

Aggregation Facility

In September 2014, a wholly owned subsidiary of the Company entered into an aggregation credit facility (as amended, the “Aggregation Facility”), pursuant to which the Company may borrow up to an aggregate of \$375.0 million and, upon the satisfaction of certain conditions and the approval of the lenders, up to an additional aggregate of \$175.0 million in borrowings. Prepayments are permitted under the Aggregation Facility. Under the Aggregation Facility, interest on borrowings accrues at a floating rate equal to either (1)(a) LIBOR or (b) the greatest of (i) the Federal Funds Rate plus 0.5%, (ii) the administrative agent’s prime rate and (iii) LIBOR plus 1% and (2) a margin that varies between 3.25% during the period during which the Company may incur borrowings and 3.75% after such period. As of September 30, 2018, the Company had \$1.0 million in required reserves outstanding in collateral accounts with the administrative agent, which were included in restricted cash and cash equivalents.

Working Capital Facility

In March 2015, a wholly owned subsidiary of the Company entered into a revolving credit agreement (the “Working Capital Facility”) pursuant to which the Company may borrow up to an aggregate principal amount of \$150.0 million from certain financial institutions. In addition to the outstanding borrowings as of September 30, 2018, the Company had established letters of credit under the Working Capital Facility for up to \$13.5 million related to insurance contracts. Prepayments are permitted under the Working Capital Facility. Interest accrues on borrowings at a floating rate equal to, depending on the type of borrowing, (1) a rate equal to the Eurodollar Rate for the interest period divided by one minus the Eurodollar Reserve Percentage, plus a margin of 3.25%; or (2) the highest of (a) the Federal Funds Rate plus 0.50%, (b) the Citibank prime rate and (c) the one-month interest period Eurodollar rate plus 1.00%, plus a margin of 2.25%. Interest is payable depending on the type of borrowing at the end of (1) the interest period that the Company may elect as a term, not to exceed three months, (2) quarterly or (3) at maturity of the Working Capital Facility. The Company is required to maintain \$30.0 million in cash and cash equivalents and certain investments as of the last day of each quarter. As of September 30, 2018, the Company was in compliance with such covenants.

11. Derivative Financial Instruments

Derivative financial instruments consisted of the following at fair value (in thousands):

September 30, 2018		
Fair		
	Value	Balance Sheet Location
Derivatives designated as hedging instruments:		
Interest rate swaps	\$131	Other non-current assets, net
December 31, 2017		
Fair		
	Value	Balance Sheet Location
Derivatives designated as hedging instruments:		
Interest rate swaps	\$14,028	Other non-current assets, net
Derivatives not designated as hedging instruments:		
Interest rate swaps	\$1,280	Other non-current liabilities

The Company is exposed to interest rate risk relating to its outstanding debt facilities that have variable interest rates. In connection with the 2016 Term Loan Facility, the Company entered into interest rate swaps to offset changes in the variable interest rate for a portion of the Company's LIBOR-indexed floating-rate loans. During the nine months ended September 30, 2018, the Company paid off and terminated the 2016 Term Loan Facility and settled all outstanding interest rate swaps associated with the 2016 Term Loan Facility. As a result of settling the interest rate swaps, which were designated as hedges, the Company realized a \$22.5 million gain that was recorded as a reduction to interest expense.

In connection with the March 2017 amendment of the Aggregation Facility, the Company is required to maintain interest rate swaps such that at least 75% of the outstanding loan balance of the Aggregation Facility is hedged. The Company is required to meet this threshold within 15 business days after the end of each quarterly period. During the second quarter of 2018, the outstanding balance of the Aggregation Facility was paid off, and as a result, the Company settled all outstanding interest rate swaps associated with the Aggregation Facility during that quarter. The settlement of the interest rate swaps, which were not designated as hedges, resulted in a realized gain of \$2.0 million that was recorded as other income. As of September 30, 2018, the Company had drawn on the Aggregation Facility again but had not yet opened the required interest rate swaps. The Company entered the required swaps subsequent to period end and is in compliance with the hedging requirement.

In connection with the 2018-2 Notes, the Company entered into interest rate swaps to offset changes in the variable interest rate for a portion of these notes. As of September 30, 2018, the notional amount of these interest rate swaps was \$326.8 million. The notional amount of the interest rate swaps decreases through the maturity of the 2018-2 Notes, similar to the Company's estimated semi-annual principal payments on the 2018-2 Notes through August 2023. The interest rate swaps are designated as cash flow hedges, and unrealized gains or losses are recorded in other comprehensive income ("OCI"). The amount of AOCI expected to be reclassified to interest expense within the next 12 months is approximately \$1.0 million. The Company will discontinue the hedge accounting designation of these derivatives if interest payments on LIBOR-indexed floating rate loans compared to the payments under the derivatives are no longer highly effective.

The Company adopted ASU 2017-12 as of January 1, 2018. Among other changes, this update eliminated the separate measurement of hedge ineffectiveness. The Company adopted this update using a modified retrospective method with a cumulative-effect adjustment to retained earnings as of January 1, 2018. As a result, the Company ceased measuring hedge ineffectiveness beginning January 1, 2018, while prior period measurements remain unchanged. See Note

2—Summary of Significant Accounting Policies. The Company records derivatives at fair value. The (gains) losses on derivatives designated as cash flow hedges recognized in OCI, before tax effect, consisted of the following (in thousands):

	Three Months Ended September 30, 2018 2017	
Derivatives designated as cash flow hedges:		
Interest rate swaps	\$(3,966)	\$828

	Nine Months Ended September 30, 2018 2017	
Derivatives designated as cash flow hedges:		
Interest rate swaps	\$(8,284)	\$2,688

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

	Three Months Ended September 30,		2017	
	2018	Other	Interest	Other
	Interest	(income)	Interest	(income)
	expense,	expense,	expense,	expense,
	net	net	net	net
Total amounts presented in the income statement line items	\$18,715	\$ (1)	\$16,148	\$ 195
Derivatives designated as cash flow hedges:				
Interest rate swaps				
Losses (gains) reclassified from AOCI into income	\$535	\$ —	\$(156)	\$ —
Gains recognized in income - ineffective portion:	—	—	—	(120)
Derivatives not designated as hedging instruments:				
Interest rate swaps				
Losses recognized in income	—	—	—	320
Total losses (gains)	\$535	\$ —	\$(156)	\$ 200
	Nine Months Ended September 30,		2017	
	2018	Other	Interest	Other
	Interest	(income)	Interest	(income)
	expense,	expense,	expense,	expense,
	net	net	net	net
Total amounts presented in the income statement line items	\$46,973	\$ (6,371)	\$47,707	\$ 1,186
Derivatives designated as cash flow hedges:				
Interest rate swaps				
Gains reclassified from AOCI into income	\$(22,181)	\$ —	\$(13)	\$ —
Gains recognized in income - ineffective portion:	—	—	—	(641)
Derivatives not designated as hedging instruments:				
Interest rate swaps				
(Gains) losses recognized in income	—	(4,252)	—	1,834
Total (gains) losses	\$(22,181)	\$(4,252)	\$(13)	\$ 1,193

12. Investment Funds

As of September 30, 2018 and December 31, 2017, the Company had formed investment funds for the purpose of funding the purchase of solar energy systems under long-term customer contracts. The aggregate carrying value of these funds' assets and liabilities (after elimination of intercompany transactions and balances) in the Company's condensed consolidated balance sheets were as follows (in thousands):

	September 30, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	\$ 78,906	\$ 17,280
Accounts receivable, net	11,052	5,143
Prepaid expenses and other current assets	1,753	952
Total current assets	91,711	23,375
Restricted cash and cash equivalents	438	—
Solar energy systems, net	1,636,300	1,486,023
Other non-current assets, net	9,529	6,792
Total assets	\$ 1,737,978	\$ 1,516,190
Liabilities		
Current liabilities:		
Distributions payable to non-controlling interests and redeemable		
non-controlling interests	\$ 11,236	\$ 16,437
Current portion of long-term debt	611	—
Current portion of deferred revenue	1,793	9,176
Accrued and other current liabilities	4,540	4,478
Total current liabilities	18,180	30,091
Long-term debt, net of current portion	7,674	—
Deferred revenue, net of current portion	9,408	26,847
Other non-current liabilities	982	1,444
Total liabilities	\$ 36,244	\$ 58,382

Under the fund agreements, cash distributions of income and other receipts by the funds, net of agreed-upon expenses and estimated expenses, tax benefits and detriments of income and loss, and tax benefits of tax credits, are assigned to the fund investors and the Company's subsidiaries as specified in contractual arrangements. As such, the cash held in investment funds is not readily available to the Company due to the timing of distributions. Certain of these fund arrangements have call and put options to acquire the investor's equity interest as specified in the contractual agreements. Once the investor's equity interest is acquired by the Company, the assets, liabilities and operations of the investment fund become wholly owned and no longer require an assessment of non-controlling interests.

Fund investors for three of the funds are managed indirectly by The Blackstone Group L.P. (the "Sponsor") and are considered related parties. As of September 30, 2018 and December 31, 2017, the cumulative total of contributions into the VIEs by all investors was \$1,459.5 million and \$1,264.6 million. Of these contributions, a cumulative total of \$110.0 million was contributed by related parties in prior periods. A third-party provider has agreed to perform backup maintenance services for all funds, if necessary.

Lease Pass-Through Financing Obligation

During 2015, a wholly owned subsidiary of the Company entered into a lease pass-through fund arrangement under which the Company contributed solar energy systems and the investor contributed cash. The net carrying value of the related solar energy systems was \$56.4 million and \$58.2 million as of September 30, 2018 and December 31, 2017.

The Company adopted Topic 606 as of January 1, 2018. The Company has assessed the impact of Topic 606 as it relates to the sales of ITCs through its lease pass-through fund arrangement. The Company has concluded that revenue related to the sale of ITCs through its lease pass-through arrangement is recognized when the related solar energy systems are placed in service as the Company has completed its performance obligation to transfer ITCs to the funds investors at that time. The fund investors contributed cash to the investment fund during the installation process as payment for the ITCs. The transaction price for the ITCs was estimated using the tax credit rate of 30% times the fair market value of the solar energy systems that were placed into service in the lease pass-through fund. All of the related solar energy systems were placed in service and all related revenue would have been recognized prior to September 30, 2016 under Topic 606. Prior to the adoption of Topic 606, the Company recognized this revenue evenly over the five-year ITC recapture period. The Company adopted Topic 606 on a modified retrospective basis with a cumulative adjustment to retained earnings as of January 1, 2018. As all ITC sales revenue would have been recognized prior to September 30, 2016 under Topic 606, the Company removed previously recorded deferred revenue related to ITC sales by recording it to retained earnings as of the adoption date of Topic 606. See Note 2—Summary of Significant Accounting Policies.

The Company accounts for the residual of the large upfront payments, net of amounts allocated to the ITCs, and subsequent periodic payments received from the fund investor as a borrowing by recording the proceeds received as a lease pass-through financing obligation, which will be repaid through customer payments that will be received by the investor. Under this approach, the Company continues to account for the arrangement with the customers in its condensed consolidated financial statements, whether the cash generated from the customer arrangements is received by the Company's wholly owned subsidiary or paid directly to the fund investor. A portion of the amounts received by the fund investor from customer payments is applied to reduce the lease pass-through financing obligation, and the balance is allocated to interest expense. The customer payments are recognized into revenue based on cash receipts during the period as required by GAAP. Interest is calculated on the lease pass-through financing obligation using the effective interest rate method. The effective interest rate is the interest rate that equates the present value of the cash amounts to be received by a fund investor over the master lease term with the present value of the cash amounts paid by the investor to the Company, adjusted for any payments made by the Company. Any additional master lease prepayments by the investor would be recorded as an additional lease pass-through financing obligation, while any refunds of master lease prepayments would reduce the lease pass-through financing obligation.

The lease pass-through financing obligation is nonrecourse. As of September 30, 2018, the Company had recorded financing liabilities of \$5.3 million related to this fund arrangement, which was the lease pass-through financing obligation recorded in other liabilities. As of December 31, 2017, the Company had recorded financing liabilities of \$32.1 million related to this fund arrangement, of which \$26.4 million was deferred revenue and \$5.8 million was the lease pass-through financing obligation recorded in other liabilities.

Guarantees

With respect to the investment funds, the Company and the fund investors have entered into guaranty agreements under which the Company guarantees the performance of certain financial obligations of its subsidiaries to the investment funds. These guarantees do not result in the Company being required to make payments to the fund investors unless such payments are mandated by the investment fund governing documents and the investment fund fails to make such payment. Each of the Company's investment funds and financing subsidiaries maintains separate books and records from each other and from the Company. The assets of each investment fund are not available to satisfy the debts or obligations of any other investment fund, subsidiary or the Company.

The Company is contractually obligated to make certain VIE investors whole for losses that the investors may suffer in certain limited circumstances resulting from the disallowance or recapture of ITCs. The Company has concluded that the likelihood of a significant recapture event is remote and consequently has not recorded any liability in the

condensed consolidated financial statements for any potential recapture exposure. The maximum potential future payments that the Company could have to make under this obligation would depend on the Internal Revenue Service (“IRS”) successfully asserting upon audit that the fair market values of the solar energy systems sold or transferred to the funds as determined by the Company exceeded the allowable basis for the systems for purposes of claiming ITCs. The fair market values of the solar energy systems and related ITCs are determined and the ITCs are allocated to the fund investors in accordance with the funds’ governing agreements. Due to uncertainties associated with estimating the timing and amounts of distributions, the likelihood of an event that may trigger repayment, forfeiture or recapture of ITCs to such investors, and the fact that the Company cannot determine how the IRS will evaluate system values used in claiming ITCs, the Company cannot determine the potential maximum future payments that are required under these guarantees. As of September 30, 2018, the Company has not made any payments under these guarantees. However, several recent investment funds, the 2018-1 Notes and the 2018-2 Notes have required the Company to prepay insurance premiums to cover the risk of ITC recapture. The Company amortizes this prepaid insurance expense over the ITC recapture period. The Company had prepaid insurance balances of \$8.6 million and \$2.4 million as of September 30, 2018 and December 31, 2017.

From time to time, the Company incurs penalties for non-performance, which non-performance may include, but is not limited to, delays in the installation process and interconnection to the power grid of solar energy systems and other factors. Based on the terms of the investment fund agreements, the Company will either reimburse a portion of the fund investor's capital or pay the fund investor a non-performance fee. No distributions were paid to reimburse fund investors during the three months ended September 30, 2018. Distributions paid to reimburse fund investors totaled \$11.9 million during nine months ended September 30, 2018. As of September 30, 2018, no accrual for additional distributions was required.

As a result of the guaranty arrangements in certain funds, the Company was required to hold a minimum cash balance of \$10.0 million as of September 30, 2018 and December 31, 2017, which is classified as restricted cash and cash equivalents.

13. Redeemable Non-Controlling Interests and Equity Common Stock

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

	September 30, 2018	December 31, 2017
Shares available for grant under equity incentive plans	13,242	12,774
Restricted stock units issued and outstanding	6,653	6,688
Stock options issued and outstanding	3,792	3,837
Long-term incentive plan	2,706	2,706
Total	26,393	26,005

Redeemable Non-Controlling Interests, Equity and Non-Controlling Interests

The changes in redeemable non-controlling interests were as follows (in thousands):

Balance as of December 31, 2017	\$ 122,444
Contributions from redeemable non-controlling interests	72,078
Distributions to redeemable non-controlling interests	(7,663)
Net loss	(65,039)
Balance as of September 30, 2018	\$ 121,820

The changes in stockholders' equity and non-controlling interests were as follows (in thousands):

	Total Stockholders' Equity	Non-Controlling Interests	Total Equity
Balance as of December 31, 2017	\$ 780,951	\$ 80,115	\$ 861,066
Cumulative-effect adjustment from adoption of new ASUs	(473,828)	—	(473,828)

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Stock-based compensation expense	9,884	—	9,884
Issuance of common stock	876	—	876
Contributions from non-controlling interests	—	122,843	122,843
Distributions to non-controlling interests	—	(28,865)	(28,865)
Total other comprehensive loss	(10,128)	—	(10,128)
Net loss	(2,728)	(124,999)	(127,727)
Balance as of September 30, 2018	\$ 305,027	\$ 49,094	\$ 354,121

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Accumulated Other Comprehensive Income

The changes in AOCI are related to the Company's cash flow hedges. The changes in AOCI, net of tax, were as follows (in thousands):

	Accumulated Other Comprehensive Income
Balance as of December 31, 2017	\$ 6,905
Cumulative-effect adjustment from adoption of new ASUs	3,318
Other comprehensive income before reclassifications	6,037
Less: Amounts reclassified from AOCI	16,165
Balance as of September 30, 2018	\$ 95

Redeemable Non-Controlling Interests and Non-Controlling Interests

Seven of the investment funds include a right for the non-controlling interest holder to require the Company's wholly owned subsidiary to purchase all of its membership interests in the fund (each, a "Put Option"). The purchase price for the fund investor's interest in the seven investment funds under the Put Options is the greater of fair market value at the time the option is exercised and a specified amount, ranging from \$2.1 million to \$4.1 million. The Put Options for these seven investment funds are exercisable beginning on the date that specified conditions are met for each respective fund. None of the Put Options are expected to become exercisable prior to 2021.

Because the Put Options represent redemption features that are not solely within the control of the Company, the non-controlling interests in these investment funds are presented outside of permanent equity. Redeemable non-controlling interests are recorded using the greater of their carrying value at each reporting date (which is impacted by attribution under the hypothetical liquidation at book value ("HLBV") method) or their estimated redemption value in each reporting period.

In all investment funds except one, the Company's wholly owned subsidiary has the right to require the non-controlling interest holder to sell all of its membership units to the Company's wholly owned subsidiary (each, a "Call Option"). The purchase price for the fund investors' interests under the Call Options varies by fund, but is generally the greater of a specified amount, which ranges from approximately \$1.2 million to \$7.0 million, the fair market value of such interest at the time the option is exercised, or an amount that causes the fund investor to achieve a specified return on investment. The Call Options are exercisable beginning on the date that specified conditions are met for each respective fund. None of the Call Options are expected to become exercisable prior to 2020.

14. Equity Compensation Plans

Equity Incentive Plans

2014 Equity Incentive Plan

The Company currently grants equity awards through its 2014 Equity Incentive Plan (the "2014 Plan"). Under the 2014 Plan, the Company may grant stock options, restricted stock, restricted stock units ("RSUs"), stock appreciation rights, performance stock units, performance shares and performance awards to its employees, directors and consultants, and its parent and subsidiary corporations' employees and consultants.

As of September 30, 2018, a total of 13.2 million shares of common stock were available to grant under the 2014 Plan, subject to adjustment in the case of certain events. The number of shares available to grant under the 2014 Plan is subject to an annual increase on the first day of each year. In accordance with the annual increase, an additional 4.6 million shares became available to grant in January 2018 under the 2014 Plan.

Equity Award Modifications

Sales Leader Awards

In July 2018, the Company modified 0.4 million performance-based equity awards for members of its sales leadership team as it was considered improbable that the performance targets would be met. As a result of the modification, the awards are now considered probable of being met, and expense is being recorded accordingly. This was accounted for as a modification; however, there was no incremental expense arising from the modification.

Stock Options

Stock Option Activity

Stock option activity for the nine months ended September 30, 2018 was as follows (in thousands, except term and per share amounts):

	Shares Underlying Options	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding—December 31, 2017	3,837	\$ 2.01		\$ 8,522
Granted	827	3.93		
Exercised	(780)	1.12		
Cancelled	(92)	2.27		
Outstanding—September 30, 2018	3,792	\$ 2.60	7.1	\$ 10,447
Options vested and exercisable—September 30, 2018	1,840	\$ 2.06	5.9	\$ 6,290

RSUs

RSU activity for the nine months ended September 30, 2018 was as follows (awards in thousands):

	Number of Awards	Weighted- Average Grant Date Fair Value
Outstanding at December 31, 2017	6,688	\$ 3.20
Granted	3,986	4.13
Vested	(3,436)	2.98
Forfeited	(585)	3.42
Outstanding at September 30, 2018	6,653	\$ 3.85

Stock-Based Compensation Expense

Stock-based compensation was included in operating expenses as follows (in thousands):

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	Three Months Ended September 30, 2018		Nine Months Ended September 30, 2018	
	2017		2017	
Cost of revenue	\$361	\$164	\$984	\$738
Sales and marketing	754	601	2,668	2,710
General and administrative	1,956	1,421	6,125	5,763
Research and development	32	63	107	290
Total stock-based compensation	\$3,103	\$2,249	\$9,884	\$9,501

Unrecognized stock-based compensation expense for stock options and RSUs as of September 30, 2018 was as follows (in thousands, except years):

	Unrecognized Stock-Based Compensation Expense	Weighted- Average Period of Recognition (in years)
RSUs	\$ 20,105	1.8
Stock options	2,516	1.8
Total unrecognized stock-based compensation expense	\$ 22,621	

15. Income Taxes

The income tax expense for the three months ended September 30, 2018 and 2017 was calculated on a discrete basis resulting in a consolidated quarterly effective income tax rate of (54.7)% and (33.1)%. For the nine months ended September 30, 2018 and 2017 the Company's consolidated effective income tax rate was (70.5)% and (22.5)%. The variations between the consolidated effective income tax rate and the U.S. federal statutory rate for the three and nine months ended September 30, 2018 and 2017 were primarily attributable to the net effects of adopting ASU 2016-16, non-controlling interests and redeemable non-controlling interests, federal investment tax credits and the TCJA reducing the federal corporate income tax rate from 35% to 21% beginning in 2018.

The TCJA made significant changes to the U.S. tax code, which include, but are not limited to, a reduced U.S. federal corporate tax rate, a provision that limits the amount of deductible interest expense, full expensing of acquired property, limitations on the utilization of net operating loss carryforwards, the repeal of the domestic production activity deduction, limitations on the deductibility of certain executive compensation, and the tax year of income inclusion.

The Company recorded a provisional net tax benefit of \$187.5 million related to the remeasurement of its deferred tax balances to reflect the corporate rate reduction in the period ended December 31, 2017. Although the Company is able to make a reasonable estimate of the impacts of the TCJA, it continues to analyze the temporary differences that existed on the date of enactment and the other previously mentioned provisions that come into effect for tax years starting after 2017 to determine if these items would impact the effective tax rate. The impact of the TCJA may differ from the Company's estimates, possibly materially, due to, among other things, changes in interpretations and assumptions the Company has made, guidance that may be issued and actions the Company may take as a result of the TCJA.

The Company sells solar energy systems to the investment funds for income tax purposes. As the investment funds are consolidated by the Company, the gain on the sale of the solar energy systems is eliminated in the condensed consolidated financial statements. However, this gain is recognized for tax reporting purposes. With the adoption of ASU 2016-16, the Company now accounts for the income tax consequences of these intra-entity transfers, both current and deferred, as a component of income tax expense and deferred tax liability, net during the period in which the transfers occur. Prior to the adoption of ASU 2016-16, any tax expense incurred related to these intra-entity sales was deferred and amortized over the estimated useful life of the underlying solar energy systems, which was estimated to be 30 years. Accordingly, the Company had recorded a prepaid tax asset, net, of \$505.9 million as of December 31, 2017, which was removed as of January 1, 2018 when the Company adopted ASU 2016-16. See Note 2—Summary of Significant Accounting Policies.

Uncertain Tax Positions

As of September 30, 2018 and December 31, 2017, the Company had no unrecognized tax benefits. There was no interest or penalties accrued for any uncertain tax positions as of September 30, 2018 and December 31, 2017. The Company does not have any tax positions for which it is reasonably possible the total amount of gross unrecognized benefits will increase or decrease within the next 12 months. The Company is subject to taxation and files income tax returns in the United States, and various state and local jurisdictions. The U.S. and state jurisdictions in which the Company operates have statutes of limitations that generally range from three to four years. The Company's federal, state and local income tax returns starting with the 2015 tax year are subject to audit. The Company's 2014 income tax returns for four states are also subject to audit.

16. Related Party Transactions

The Company's condensed consolidated statements of operations included the following related party transactions (in thousands):

	Three Months Ended September 30, 2018		Nine Months Ended September 30, 2017	
Cost of revenue—operating leases and incentive	\$—	\$ 70	\$—	\$701
Sales and marketing	340	697	1,651	1,959
General and administrative	—	15	—	139

Vivint Services

The Company has negotiated and entered into a number of agreements with its sister company, Vivint, Inc. ("Vivint"). Some of those agreements related to the Company's use of certain of Vivint's information technology and infrastructure services; however, the Company stopped using such services in July 2017. In August 2017, the Company entered into a sales dealer agreement with Vivint, pursuant to which each company will act as a non-exclusive dealer for the other party to market, promote and sell each other's products. The agreement has an initial term of two years and replaces substantially all of the activities being undertaken under the parties' former marketing and customer relations agreement. The Company and Vivint also agreed to extend the term of the non-solicitation provisions under an existing non-competition agreement to match the term of the sales dealer agreement. The Company incurred fees under agreements with Vivint of \$6.1 million and \$0.7 million for the three months ended September 30, 2018 and 2017, which reflect the amount of services provided by Vivint on behalf of the Company. The Company incurred fees under these agreements of \$11.4 million and \$1.8 million for the nine months ended September 30, 2018 and 2017.

Payables to Vivint recorded in accounts payable—related party were \$0.1 million and \$0.2 million as of September 30, 2018 and December 31, 2017. These payables include amounts due to Vivint related primarily to the sales dealer agreement.

Advances Receivable—Related Party

Net amounts due from direct-sales personnel were \$5.7 million and \$6.6 million as of September 30, 2018 and December 31, 2017. The Company provided a reserve of \$1.0 million as of September 30, 2018 and December 31, 2017 related to advances to direct-sales personnel who have terminated their employment agreement with the Company.

Investment Funds

Fund investors for three of the investment funds are indirectly managed by the Sponsor and accordingly are considered related parties. The Company accrued equity distributions to these entities of \$1.8 million and \$1.2 million as of September 30, 2018 and December 31, 2017, included in distributions payable to non-controlling and redeemable non-controlling interests. See Note 12—Investment Funds.

17. Commitments and Contingencies

Non-Cancellable Operating Leases

The Company has entered into operating lease agreements for corporate and operating facilities, warehouses and related equipment in states in which the Company conducts operations. The aggregate expense incurred under these operating leases was \$3.6 million and \$4.0 million for the three months ended September 30, 2018 and 2017. The aggregate expense incurred under these operating leases was \$11.3 million and \$12.4 million for the nine months ended September 30, 2018 and 2017.

Letters of Credit

As of September 30, 2018, the Company had established letters of credit under the Working Capital Facility for up to \$13.5 million related to insurance contracts. See Note 10—Debt Obligations.

Indemnification Obligations

From time to time, the Company enters into contracts that contingently require it to indemnify parties against claims. These contracts primarily relate to provisions in the Company's services agreements with related parties that may require the Company to indemnify the related parties against services rendered; and certain agreements with the Company's officers and directors under which the Company may be required to indemnify such persons for liabilities. In addition, under the terms of the agreements related to the Company's investment funds and other material contracts, the Company may also be required to indemnify fund investors and other third parties for liabilities. For further information see Note 12—Investment Funds.

Residual Commission Payments

The Company pays a portion of sales commissions to its sales representatives on a deferred basis. The amount deferred is based on the value of the system sold by the sales representative and payment is based on the sales representative remaining employed by the Company. As this amount is earned over time, it is not considered an initial direct cost of obtaining the contract due to the requirement that the sales representative remain in the Company's service. As a result, the amount that is earned over time is expensed by the Company over the deferment period. As of September 30, 2018, the total estimated obligation that is currently not recorded in the Company's condensed consolidated financial statements, but that will be earned and expensed over the deferment period was \$12.5 million.

Legal Proceedings

In September 2015, two of the Company's customers, on behalf of themselves and a purported class, named the Company in a putative class action, Case No. BCV-15-100925 (Cal. Super. Ct., Kern County), alleging violation of California Business and Professions Code Section 17200 and requesting relief pursuant to Section 1689 of the California Civil Code. The complaint sought: (1) rescission of their PPAs along with restitution to the plaintiffs individually and (2) declaratory and injunctive relief. In October 2015, the Company moved to compel arbitration of the plaintiffs' claims pursuant to the provisions set forth in the PPAs, which the Court granted and dismissed the class claims without prejudice. The plaintiffs appealed the Court's order. On July 26, 2017, the Court of Appeal for the Fifth Appellate District ruled that all issues concerning the interpretation, validity, or enforceability of the PPAs, including the arbitrability of class claims, must be submitted to arbitration. The appellate court vacated the portion of the trial court's order dismissing class claims, requiring that issue to be determined by an arbitrator. The case proceeded in arbitration administered by JAMS. In June 2018, the parties reached a settlement with the two individual plaintiffs.

In March 2016, the Company filed suit in the Court of Chancery State of Delaware against SunEdison and SEV Merger Sub Inc. alleging that SunEdison willfully breached its obligations under the Merger Agreement pursuant to which the Company was to be acquired and breached its implied covenant of good faith and fair dealing. In April 2016, SunEdison filed for Chapter 11 bankruptcy, which stayed prosecution of the Company's litigation in the Delaware court. In September 2016, the Company submitted a proof of claim in the bankruptcy case for an unsecured claim in the initial amount of \$1.0 billion, which was subject to dispute, for damages for breach of the Merger Agreement. In April 2018, the Company reached a settlement with the litigation trustee in the bankruptcy case under which the Company's claim will be allowed in the amount of \$590.0 million. This settlement resolves both the lawsuit in the Delaware Chancery Court and the dispute about the amount of the Company's unsecured creditor claim in the bankruptcy. In April 2018, the Company received an initial distribution of \$2.1 million and expects to receive further distributions as assets are distributed to unsecured creditors under the court-approved plan of reorganization in the SunEdison bankruptcy case. While the exact amount to be distributed for this claim is unknown at this time, the payout is expected to be a small fraction of the \$590.0 million claim.

In November 2016, a customer of the Company filed a putative class action lawsuit in Superior Court in Alameda County, California, purportedly on behalf of all customers of a particular Company sales representative in California, claiming that the representative's sales practices were improper under California consumer protection law. The Company moved to dismiss that action to compel arbitration. In March 2017, the original plaintiff filed an amended complaint adding an additional plaintiff, purporting to expand the proposed class to include all customers who are eligible for the California Alternate Rates for Energy program, and adding claims of misconduct in the Company's sales practices apart from the individual representative identified in the original complaint. The Company moved to compel arbitration of the new plaintiff's claims as well. The Company disputed the allegations in both the original and amended complaints. In January 2018, the parties reached a settlement with the two individual plaintiffs. Under the settlement, in addition to certain changes to its sales process and immaterial compensation payments to the individual plaintiffs, the Company agreed to pay attorneys' fees. On May 29, 2018, the court entered an order requiring the Company to pay attorneys' fees and costs, both of which have now been paid, and which were immaterial to the Company's results of operations.

In March 2018, the New Mexico Attorney General's office filed an action against the Company and several of its officers alleging violation of state consumer protection statutes and other claims. The Company disputes the allegations in the lawsuit and intends to defend itself in the action. The Company is unable to estimate a range of loss, if any, were there to be an adverse final decision. If an unfavorable outcome were to occur in this case, it is possible that the impact could be material to the Company's results of operations in the period(s) in which any such outcome becomes probable and estimable.

In June 2018, four of the Company's customers, on behalf of themselves and a purported class, named the Company in a putative class action alleging violations of the Consumers Legal Remedies Act and California Business and Professions Code Section 17200 and requesting relief pursuant to Section 1689 of the California Civil Code. The complaint sought (1) rescission of their PPAs along with restitution to the plaintiffs individually and (2) declaratory and injunctive relief. The Company disputes the allegations in the complaint and intends to vigorously defend itself. The Company is unable to estimate the amount or range of potential loss, if any, at this time.

In July 2018, an individual filed a putative class action lawsuit in the U.S. District Court for the District of Columbia, purportedly on behalf of himself and other persons who received certain telephone calls. The lawsuit alleges that the Company violated the Telephone Consumer Protection Act and some of its implementing regulations. The complaint seeks statutory penalties for each alleged violation. The Company disputes the allegations in the complaint and intends to vigorously defend itself in the litigation. The Company is unable to estimate the amount or range of potential loss, if any, at this time.

In October 2018, a former employee filed a representative action pursuant to California's Private Attorneys General Act alleging that the Company violated California labor and employment laws by, among other things, failing to provide its employees with rest and meal breaks. The Company disputes the allegations in the complaint and is in the process of retaining counsel to represent it in the litigation. The Company is unable to estimate a range of loss, if any, at this time. If an unfavorable outcome were to occur in the case, it is possible that the impact could be material to the Company's results of operations in the period(s) in which any such outcome becomes probable and estimable.

In October 2018, a former sales representative filed a representative action pursuant to California's Private Attorneys General Act alleging that the Company violated California labor and employment laws by, among other things, failing to properly compensate its direct sellers and reimburse them for business expenses. The Company disputes the allegations in the complaint and is in the process of retaining counsel to represent it in the litigation. The Company is unable to estimate a range of loss, if any, at this time. If an unfavorable outcome were to occur in the case, it is possible that the impact could be material to the Company's results of operations in the period(s) in which any such outcome becomes probable and estimable.

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

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

18. Basic and Diluted Net (Loss) Income Per Share

The following table sets forth the computation of the Company's basic and diluted net (loss attributable) income available per share to common stockholders for the three and nine months ended September 30, 2018 and 2017 (in thousands, except per share amounts):

	Three Months Ended September 30, 2018		Nine Months Ended September 30, 2017	
Numerator:				
Net (loss attributable) income available to common stockholders	\$ (7,868) \$ 6,905		\$ (2,728) \$ 25,177	
Denominator:				
Shares used in computing net (loss attributable) income available				
per share to common stockholders, basic	118,767	114,505	116,871	112,554
Weighted-average effect of potentially dilutive shares to				
purchase common stock	—	4,960	—	5,271
Shares used in computing net (loss attributable) income available				
per share to common stockholders, diluted	118,767	119,465	116,871	117,825
Net (loss attributable) income available per share to common				
stockholders:				
Basic	\$ (0.07) \$ 0.06		\$ (0.02) \$ 0.22	
Diluted	\$ (0.07) \$ 0.06		\$ (0.02) \$ 0.21	

For the three and nine months ended September 30, 2018, the Company incurred a net loss attributable to common stockholders. As such, the potentially dilutive shares were anti-dilutive and were not considered in the weighted-average number of common shares outstanding for the period. For the three and nine months ended September 30, 2017, 0.2 million shares and 0.8 million shares were excluded from the dilutive share calculations as the effect on net income per share would have been anti-dilutive.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-Looking Statements

This section should be read in conjunction with our unaudited condensed consolidated financial statements and related notes included in Part 1, Item 1 of this report. This discussion contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements are identified by words such as “believe,” “anticipate,” “expect,” “intend,” “plan,” “will,” “may,” “seek” and other similar expressions. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition or state other “forward-looking” information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements.

These forward-looking statements include, but are not limited to:

- federal, state and local regulations and policies governing the electric utility industry;
- the regulatory regime for our offerings and for third-party owned solar energy systems;
- technical limitations imposed by operators of the power grid;
- the continuation of tax rebates, credits and incentives, including changes to the rates of the U.S. federal investment tax credit, or ITC, beginning in 2020;
- the price of utility-generated electricity and electricity from other sources;
- our ability to finance the installation of solar energy systems;
- our ability to efficiently install and interconnect solar energy systems to the power grid;
- our ability to manage growth, product offering mix and costs;
- our ability to further penetrate existing markets and expand into new markets;
- our ability to develop new product offerings and distribution channels;
 - our relationship with our sister company Vivint, Inc., or Vivint, and The Blackstone Group L.P., our Sponsor;
- our ability to manage our supply chain;
 - the cost of equipment and the residual value of solar panels after the expiration of our customer contracts;
- the course and outcome of litigation and other disputes; and
- our ability to maintain our brand and protect our intellectual property.

In combination with the risk factors we have identified, we cannot assure you that the forward-looking statements in this report will prove to be accurate. Further, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all, or as predictions of future events. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Overview

We offer distributed solar energy — electricity generated by a solar energy system installed at or near customers' locations — to residential customers primarily through a customer-focused and neighborhood-driven direct-to-home sales model. We believe we are disrupting the traditional electricity market by satisfying customers' demand for increased energy independence and less expensive, more socially responsible electricity generation. As a result, we primarily compete with traditional utilities in the markets we serve, and our strategy is to price the energy we sell

below prevailing retail electricity rates. The price our customers pay to buy energy from us varies depending on the state where the customer is located, the impact of the local traditional utility, customer price sensitivity, the availability of incentives and rebates, the need to offer a compelling financial benefit and the price other solar energy companies charge in the region. We also compete with distributed solar energy system providers for solar energy system sales on the basis of price, service and availability of financing options.

Our primary product offering includes the following:

Power Purchase Agreements. Under power purchase agreements, or PPAs, we charge customers a fee per kilowatt hour based on the electricity production of the solar energy system, which is billed monthly. PPAs typically have a term of 20 years and are subject to an annual price escalator of 2.9%. Over the term of the PPA, we operate the system and agree to maintain it in good condition. Customers who buy energy from us under PPAs are covered by our workmanship warranty equal to the length of the term of these agreements.

Legal-form Leases. Under legal-form leases, or Solar Leases, we charge customers a fixed monthly payment to lease the solar energy system, which is based on a calculation that accounts for expected solar energy generation. Solar Leases typically have a term of 20 years and are typically subject to an annual price escalator of 2.9%. We provide our Solar Lease customers a performance guarantee, under which we agree to refund certain payments to the customer if the solar energy system does not meet the guaranteed production level in the prior 12-month period. Over the term of the Solar Lease, we operate the system and agree to maintain it in good condition. Customers who buy energy from us under Solar Leases are covered by our workmanship warranty equal to the length of the term of these agreements.

Solar Energy System Sales. Under solar energy system sales, or System Sales, we offer our customers the option to purchase solar energy systems for cash or through third-party financing. The price for these contracts is determined as a function of the respective market rate and the size of the solar energy system to be installed. Customers can additionally contract with us for certain structural upgrades, smart home products, battery storage systems, electric vehicle charging stations and other accessories based on the market where they are located in connection with the installation of a solar energy system. We believe System Sales are advantageous to us as they provide immediate access to cash.

Of the 141.7 megawatts installed in the nine months ended September 30, 2018, approximately 85% were installed under PPAs and Solar Leases and 15% were installed under System Sales.

From time to time, we have adjusted our installation policies and pricing. We have become more selective in our installation policies to increase incremental value by limiting the installation of smaller system sizes and limiting installations on certain roof types. We have also changed our pricing in certain markets to increase returns on investment or to place ourselves in a more competitive position. We continue to evaluate and make adjustments to our installation policies and pricing as our processes become more efficient and power rates increase. We also continue to evaluate pricing to optimize our use of capital based on market conditions and utility rates.

Our ability to offer long-term customer contracts depends in part on our ability to finance the installation of the solar energy systems by co-investing or entering into lease arrangements with fund investors who value the resulting customer receivables and ITCs, accelerated tax depreciation and other incentives related to the solar energy systems primarily through structured investments known as “tax equity.” Tax equity investments are generally structured as non-recourse project financings known as investment funds. In the context of the distributed solar energy market, tax equity investors make an upfront advance payment to a sponsor through an investment fund in exchange for a share of the tax attributes and cash flows emanating from an underlying portfolio of solar energy systems. In these investment funds, the U.S. federal tax attributes offset taxes that otherwise would have been payable on the investors’ other operations. The terms and conditions of each investment fund vary significantly by investor and by fund. We continue to negotiate with financial investors to create additional investment funds.

In general, our investment funds have adopted the partnership or inverted lease structures. Under partnership structures, we and our fund investors contribute cash into a partnership company. The partnership uses this cash to acquire solar energy systems developed by us and sells energy from such systems to customers or directly leases the solar energy systems to customers. Under our existing inverted lease structures, we and the fund investor set up a multi-tiered investment vehicle, comprised of two partnership entities, that facilitates the pass through of the tax benefits to the fund investors. In this structure, we contribute solar energy systems to a lessor partnership entity in

exchange for interests in the lessor partnership and the fund investors contribute cash to a lessee partnership in exchange for interests in the lessee partnership which in turn makes an investment in the lessor partnership entity in exchange for interests in the lessor partnership. The lessor partnership distributes the cash contributions received from the lessee partnership to our wholly owned subsidiary that contributed the projects to the lessor partnership. The lessor partnership leases the contributed solar energy systems to the lessee partnership under a master lease, and the lessee partnership pays the lessor partnership rent for those systems.

We have determined that we are the primary beneficiary in these partnership and inverted lease structures for accounting purposes. Accordingly, we consolidate the assets and liabilities and operating results of these partnerships in our condensed consolidated financial statements. We recognize the fund investors' share of the net assets of the investment funds as non-controlling interests and redeemable non-controlling interests in our condensed consolidated balance sheets. These income or loss allocations, reflected on our condensed consolidated statements of operations, may create significant volatility in our reported results of operations, including potentially changing net (loss attributable) income available to common stockholders from loss to income, or vice versa, from quarter to quarter.

Recent Developments

Smaller Reporting Company Status

In June 2018, the SEC issued release number 33-10513 which changed the definition of a smaller reporting company to expand the number of registrants that qualify to provide scaled disclosures. This change became effective September 10, 2018 and registrants are permitted to transition to the scaled disclosures in their next periodic report due after the effective date. Under the new rule, we qualify as a smaller reporting company and will take advantage of certain scaled disclosures beginning in this quarterly report.

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. These estimates 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, these estimates are based on a combination of assumptions that may not prove to be accurate over time, particularly given that a number of them involve estimates of cash flows up to 30 years in the future. Underperformance of the solar energy systems, payment defaults by our customers, cancellation of signed contracts, competition from other distributed solar energy companies, development in the distributed solar energy market and the energy market more broadly, technical innovation or other factors described under the section of this report captioned "Risk Factors" could cause our actual results to differ materially from our calculations. Furthermore, while we believe we have calculated these key metrics in a manner consistent with those used by others in our industry, other companies may in fact calculate these metrics differently than we do now or in the future, which would reduce their usefulness as a comparative measure.

☛ **Solar energy system installations.** Solar energy system installations represents the number of solar energy systems installed on customers' premises. Cumulative solar energy system installations represents the aggregate number of solar energy systems that have been installed on customers' premises. We track the number of solar energy system installations as of the end of a given period as an indicator of our historical growth and as an indicator of our rate of growth from period to period.

☛ **Megawatts installed.** Megawatts installed represents the aggregate megawatt nameplate capacity of solar energy systems for which panels, inverters, and mounting and racking hardware have been installed on customers' premises in the period. Cumulative megawatts installed represents the aggregate megawatt nameplate capacity of solar energy systems for which panels, inverters, and mounting and racking hardware have been installed on customers' premises.

☛ **Estimated nominal contracted payments remaining.** Estimated nominal contracted payments remaining equals the sum of the remaining cash payments that our customers are expected to pay over the term of their PPAs or Solar

Leases with us for systems installed as of the measurement date. For a PPA, we multiply the contract price per kilowatt-hour by the estimated annual energy output of the associated solar energy system to determine the estimated nominal contracted payments. For a Solar Lease, we include the monthly fees and upfront fee, if any, as set forth in the lease.

Estimated retained value under energy contracts. Estimated retained value under energy contracts represents the estimated retained value from the solar energy systems during the typical 20-year term of our PPAs and Solar Leases.

Estimated retained value of renewal. Estimated retained value of renewal represents the estimated retained value associated with an assumed 10-year renewal term following the expiration of the initial PPA or Solar Lease term. To calculate estimated retained value of renewal, we assume all PPAs and Solar Leases are renewed at 90% of the contractual price in effect at the expiration of the initial term.

Estimated gross retained value. Estimated retained value represents the net cash flows discounted at 6% that we expect to receive from customers pursuant to PPAs and Solar Leases net of estimated cash distributions to fund investors, debt associated with our forward flow facilities and estimated operating expenses for systems installed as of the measurement date.

Estimated gross retained value per watt. Estimated retained value per watt is calculated by dividing the estimated retained value as of the measurement date by the aggregate nameplate capacity of solar energy systems under PPAs and Solar Leases that have been installed as of such date, and is subject to the same assumptions and uncertainties as estimated retained value.

	Three Months Ended September 30, 2018 2017		Nine Months Ended September 30, 2018 2017	
Solar energy system installations	7,547	7,076	20,038	20,765
Megawatts installed	54.3	46.5	141.7	139.2

Solar energy system installations have decreased while megawatts installed have increased for the nine months ended September 30, 2018 compared to the prior period due in part to our taking a disciplined approach to install solar energy systems more profitably resulting in better system attributes including larger solar energy systems.

	September 30, 2018	December 31, 2017
Cumulative solar energy system installations	146,868	126,830
Cumulative megawatts installed	1,006.6	864.9
Estimated nominal contracted payments remaining (in millions)	\$ 3,444.4	\$ 3,021.6
Estimated retained value under energy contracts (in millions)	\$ 1,427.2	\$ 1,238.0
Estimated retained value of renewal (in millions)	\$ 451.8	\$ 377.1
Estimated gross retained value (in millions)	\$ 1,879.0	\$ 1,615.1
Estimated gross retained value per watt	\$ 2.03	\$ 2.00

Seasonality

We experience seasonal fluctuations in our operations. For example, the amount of revenue we recognize in a given period from PPAs is dependent in part on the amount of energy generated by solar energy systems under such contracts. As a result, operating leases and incentives revenue is impacted by seasonally shorter daylight hours in winter months. In addition, our ability to install solar energy systems is impacted by weather. For example, we have limited ability to install solar energy systems during the winter months in the Northeastern United States and other areas where winter weather is impactful. Such delays can impact the timing of when we can install and begin to generate revenue from solar energy systems. However, the true extent of these fluctuations may have been masked by our historical growth rates and thus may not be readily apparent from our historical operating results and may be difficult to predict. As such, our historical operating results may not be indicative of future performance.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our condensed consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States, or GAAP. GAAP requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses, cash flows and related footnote disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates. Our future condensed consolidated financial statements will be affected to the extent that our actual results materially differ from these estimates.

We believe that the assumptions and estimates associated with ITCs, revenue recognition, solar energy systems, net, the impairment analysis of long-lived assets, stock-based compensation, the provision for income taxes, the valuation of derivative financial instruments, the recognition and measurement of loss contingencies, and non-controlling interests and redeemable non-controlling interests have the greatest potential impact on our condensed consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates.

Effective January 1, 2018, we adopted the following Accounting Standards Updates, or ASUs:

•ASU 2014-09, Revenue from Contracts with Customers (Topic 606), or Topic 606, provides guidance for recognizing revenue related to customer contracts not covered by lease or other GAAP requirements. This guidance was adopted using the modified retrospective method. The adoption of Topic 606 resulted in a decrease in revenue of \$1.6 million and \$4.8 million for the three and nine months ended September 30, 2018 and a cumulative adjustment to retained earnings, net of tax, as of January 1, 2018 of \$19.2 million.

•ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory, or ASU 2016-16, requires that the tax effect of intra-entity transfers of assets other than inventory be recognized upon transfer of the asset. This guidance was adopted using the modified retrospective method. The adoption of ASU 2016-16 resulted in a cumulative adjustment to retained earnings of \$493.1 million and to deferred tax liability, net, of \$12.8 million as of January 1, 2018.

•ASU 2018-02, Income Statement—Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income, or ASU 2018-02, permits stranded tax effects caused by the Tax Cuts and Jobs Act, or TCJA, to be reclassified from accumulated other comprehensive income, or AOCI, to retained earnings. Effective January 1, 2018, we reclassified tax effects of approximately \$1.5 million to retained earnings.

•ASU 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities, or ASU 2017-12, made targeted improvements to accounting for hedge activities by easing certain documentation and assessment requirements and eliminating the requirement to separately measure and report hedge ineffectiveness. This update was adopted using a modified retrospective method. The net amount recorded to retained earnings as a result of adopting ASU 2017-12 was approximately \$1.8 million.

•ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force), or ASU 2016-18, clarified that transfers between cash and restricted cash are not reported as cash flow activities in the statement of cash flows. This update was applied retrospectively, resulting in an adjustment to the beginning-of-period and end-of-period total amounts on the condensed consolidated statements of cash flows. See Note 2—Summary of Significant Accounting Policies for additional details on each of these ASUs.

There have been no other material changes to our critical accounting policies and estimates during the nine months ended September 30, 2018 from those disclosed in our annual report on Form 10-K for the year ended December 31, 2017.

Components of Results of Operations

Revenue

Operating Leases and Incentives. We classify and account for our PPAs as operating leases and recognize revenue from these contracts based on the actual amount of power generated at rates specified under the contracts. We also classify and account for our Solar Leases, which include performance guarantees, as operating leases, and recognize revenue from these contracts on a straight-line basis over the lease term.

We apply for and receive SRECs in certain jurisdictions for power generated by solar energy systems we have installed. We generally recognize revenue related to the sale of SRECs upon delivery to the buyer. The market for SRECs is extremely volatile and sellers are often able to obtain better unit pricing by selling a large quantity of SRECs. As a result, we may sell SRECs infrequently, at opportune times and in large quantities and the timing and volume of our SREC sales may lead to fluctuations in our quarterly results.

Solar Energy System and Product Sales. Solar energy systems and product sales primarily include revenue from System Sales. Revenue for System Sales is recognized when systems are interconnected to local power grids and granted permission to operate, assuming all other revenue recognition criteria are met. Revenue from System Sales decreased during the three months ended September 30, 2018 compared to the three months ended September 30, 2017. However, we expect revenue from System Sales to increase slightly in the fourth quarter of 2018 compared to the third quarter of 2018 due primarily to increased focus in specific markets. Revenue related to the sale of photovoltaic installation products is recognized at the time of product shipment to the customer, assuming the remaining revenue recognition criteria have been met. Revenue mix will likely vary on a period-to-period basis as a result of regulatory, competitive and other local market conditions.

The following table sets forth our revenue by major product (in thousands):

Three Months Ended	Nine Months Ended
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	September 30,		September 30,	
	2018	2017	2018	2017
Revenue:				
Operating leases and other incentives	\$40,938	\$35,438	\$106,860	\$90,023
SREC sales	12,532	8,911	32,489	24,857
ITC revenue	—	1,560	—	4,831
Total operating leases and incentives	53,470	45,909	139,349	119,711
System Sales	23,098	28,658	85,145	79,675
Photovoltaic installation products	1,248	425	2,191	1,419
SREC sales	—	147	179	443
Total solar energy system and product sales	24,346	29,230	87,515	81,537
Total revenue	\$77,816	\$75,139	\$226,864	\$201,248

Operating Expenses

Cost of Revenue—Operating Leases and Incentives. Cost of revenue—operating leases and incentives includes the depreciation of the cost of solar energy systems under long-term customer contracts, which are depreciated for accounting purposes over 30 years; and the amortization of the related capitalized initial direct costs, which are amortized over the term of the long-term customer contract. It also includes allocated indirect material and labor costs related to the processing; account creation; design; installation; interconnection and servicing of solar energy systems that are not capitalized, such as personnel costs not directly associated to a solar energy system installation; warehouse rent and utilities; and fleet vehicle executory costs. The cost of operating leases and incentives also includes allocated facilities and information technology costs. The cost of revenue for the sales of SRECs is limited to broker fees which are paid in connection with certain SREC transactions. In the fourth quarter of 2018, we expect the cost of operating leases and incentives revenue will increase in absolute dollars compared to the third quarter of 2018 primarily due to depreciation associated with additional solar energy systems being placed in service.

Cost of Revenue—Solar Energy System and Product Sales. Cost of revenue—solar energy system and product sales consists of direct and allocated indirect material and labor costs and overhead costs for System Sales, photovoltaic installation products and structural upgrades. Indirect material and labor costs are ratably allocated to System Sales and include costs related to the processing; account creation; design; installation; interconnection and servicing of solar energy systems, such as personnel costs not directly associated to a solar energy system installation; warehouse rent and utilities; and fleet vehicle executory costs. The cost of solar energy system and product sales also includes allocated facilities and information technology costs. Costs of solar energy system sales are recognized in conjunction with the related revenue upon the solar energy system passing an inspection by the responsible governmental department after completion of system installation and interconnection to the power grid, assuming all other revenue recognition criteria are met. In the fourth quarter of 2018, we expect the cost of solar energy system and product sales to slightly increase compared to the third quarter of 2018 due primarily to slightly higher System Sales.

Sales and Marketing. Sales and marketing expenses include personnel costs, such as salaries, benefits, bonuses and stock-based compensation for our corporate sales and marketing employees, certain non-capitalizable commission payments and exclude costs related to our direct sales personnel that are accounted for as cost of revenue. Sales and marketing expenses also include advertising, promotional and other marketing-related expenses; allocated facilities and information technology costs; travel; professional services and costs related to pre-installation sales activities. In the fourth quarter of 2018, we expect sales and marketing costs will increase in absolute dollars compared to the third quarter of 2018 due in part to increased costs related to our residual commission payments. Refer to Note 17—Commitments and Contingencies for additional details about residual commission payments.

Research and Development. Research and development expense is comprised primarily of salaries and benefits and other costs related to the development of photovoltaic installation products and other solar technologies. Research and development costs are charged to expense when incurred. In the fourth quarter of 2018, we expect research and development costs will remain relatively consistent in absolute dollars compared to the third quarter of 2018.

General and Administrative. General and administrative expenses include personnel costs, such as salaries, bonuses and stock-based compensation related to our general and administrative personnel; professional fees related to legal, human resources, accounting and structured finance services; travel; and allocated facilities and information technology costs. In the fourth quarter of 2018, we expect general and administrative expenses will decrease in absolute dollars due in part to less funding activities compared to the third quarter of 2018.

Amortization of Intangible Assets. We have recorded intangible assets at their fair value related to acquisitions in which we have been involved and at cost for internally developed software projects. Such intangible assets are amortized over their estimated useful lives.

Non-Operating Expenses

Interest Expense. Interest expense primarily consists of the interest charges associated with our indebtedness including the amortization of debt issuance costs and the interest component of capital lease obligations. In the fourth quarter of 2018, we expect our interest expense to increase in absolute dollars compared to the third quarter of 2018 as we have incurred additional indebtedness. Additionally, some of our debt facilities accrue interest at floating rates and increases in those floating rates would result in higher interest expense.

Other (Income) Expense, net. Other (income) expense, net primarily consists of changes in fair value for our interest rate swaps not designated as hedges and in the three and nine months ended September 30, 2018, an initial distribution that we received from one of our legal proceedings.

Income Tax Expense. All of our business is conducted in the United States, and therefore income tax expense consists of current and deferred income taxes incurred in U.S federal, state and local jurisdictions.

Net Income Available to Common Stockholders

We determine the net income available to common stockholders by deducting from net loss the net loss attributable to non-controlling interests and redeemable non-controlling interests, which represents the investment fund investors' allocable share in the results of operations of the investment funds that we consolidate. Generally, gains and losses that are allocated to the fund investors under the hypothetical liquidation at book value, or HLBV, method relate to hypothetical liquidation gains and losses resulting from differences between the net assets of the investment fund and the partners' respective tax capital accounts in the investment fund. As of September 30, 2018, we had one operational investment fund that did not utilize the HLBV method to allocate gains and losses as we own 100% of the equity of that fund and there is no non-controlling interest attributable to a fund investor.

Results of Operations

The results of operations presented below should be reviewed in conjunction with the condensed consolidated financial statements and related notes included elsewhere in this report.

The following table sets forth selected condensed consolidated statements of operations data for each of the periods indicated:

	Three Months Ended September 30, 20182017		Nine Months Ended September 30, 20182017	
	(In thousands)			
Revenue:				
Operating leases and incentives	\$53,470	\$45,909	\$139,349	\$119,711
Solar energy system and product sales	24,346	29,230	87,515	81,537
Total revenue	77,816	75,139	226,864	201,248
Cost of revenue:				
Cost of revenue—operating leases and incentives	42,135	34,731	122,188	103,564
Cost of revenue—solar energy system and product sales	17,700	22,168	62,735	63,664
Total cost of revenue	59,835	56,899	184,923	167,228
Gross profit	17,981	18,240	41,941	34,020
Operating expenses:				
Sales and marketing	15,841	9,808	40,999	28,037
Research and development	475	896	1,472	2,687
General and administrative	29,803	19,379	71,533	60,259
Amortization of intangible assets	142	139	408	418
Total operating expenses	46,261	30,222	114,412	91,401
Loss from operations	(28,280)	(11,982)	(72,471)	(57,381)
Interest expense, net	18,715	16,148	46,973	47,707
Other (income) expense, net	(1)	195	(6,371)	1,186
Loss before income taxes	(46,994)	(28,325)	(113,073)	(106,274)
Income tax expense	25,698	9,375	79,693	23,932

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Net loss	(72,692)	(37,700)	(192,766)	(130,206)
Net loss attributable to non-controlling interests and redeemable				
non-controlling interests	(64,824)	(44,605)	(190,038)	(155,383)
Net (loss attributable) income available to common stockholders	\$(7,868)	\$6,905	\$(2,728)	\$25,177

Comparison of Three Months Ended September 30, 2018 and 2017

Revenue

	Three Months Ended		
	September 30,		\$
	2018	2017	Change
	(In thousands)		2018 from 2017
Revenue:			
Operating leases and incentives	\$53,470	\$45,909	\$7,561
Solar energy system and product sales	24,346	29,230	(4,884)
Total revenue	\$77,816	\$75,139	\$2,677

Operating Leases and Incentives. The \$7.6 million increase was due in part to a \$5.3 million increase in operating lease revenue as the total megawatts of solar energy systems placed in service under these long-term customer contracts increased 19% and a \$3.6 million increase in SREC revenue. This increase was partially offset by a decrease in ITC revenue of \$1.6 million due to the adoption of new accounting pronouncements effective January 1, 2018.

Solar Energy System and Product Sales. The \$4.9 million decrease was primarily due to a decrease in solar energy systems placed in service under System Sales compared to the third quarter of 2017, reflecting shifts in product and market mix.

Cost of Revenue

	Three Months Ended		
	September 30,		\$
	2018	2017	Change
	(In thousands)		2018 from 2017
Cost of revenue:			
Cost of revenue—operating leases and incentives	\$42,135	\$34,731	\$7,404
Cost of revenue—solar energy system and product sales	17,700	22,168	(4,468)
Total cost of revenue	\$59,835	\$56,899	\$2,936

Cost of Revenue—Operating Leases and Incentives. The \$7.4 million increase was due in part to a \$4.1 million increase related to growth in the post-installation maintenance organization to accommodate the increase in the number of solar energy systems placed in service and other non-capitalized installation expense, and a \$2.6 million increase in depreciation and amortization of solar energy systems due to the increase in the number of solar energy systems placed in service.

Cost of Revenue—Solar Energy System and Product Sales. The \$4.5 million decrease reflected a lower volume of System Sales compared to the prior year period.

Operating Expenses

	Three Months Ended		\$
	September 30,		Change
	2018	2017	2018 from 2017
	(In thousands)		
Operating expenses:			
Sales and marketing	\$15,841	\$9,808	\$6,033
Research and development	475	896	(421)
General and administrative	29,803	19,379	10,424
Amortization of intangible assets	142	139	3
Total operating expenses	\$46,261	\$30,222	\$16,039

Sales and Marketing. The \$6.0 million increase was primarily due to a \$4.1 million increase in compensation and benefits due in part to an increase in non-capitalized residual commission payments and inside sales headcount and a \$1.6 million increase in pre-installation costs.

Research and Development. The \$0.4 million decrease was primarily due to a decrease in compensation and benefits resulting from a decrease in research and development headcount.

General and Administrative. The \$10.4 million increase was primarily due to a \$10.2 million increase in professional fees and other costs related to establishing additional investment funds in the current period.

Non-Operating Expenses

	Three Months Ended		
	September 30,		\$
			Change
			2018
			from
	2018	2017	2017
	(In thousands)		
Interest expense, net	\$18,715	\$16,148	\$2,567
Other (income) expense, net	(1)	195	(196)

Interest Expense. Interest expense increased \$2.6 million primarily due to additional borrowings year over year and higher interest rates on our floating-rate debt facilities.

Other (Income) Expense, net. The \$0.2 million change from other expense to other income was primarily due to changes in the fair value of our derivative financial instruments.

Income Taxes

	Three Months Ended		
	September 30,		\$
			Change
			2018
			from
	2018	2017	2017
	(In thousands)		
Income tax expense	\$25,698	\$9,375	\$16,323

The \$16.3 million increase in income tax expense was primarily attributable to a net \$13.9 million additional expense as a result of the adoption of ASU 2016-16, \$4.2 million associated with the net tax effect of non-controlling interests and redeemable non-controlling interests, a tax-effected \$0.8 million reduced loss before income taxes, and a \$0.2 million decrease in income tax credits. These increases in income tax expense were partially offset by \$2.2 million associated with the federal income tax rate being reduced from 35% to 21%.

Net Loss Attributable to Non-Controlling Interests and Redeemable Non-Controlling Interests

	Three Months Ended		\$
	September 30,		Change
	2018	2017	2018 from 2017
	(In thousands)		
Net loss attributable to non-controlling interests and redeemable			
non-controlling interests	\$(64,824)	\$(44,605)	\$(20,219)

Net loss attributable to non-controlling interests and redeemable non-controlling interests was allocated using the HLBV method. Generally, gains and losses that are allocated to the fund investors relate to hypothetical liquidation gains and losses resulting from differences between the net assets of the investment fund and the partners' respective tax capital accounts in the investment fund. Losses allocated to the fund investors are generally derived from the receipt of ITCs and tax depreciation under Internal Revenue Code Section 168. These tax benefits are primarily allocated to the investors and reduce the fund investors' tax capital account. The \$20.2 million increase in net loss attributable to non-controlling interests and redeemable non-controlling interests is primarily due to a higher volume of solar energy systems installed and placed in service under PPA and Solar Lease agreements compared to the same period in 2017.

Comparison of Nine Months Ended September 30, 2018 and 2017

Revenue

	Nine Months Ended		\$
	September 30,		Change
	2018	2017	2018 from 2017
	(In thousands)		
Revenue:			
Operating leases and incentives	\$ 139,349	\$ 119,711	\$ 19,638
Solar energy system and product sales	87,515	81,537	5,978
Total revenue	\$ 226,864	\$ 201,248	\$ 25,616

Operating Leases and Incentives. The \$19.6 million increase was due in part to a \$16.2 million increase in operating lease revenue as the total megawatts of solar energy systems placed in service under these long-term customer contracts increased 19% and a \$7.6 million increase in SREC revenue. This increase was partially offset by a decrease in ITC revenue of \$4.8 million due to the adoption of new accounting pronouncements effective January 1, 2018.

Solar Energy System and Product Sales. The \$6.0 million increase was primarily due to shifts in product and market mix for the solar energy systems placed in service under System Sales despite fewer megawatts placed in service compared to the same period in 2017.

Cost of Revenue

	Nine Months Ended		\$
	September 30,		Change
	2018	2017	2018 from 2017
	(In thousands)		
Cost of revenue:			
Cost of revenue—operating leases and incentives	\$ 122,188	\$ 103,564	\$ 18,624
Cost of revenue—solar energy system and product sales	62,735	63,664	(929)
Total cost of revenue	\$ 184,923	\$ 167,228	\$ 17,695

Cost of Revenue—Operating Leases and Incentives. The \$18.6 million increase was due in part to a \$11.5 million increase related to growth in the post-installation maintenance organization to accommodate the increase in the number of solar energy systems placed in service and other non-capitalized installation expense, and a \$7.6 million increase in depreciation and amortization of solar energy systems due to the increase in the number of solar energy systems placed in service.

Cost of Revenue—Solar Energy System and Product Sales. The \$0.9 million decrease reflected the lower volume of System Sales placed in service.

Operating Expenses

	Nine Months Ended		
	September 30,		\$
	2018	2017	Change 2018 from 2017
	(In thousands)		
Operating expenses:			
Sales and marketing	\$40,999	\$28,037	\$12,962
Research and development	1,472	2,687	(1,215)
General and administrative	71,533	60,259	11,274
Amortization of intangible assets	408	418	(10)
Total operating expenses	\$114,412	\$91,401	\$23,011

Sales and Marketing. The \$13.0 million increase was primarily due to a \$8.4 million increase in compensation and benefits due in part to an increase in non-capitalized residual commission payments and inside sales headcount and a \$3.5 million increase in pre-installation costs.

Research and Development. The \$1.2 million decrease was primarily due to a decrease in compensation and benefits resulting from a decrease in research and development headcount.

General and Administrative. The \$11.3 million increase was primarily due to a \$12.0 million increase in professional fees and other costs related to establishing additional investment funds in the current period.

Non-Operating Expenses

	Nine Months Ended		
	September 30,		\$
			Change
			2018
			from
	2018	2017	2017
	(In thousands)		
Interest expense, net	\$46,973	\$47,707	\$(734)
Other (income) expense, net	(6,371)	1,186	(7,557)

Interest Expense. Interest expense decreased \$0.7 million primarily due to a \$22.5 million reduction in interest expense resulting from the settlement of the interest rate swaps associated with the 2016 Term Loan Facility, which were designated as hedges, and a \$1.6 million reduction in amortization of debt issuance costs. These decreases were partially offset by a \$9.8 million charge to write off remaining debt issuance costs related to the 2016 Term Loan Facility and Subordinated HoldCo Facility, both of which were refinanced and terminated in the current period, a \$5.9 million prepayment fee related to the termination of the Subordinated HoldCo Facility and a \$8.0 million increase in interest expense due to additional borrowings year over year and higher interest rates on our floating-rate debt facilities.

Other (Income) Expense, net. The \$7.6 million change from other expense to other income was primarily due to a \$5.4 million change in the fair value of our derivative financial instruments and a \$2.1 million payment received as an initial distribution to us in one of our legal proceedings.

Income Taxes

	Nine Months Ended		
	September 30,		\$
			Change
			2018
			from
	2018	2017	2017
	(In thousands)		
Income tax expense	\$79,693	\$23,932	\$55,761

The \$55.8 million increase in income tax expense was primarily attributable to a net \$37.2 million additional expense as a result of the adoption of ASU 2016-16, a tax-effected \$12.7 million reduced loss before income taxes, an \$8.2 million decrease in income tax credits, and \$7.3 million associated with the net tax effect of non-controlling interests

and redeemable non-controlling interests. These increases in income tax expense were partially offset by \$7.0 million associated with the federal income tax rate being reduced from 35% to 21%.

Net Loss Attributable to Non-Controlling Interests and Redeemable Non-Controlling Interests

	Nine Months Ended		\$
	September 30,		Change
	2018	2017	2018 from 2017
	(In thousands)		
Net loss attributable to non-controlling interests and redeemable			
non-controlling interests	\$(190,038)	\$(155,383)	\$(34,655)

Net loss attributable to non-controlling interests and redeemable non-controlling interests was allocated using the HLBV method. Generally, gains and losses that are allocated to the fund investors relate to hypothetical liquidation gains and losses resulting from differences between the net assets of the investment fund and the partners' respective tax capital accounts in the investment fund. Losses allocated to the fund investors are generally derived from the receipt of ITCs and tax depreciation under Internal Revenue Code Section 168. These tax benefits are primarily allocated to the investors and reduce the fund investors' tax capital account. The \$34.7 million increase in net loss attributable to non-controlling interests and redeemable non-controlling interests is primarily due to a higher volume of solar energy systems installed and placed in service under PPA and Solar Lease agreements compared to the same period in 2017.

Liquidity and Capital Resources

As of September 30, 2018, we had cash and cash equivalents of \$188.6 million, which consisted principally of cash and time deposits with high-credit-quality financial institutions. As discussed in Note 10—Debt Obligations and Note 12—Investment Funds, we do not have full access to a portion of our cash and cash equivalents. Additional details regarding our existing credit facilities are included in the consolidated financial statements and accompanying notes included in our annual report on Form 10-K dated as of March 7, 2018. We finance our operations primarily from investment fund arrangements that we have formed with fund investors, from borrowings and from cash inflows from operations.

Our principal uses of cash are funding our operations, including the costs of acquisition and installation of solar energy systems, working capital requirements and the satisfaction of our obligations under our debt instruments. Our business model requires substantial outside financing arrangements to grow the business and facilitate the deployment of additional solar energy systems. While there can be no assurances, we anticipate raising additional required capital from new and existing fund investors, additional borrowings, cash from System Sales and other potential financing vehicles.

We may seek to raise financing through the sale of equity, equity-linked securities, additional borrowings or other financing vehicles. Additional equity or equity-linked financing may be dilutive to our stockholders. If we raise funding through additional borrowings, such borrowings would have rights that are senior to holders of our equity securities and could contain covenants that restrict our operations. We believe our cash and cash equivalents, including our investment fund commitments, projected investment fund contributions and our current debt facilities as further described below, in addition to financing that we may obtain from other sources, including our financial sponsors, will be sufficient to meet our anticipated cash needs for at least the next 12 months. However, if we are unable to secure additional financing when needed, or upon desirable terms, we may be unable to finance installation of our customers' systems in a manner consistent with our past performance, our cost of capital could increase, or we may be required to significantly reduce the scope of our operations, any of which would have a material adverse effect on our business, financial condition, results of operations and prospects. In addition, our investment funds and debt instruments impose restrictions on our ability to draw on financing commitments. If we are unable to satisfy such conditions, we may incur penalties for non-performance under certain investment funds, experience installation delays, or be unable to make installations in accordance with our plans or at all. Any of these factors could also impact customer satisfaction, our business, operating results, prospects and financial condition. While we believe additional financing is available and will continue to be available to support our current level of operations, we believe we have the ability and intent to reduce operations to the level of available financial resources for at least the next 12 months, if necessary.

Sources of Funds

Investment Fund Commitments

As of October 31, 2018, we had raised 25 residential investment funds to which investors such as banks and other large financial investors have committed to invest approximately \$1.9 billion. The undrawn committed capital for these funds as of October 31, 2018 is approximately \$252.7 million, which we estimate will fund approximately 134 megawatts of future deployments.

Debt Instruments

Debt obligations consisted of the following as of September 30, 2018 (in thousands, except interest rates):

	Principal Borrowings Outstanding	Unused Borrowing Capacity	Interest Rate	Maturity Date
Solar asset backed notes, Series 2018-1	\$466,000	\$—	*	October 2028
Solar asset backed notes, Series 2018-2 ⁽¹⁾⁽²⁾	342,833	—	5.2 %	August 2023
2017 Term loan facility	191,705	—	6.0	January 2035
Forward flow loan facility	11,748	118,252	5.0	⁽³⁾
Credit agreement	1,287	—	6.5	February 2023
Revolving lines of credit				
Aggregation facility	30,000	345,000	5.4	September 2020
Working capital facility ⁽⁴⁾	136,500	—	5.3	March 2020
Total debt	\$1,180,073	\$463,252		

* The Series 2018-1 Notes are comprised of Class A and Class B Notes. Class A Notes accrue interest at 4.73%. Class B Notes accrue interest at 7.37%.

(1) The Series 2018-2 Notes are comprised of Class A and Class B Notes. Class B Notes accrue interest at a rate of LIBOR plus 4.75%. Class A Notes accrue interest at a variable spread over LIBOR that results in a weighted average spread for all 2018-2 Notes of 2.95%.

(2) The interest rate of this facility is partially hedged to an effective interest rate of 6.0% for \$326.8 million of the principal borrowings. See Note 11—Derivative Financial Instruments.

The maturity date for this facility is 20 years from the end date of the borrowing availability period when all (3) borrowings are aggregated into one term loan, which will be no later than October 31, 2019.

(4) Facility is recourse debt, which refers to debt that is collateralized by our general assets. All of our other debt obligations are non-recourse, which refers to debt that is only collateralized by specified assets or our subsidiaries. See Note 10—Debt Obligations for additional details regarding the debt facilities outstanding at September 30, 2018.

Revenue from Operations

In the three and nine months ended September 30, 2018, we generated \$53.5 million and \$139.3 million in revenue from operating leases and incentives, which approximates cash inflow. Cash related to our System Sales is generally received prior to revenue recognition, and we received \$26.2 million and \$81.6 million related to System Sales for the three and nine months ended September 30, 2018. The cash from our revenue partially offsets the cash used in operations for the period.

Uses of Funds

Our principal uses of cash are funding our operations, including the costs of acquisition and installation of solar energy systems, satisfaction of our obligations under our debt instruments and other working capital requirements. From time to time, we also reimburse portions of fund investors' capital as a result of delays in the installation process and interconnection to the power grid of solar energy systems and other factors. We expect our capital expenditures to continue to increase as we continue to install additional solar energy systems. We will need to raise financing to support our operations, and such financing may not be available to us on acceptable terms, or at all.

Historical Cash Flows

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

	Nine Months Ended September 30, 2018		2017	
Net cash (used in) provided by:	(In thousands)			
Operating activities	\$	(23,058)	\$	(24,674)
Investing activities		(231,565)		(207,729)
Financing activities		356,653		256,312
Net increase in cash and cash equivalents, including restricted amounts	\$	102,030	\$	23,909

Operating Activities

In the nine months ended September 30, 2018, we had a net cash outflow from operations of \$23.1 million. This was primarily due to outflows of \$36.6 million from our net loss excluding noncash and non-operating items and \$13.5 million of inflows from changes in working capital.

Investing Activities

In the nine months ended September 30, 2018, we used \$231.6 million for investing activities primarily due to \$233.5 million in costs associated with the design, acquisition and installation of solar energy systems. These outflows were partially offset by \$2.3 million in proceeds from disposals of property and equipment.

Financing Activities

In the nine months ended September 30, 2018, we generated \$356.7 million from financing activities, of which \$917.7 million represented proceeds from long-term debt and \$194.9 million represented proceeds from investments by non-controlling interests and redeemable non-controlling interests received by our investment funds. These proceeds were partially offset by repayments of long-term debt of \$693.8 million, distributions to non-controlling interests and redeemable non-controlling interests of \$41.7 million and payments on debt issuance and deferred offering costs of \$21.2 million.

Contractual Obligations

Our contractual commitments and obligations as of December 31, 2017 are set forth in the following table. Material changes that have occurred during the nine months ended September 30, 2018 are included in the footnotes to the table.

	Payments Due by Period				
	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years	Total
	(In thousands)				
Long-term debt ⁽¹⁾	\$13,939	\$491,052	\$283,876	\$167,240	\$956,107
Interest payments related to long-term debt ⁽²⁾	54,611	86,841	28,233	69,434	239,119
Distributions payable to non-controlling interests					
and redeemable non-controlling interests ⁽³⁾	16,437	—	—	—	16,437
Capital lease obligations and interest	4,457	1,687	—	—	6,144
Operating lease obligations	11,161	15,616	18,543	73,090	118,410
Total	\$100,605	\$595,196	\$330,652	\$309,764	\$1,336,217

(1) Does not include additional borrowings and repayments during the nine months ended September 30, 2018, which resulted in a net \$224.0 million increase in principal borrowings. These borrowings included the following activity: under the Series 2018-1 Notes maturing in October 2028, we incurred \$466.0 million of principal borrowings; under the Series 2018-2 Notes maturing in August 2023, we incurred \$342.8 million of principal borrowings; under the 2016 Term Loan Facility which was terminated in June 2018, we reduced principal borrowings by \$287.9 million; under the Subordinated HoldCo Facility which was terminated in June 2018, we reduced principal borrowings by \$197.6 million; under the Aggregation Facility maturing in September 2020, we reduced principal

borrowings by \$105.0 million; under the Forward Flow Loan Facility maturing October 2039, we incurred \$11.7 million of principal borrowings; and under the 2017 Term Loan Facility maturing in January 2035, we reduced principal borrowings by \$6.1 million. For additional information, see Note 10—Debt Obligations.

- (2) Does not include increases in interest payments related to changes in long-term debt during the nine months ended September 30, 2018, which for payments due in less than one year increased \$15.0 million, payments due in one to three years increased \$36.2 million, payments due in three to five years increased \$80.4 million and payments due in more than five years increased \$142.3 million.
- (3) During the nine months ended September 30, 2018, distributions payable to non-controlling interests and redeemable non-controlling interests decreased by \$5.2 million.

Off-Balance Sheet Arrangements

We include in our condensed 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

For a description of recent accounting pronouncements that we are evaluating, see Note 2—Summary of Significant Accounting Policies.

Emerging Growth Company Status

Section 107 of the JOBS Act provides that an “emerging growth company” can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. In other words, an “emerging growth company” can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not “emerging growth companies.”

Item 4. Controls and Procedures

Internal Control Over Financial Reporting

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2018 pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under 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, as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Based on the evaluation of our disclosure controls and procedures, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of September 30, 2018.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the nine months ended September 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

For a list of our current legal proceedings, see Note 17—Commitments and Contingencies.

Item 1A. Risk Factors

You should carefully consider the following risk factors, together with all of the other information included in this report, including the section of this report captioned “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our financial statements and related notes. If any of the following risks occurred, they could materially adversely affect our business, financial condition or operating results. This report also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of factors that are described below and elsewhere in this report.

Risk Related to Our Business

We need to enter into substantial additional financing arrangements to facilitate new customers’ access to our solar energy systems and provide working capital, and if financing is not available to us on acceptable terms when needed, our ability to continue to grow our business would be materially adversely impacted.

Our future success depends on our ability to raise capital from third-party investors and commercial sources, such as banks and other lenders, on competitive terms to help finance the deployment of our solar energy systems. We seek to minimize our cost of capital in order to maintain the price competitiveness of the electricity produced by, the lease payments for and the cost of our solar energy systems. We rely on investment funds in order to provide solar energy systems with little to no upfront costs to our customers under our PPAs and Solar Leases. We also rely on access to capital, including through indebtedness in the form of debt facilities and asset-backed securities, to cover the costs of our solar energy systems that are sold outright until the systems are paid for by our customers, whether by cash or through third-party financing arrangements. Certain of our financing arrangements are with fund investors who require particular tax and other benefits. The availability of this tax-advantaged financing depends upon many factors, including:

- our ability to compete with other renewable energy companies for the limited number of potential investment 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 certain incentives or decreases in the associated benefits.

Moreover, potential investors seeking such tax-advantaged financing must remain satisfied that the structures we offer qualify for the tax benefits associated with solar energy systems available to these investors, which depends both on the investors’ assessment of tax law and the absence of any unfavorable interpretations of that law. Changes in existing law and interpretations by the Internal Revenue Service, or IRS, and the courts could reduce the willingness of fund investors to invest in funds associated with these solar energy system investments or cause these investors to require a larger allocation of customer payments. We are not certain that this type of financing will continue to be available to us. If we are unable to establish new financing when needed, or upon desirable terms, to enable our customers’ access to our solar energy systems, we may be unable to finance installation of our customers’ systems, our cost of capital could increase or our liquidity could be constrained, any of which would have a material adverse effect on our business, financial condition, results of operations and prospects. As of October 31, 2018, we had raised 25 investment funds to which investors such as banks and other large financial investors have committed to invest

approximately \$1.9 billion. The undrawn committed capital for these funds as of October 31, 2018 is approximately \$252.7 million, which we estimate will fund approximately 134 megawatts of future deployments.

The contract terms in certain of our investment fund documents impose conditions on our ability to draw on financing commitments from the fund investors, including if an event occurs that could reasonably be expected to have a material adverse effect on the fund or on us. The terms and conditions of our investment funds can vary and may require us to alter our products, services or product mix. If we do not satisfy such conditions due to events related to our business or a specific investment fund or developments in our industry or otherwise, and as a result we are unable to draw on existing commitments, our inability to draw on such commitments could have a material adverse effect on our business, liquidity, financial condition and prospects. In addition to our inability to draw on the investors' commitments, we have in the past incurred and may in the future incur financial penalties for non-performance, including delays in the installation process and interconnection to the power grid of solar energy systems and other factors. Based on the terms of the investment fund agreements, we will either reimburse a portion of the fund investor's capital or pay the fund investor a non-performance fee.

To meet the capital needs of our growing business, we will need to obtain additional financing from new investors and financial institutions and investors and financial institutions who are current investors or with whom we currently have financing arrangements. If any of the investors or financial institutions that currently provide financing decide not to invest in us in the future due to general market conditions, concerns about our business or prospects or any other reason, or decide to invest at levels that are inadequate to support our anticipated needs or materially change the terms under which they are willing to provide future financing, we will need to identify new investors and financial institutions to provide financing and negotiate new financing terms. In addition, our ability to obtain additional financing through the asset-backed securities market or other secured debt markets is subject to our having sufficient assets eligible for securitization as well as our ability to obtain appropriate credit ratings. If we are unable to raise additional capital in a timely manner, our ability to meet our capital needs and fund future growth may be limited.

In the past, we have sometimes been unable to timely establish investment funds in accordance with our plans, due in part to the relatively limited number of investors attracted to such types of funds, competition for such capital and the complexity associated with negotiating the agreements with respect to such funds. Delays in raising financing could cause us to delay expanding in existing markets or entering into new markets and hiring additional personnel. Any future delays in capital raising could similarly cause us to delay deployment of a substantial number of solar energy systems for which we have signed PPAs or Solar Leases with customers. Our future ability to obtain additional financing depends on banks' and other financing sources' continued confidence in our business model and the renewable energy industry as a whole. It could also be impacted by the liquidity needs of such financing sources themselves. We face intense competition from a variety of other companies, technologies and financing structures for such limited investment capital. 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 to us on terms that are less favorable than those received by our competitors. For example, if we experience higher customer default rates than we currently experience in our existing investment funds, it could be more difficult or costly to attract future financing. In our experience, there are a relatively small number of investors that generate sufficient profits and possess the requisite financial sophistication to benefit from and have significant demand for the tax benefits that our investment funds provide. Historically, in the distributed solar energy industry, investors have typically been large financial institutions and a few large, profitable corporations. Our ability to raise investment funds is limited by the relatively small number of such investors. Any inability to secure financing could lead us to cancel planned installations, impair our ability to accept new customers or increase our borrowing costs, any of which would have a material adverse effect on our business, financial condition, results of operations and prospects.

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

We believe that many of our customers' interest in solar energy systems is driven by a desire to pay less for their energy costs. However, distributed residential solar energy has yet to achieve broad market adoption for a number of reasons including state regulatory hurdles, utility imposed interconnection issues for distributed electricity generation systems and unfavorable economics from the customer perspective.

A customer's interest in a solar energy system may also be affected by the cost of electricity generated from other renewable energy sources. Decreases in the retail prices of electricity from the traditional utilities or from other renewable energy sources would harm our ability to offer competitive pricing and could harm our business. The cost of electricity from traditional utilities could decrease as a result of:

- construction of new power generation plants, including plants utilizing natural gas, nuclear, coal, renewable energy or other generation technologies;
- the construction of additional electric transmission and distribution lines;
- relief of transmission constraints that enable local centers to generate energy less expensively;
- reductions in the price of natural gas or other fuel sources;
- utility rate adjustment and customer class cost reallocation;

- energy conservation technologies and public initiatives to reduce electricity consumption;
- widespread deployment of existing or development of new or lower-cost energy storage technologies that have the ability to reduce a customer's average cost of electricity by shifting load to off-peak times;
- changes in regulations by federal or state regulatory bodies that lower the cost of generating and transmitting electricity or otherwise reduce regulatory compliance costs for traditional utilities, or otherwise disadvantage residential solar energy providers relative to traditional utilities; and
- development of new energy generation technologies that provide less expensive energy.

A reduction in utility electricity costs would make PPAs or Solar Leases less economically attractive to customers on a monthly basis and would increase the time to break even for our System Sales customers. If the cost of energy available from traditional utilities were to decrease due to any of these reasons, or other reasons, we would be at a competitive disadvantage, we may be unable to attract new customers and our growth would be limited. In addition, from time to time we have increased our pricing in certain markets, which may negatively impact our competitiveness.

Electric utility industry policies and regulations may present technical, regulatory and economic barriers to the purchase and use of solar energy systems that may significantly reduce demand for electricity from our solar energy systems.

Federal, state and local government regulations and policies concerning the electric utility industry, utility rate structures, interconnection procedures, and internal policies of electric utilities, heavily influence the market for electricity generation products and services. These regulations and policies often relate to electricity pricing and the interconnection of distributed electricity generation systems to the power grid. Policies and regulations that promote renewable energy and customer-sited energy generation have been challenged by traditional utilities and questioned by those in government and others arguing for less governmental spending and involvement in the energy market. In addition, it is unclear what, if any, actions the current presidential administration in the United States, the U.S. Department of Energy, and the Federal Energy Regulatory Commission may take regarding existing regulations and policies that affect the cost competitiveness of nuclear, coal and gas electric generation, and fossil fuel mining and exploration. Changes in such policies and regulations could increase the cost or decrease the benefits of solar energy systems or reduce costs and other limitations on competing forms of generation, and adversely affect the attractiveness of our products and our results of operations, cost of capital and growth prospects.

In the United States, governments and the state public service commissions that determine utility rates continually modify these regulations and policies. These regulations and policies could result in a significant reduction in the potential demand for electricity from our solar energy systems and could deter customers from entering into contracts with us. In addition, in certain of our regions, electricity generated by solar energy systems competes most effectively with the most expensive retail rates for electricity from the power grid, rather than the less expensive average price of electricity. Modifications to the utilities' peak hour pricing policies or rate design, such as movement to a flat rate, would make our current products less competitive with the price of electricity from the power grid. Other regulatory revisions that could impact the competitiveness of our product include moving from a retail rate to a time-of-use compensation mechanism, imposition of fixed demand or grid-service charges, or limitations on whether third-party owned systems are eligible for such programs. It is possible that changes such as these could have the effect of lowering the incentive for residential customers of investor-owned utilities to reduce their purchases of electricity from their utility by supplying more of their own electricity from solar, and thereby reducing demand for our product. A shift in the timing of peak rates for utility-generated electricity to a time of day when solar energy generation is less efficient or nonexistent could make our solar energy system offerings less competitive and reduce demand for our offerings. In addition, since we are required to obtain interconnection permission for each solar energy system from the local utility, changes in a local utility's regulations, policies or interconnection processes have in the past delayed and in the future could delay or prevent the completion of our solar energy systems. This in turn has delayed and, in the future, could delay or prevent us from generating revenues from such solar energy systems or cause us to redeploy solar energy systems, adversely impacting our results of operations.

In addition, any changes to government or internal utility regulations and policies that favor electric utilities or alternative forms of energy over residential rooftop solar energy could reduce our competitiveness and cause a significant reduction in demand for our offerings or increase our costs or the prices we charge our customers. Certain jurisdictions have proposed allowing traditional utilities to assess various fees on customers purchasing energy from solar energy systems or have imposed or proposed new charges or rate structures that would disproportionately impact solar energy system customers who utilize net metering, either of which would increase the cost of energy to those customers and could reduce demand for our solar energy systems. For example, in California, investor owned utilities are allowed to impose a minimum \$10 fixed charge on the monthly bill for residential customers that elect net metering and also impose new fees for interconnection and other non-bypassable charges. Such non-bypassable charges are being authorized by other public utilities commissions outside of California. Additionally, certain utilities in Arizona have approved increased rates and charges for net metering customers, and others have proposed doing away with the state's renewable electricity standard carve-outs for distributed generation. These policy changes may negatively impact our customers and affect demand for our solar energy systems, and similar changes to net metering policies may occur in other states. It is also possible that these or other changes could be imposed on our current customers, as well as future customers. Due to the current and expected continued concentration of our solar energy systems in California, any such changes in this market would be particularly harmful to our reputation, customer relations, business, results of operations and future growth in these areas. We may be similarly adversely affected if our business becomes concentrated in other jurisdictions.

Finally, public service commissions may impose requirements on our business associated with our interactions with potential customers. In October 2017, the Public Service Commission of the State of New York entered an order requiring changes to certain of our business practices. Other public service commissions could follow New York's lead and impose requirements associated with consumer protection that could affect how we do business and acquire customers.

Our business currently depends on the availability of rebates, tax credits and other financial incentives. The expiration, elimination or reduction of these rebates, credits or incentives or our ability to monetize them could adversely impact our business.

Federal, state and local government and regulatory bodies provide for tariff structures and incentives to various parties including owners, end users, distributors, system integrators and manufacturers of solar energy systems to promote solar energy in various forms, including rebates, tax credits and other financial incentives such as system performance payments, renewable energy credits associated with renewable energy generation, exclusion of solar energy systems from property tax assessments and net metering. We rely on these governmental and regulatory programs to finance solar energy system installations, which enables us to lower the price we charge customers for energy from, and to lease or purchase, our solar energy systems, helping to achieve customer acceptance of solar energy with those customers as an alternative to utility-provided power. However, these programs may expire on a particular date, end when the allocated funding or capacity allocations are exhausted or be reduced or terminated. These reductions or terminations often occur without warning. In addition, the financial value of certain incentives decreases over time. For example, the value of SRECs in a market tends to decrease over time as the supply of SREC-producing solar energy systems installed in that market increases. If we overestimate the future value of these incentives, it could adversely impact our financial results.

Substantially all of our solar energy systems installed to date have been eligible for ITCs as well as accelerated depreciation benefits. We have relied on, and will continue to rely on, financing structures that monetize a substantial portion of those benefits and provide financing for our solar energy systems. The federal government currently offers a 30% ITC under Section 48(a) of the Internal Revenue Code for the installation of certain solar power facilities; the 30% rate continues until December 31, 2019. By statute, the ITC is scheduled to decrease to 26% of the fair market value of a solar energy system for 2020, 22% for 2021 and 10% on January 1, 2022, and the amounts that fund

investors are willing to invest could decrease or we may be required to provide a larger allocation of customer payments to the fund investors as a result of this scheduled decrease. To the extent we have a reduced ability to raise investment funds as a result of this reduction or an inability to continue to monetize such benefits in our financing arrangements, the rate of growth of installations of our residential solar energy systems and our ability to maintain such systems could be negatively impacted. In addition, future changes in existing law and interpretations by the IRS and the courts with respect to certain matters, including but not limited to, treatment of the ITC and our financing arrangements, the taxation of business entities and the deductibility of interest expense could affect the amount that fund investors are willing to invest, which could reduce our access to capital. The ITC has been a significant driver of the financing supporting the adoption of residential solar energy systems in the United States and its scheduled reduction beginning in 2020, unless modified by an intervening change in law, will significantly impact the attractiveness of solar energy to these investors and could potentially harm our business.

In addition, the Tax Cuts and Jobs Act, or TCJA, which was enacted in December 2017, contains several provisions that may significantly impact the attractiveness of tax benefits to our fund investors. The TCJA reduces the highest marginal corporate tax rate from 35% to 21%, which causes accelerated depreciation to have less value to investors and results in investors having less appetite for ITCs. In addition, the TCJA imposes a new “base erosion and anti-abuse tax”, or BEAT. The BEAT is a minimum tax applied to certain large taxpayers who make deductible payments that erode their U.S. tax base above a minimum threshold. If an investor is subject to BEAT, ITCs may be used to partially, but not fully offset the BEAT, resulting in a decrease of the value of the ITCs. Thus, investors will likely discount their investments to reflect the lower corporate tax rate as well as the BEAT and may be less likely to invest in solar overall, which could potentially harm our business.

Applicable authorities may adjust or decrease incentives from time to time or include provisions for minimum domestic content requirements or other requirements to qualify for these incentives. An inability to finance solar energy systems through tax-advantaged structures, to realize or monetize depreciation benefits, to monetize or otherwise receive the benefit of rebates, tax credits, SRECs or other financial incentives, or to otherwise structure investment funds in ways that are both attractive to investors and allow us to provide desirable pricing to customers could adversely impact our results of operations and ability to compete in our industry by increasing our cost of capital, causing us to increase the prices of our energy and solar energy systems and reducing the size of our addressable market. In addition, this would adversely impact our ability to attract investment partners and to form new investment funds and our ability to offer attractive financing to prospective customers.

We rely on net metering and related policies to offer competitive pricing to our customers in all of our current markets, and changes to net metering policies may significantly reduce demand for electricity from our solar energy systems.

Our business benefits significantly from favorable net metering policies in states in which we operate. Net metering allows a homeowner to pay his or her local electric utility only for his or her power usage net of production from the solar energy system, transforming the conventional relationship between customers and traditional utilities. Homeowners receive credit for the energy that the solar installation generates in excess of that needed by the home to offset energy usage at times when the solar installation is not generating energy. In states that provide for net metering, the customer typically pays for the net energy used or receives a credit against future bills at the retail rate if more energy is produced by the solar installation than consumed. In some states and utility territories, customers are also reimbursed by the electric utility for net excess generation on a periodic basis.

In recent years, net metering programs have been subject to regulatory scrutiny and legislative proposals in some states, such as Arizona, California, Hawaii, Nevada, New Hampshire, New York, Texas and Utah. Utilities are proposing new and varied revisions to their net metering programs, with such proposals decided by the state public utilities commissions. These revisions include capping the numbers of customers that can elect net metering within a utility service territory, imposing new fixed charges for grid service or interconnection, and reducing the retail rate value of the net metered generation. In California, for example, customers within the service territory of San Diego Gas and Electric, Pacific Gas and Electric Company, and Southern California Edison Company, must take service on a new net metering successor tariff. For this new tariff, the California Public Utilities Commission largely uses the current net metering form with full retail compensation for exports but allows the utilities to impose reasonable interconnection fees and some additional charges on customers and will require such customers to take service on time-of-use rates. There are no caps under the new Net Energy Metering, or NEM, successor tariff. Further, municipal utilities are generally not subject to the same state laws and public commission oversight as compared to investor owned utilities and may make drastic and abrupt changes. As we continue to expand into areas with municipal utilities, we may be subject to greater risk of regulatory uncertainty.

If and when net metering caps in certain jurisdictions are reached while they are still in effect, the value of the credit that customers receive for net metering is significantly reduced, utility rate structures are altered, or fees are imposed on net metering customers, future customers may be unable to recognize the same level of cost savings associated with net metering that current customers enjoy. The absence of favorable net metering policies or of net metering entirely, or the imposition of new charges that only or disproportionately impact customers that use net metering would significantly limit customer demand for our solar energy systems and the electricity they generate, could negatively affect existing customers and lead to missed payments or defaults, and could adversely impact our business, results of operations and future growth.

Our business has benefited from the declining cost of equipment, and our financial results may be harmed if the cost of equipment increases in the future.

During previous years, the declining cost of solar panels and the raw materials necessary to manufacture them has been a key driver in the price we charge for electricity and customer adoption of solar energy systems. Despite recent increases in solar panel prices due to the tariffs imposed in February 2018, industry experts indicate, and we have seen, that solar panel and raw material prices have generally declined. However, it is possible they will not decline at the same rate as they have over the past several years or that they may increase. In addition, while the solar panel market has recently seen an increase in supply, growth in the solar industry and the resulting increase in demand for solar panels and the raw materials necessary to manufacture them may put upward pressure on prices. These resulting prices could slow our growth and cause our financial results to suffer. In addition, in the past we have purchased a substantial majority of the solar panels used in our solar energy systems from manufacturers headquartered in China; however, most of the manufacturing now takes place in other Asian countries, such as Malaysia and Vietnam. Changes in governmental support or regulation in China or the other countries where these products are manufactured could affect our ability to purchase them on competitive terms, and access to specialized technologies could be restricted.

In addition, the U.S. government could impose additional tariffs on solar cells manufactured outside the United States or implement additional restraints on trade. These combined tariffs make such solar cells less competitively priced in the United States, and the Chinese and Taiwanese manufacturers may choose to limit the amount of solar equipment they sell into the United States. If we are required to pay higher prices, accept less favorable terms or purchase solar panels or other system components from alternative, higher-priced sources, our financial results will be adversely affected. The U.S. government may also take broader actions to protect U.S. based manufacturers against imports of solar cells manufactured outside the United States, such as in Southeast Asia, Japan, Germany and South Korea.

On January 22, 2018, the President of the United States announced the imposition of safeguard measures for a period of four years that include (1) a 30% tariff on imports of solar cells not partially or fully assembled into other products and (2) a 30% tariff on imported solar panels. These tariffs are additive to the anti-dumping and countervailing duties imposed in 2014 and 2015. The tariff on imported solar panels will decline 5% each year in the second, third and fourth years. The safeguard measures went into effect on February 7, 2018 and apply to imports from all foreign countries, including Mexico and Canada, except certain developing countries that are members of the World Trade Organization.

On September 17, 2018, the President of the United States announced the imposition of tariffs on \$200 billion of Chinese goods. Inverters imported from China are listed as subject to the new duties. Tariffs of 10% on inverters went into effect on September 24, 2018 and the tariffs are currently scheduled to rise to 25% on January 1, 2019. Our various inverter suppliers are still determining how they will manage these tariffs. We are currently seeing various responses to the 10% tariff, ranging from no price increases to passing on the majority of the tariff to the purchaser. We are also seeing a disparity in supplier pricing in relation to the potential implementation of the 25% tariff on January 1, 2019. Additionally, it remains unclear whether the tariff applies to all components that accompany an inverter, or just the inverter itself.

The safeguard measures have increased and other potential tariffs could further increase our costs of solar panels and other system components, potentially causing a significant impact on our system costs, business and prospects. If we are required to pay higher prices, accept less favorable terms or purchase solar panels or other system components from alternative, higher-priced sources, or if supply is otherwise constrained, our costs would increase significantly, and it may be less economical for us to serve certain markets, which would adversely affect our operating results and growth prospects.

Lack of success in System Sales could negatively impact our operating results and cash flows.

System Sales allow us to expand our product offerings and to enter into additional markets, such as those that prohibit third-party ownership of distributed solar energy systems or that lack a favorable net metering policy. System Sales represented approximately 15% of total megawatts installed in the nine months ended September 30, 2018. Industry analysts have indicated that the number of customer-owned solar energy systems has increased significantly relative to third-party ownership in certain markets and that solar energy system sales are expected to account for a larger percentage of total residential solar installations in the future. Continued increases in the variety and availability of third-party loan financing products to consumers and outright solar energy system purchases could further facilitate this growth. If customer preferences or the residential solar energy market continue to shift toward solar energy system sales, and we are not successful in our efforts, we may lose market share, which could have an adverse effect on our business, operating results and growth prospects. To the extent we are unsuccessful in our efforts to sell solar energy systems, or to work with third parties to finance those systems for our customers, our operating cash flows would be negatively affected, and our business and growth prospects would be adversely affected.

Technical and regulatory limitations may significantly reduce our ability to sell electricity from our solar energy systems and retain employees in certain markets.

Technical and regulatory limits may curb our growth in certain key markets, which may also reduce our ability to retain employees in those markets. For example, the Federal Energy Regulatory Commission, in promulgating the first form small generator interconnection procedures, recommended limiting customer-sited intermittent generation resources, such as our solar energy systems, to a certain percentage of peak load on a given electrical feeder circuit. Similar limits have been adopted by many states as a de facto standard and could constrain our ability to market to customers in certain geographic areas where the concentration of solar installations exceeds this limit. Furthermore, in certain areas, we benefit from policies that allow for expedited or simplified procedures related to connecting solar energy systems to the power grid. If such procedures are changed or cease to be available, our ability to sell the electricity generated by solar energy systems we install may be adversely impacted. As adoption of solar distributed generation rises along with the commercial operation of utility scale solar generation in key markets such as California, the amount of solar energy being fed into the power grid will surpass the amount planned for relative to the amount of aggregate demand. Some traditional utilities claim that in less than five years, solar generation resources may reach a level capable of producing an over-generation situation, which may require some solar generation resources to be curtailed to maintain operation of the power grid. While the prospect of such curtailment is somewhat speculative, particularly in the residential sector, the adverse effects of such curtailment without compensation could adversely impact our business, results of operations and future growth.

We have incurred operating losses before income taxes and may be unable to achieve or sustain profitability in the future.

We have incurred operating losses before income taxes since our inception. We incurred losses before income taxes of \$113.1 million and \$106.3 million for the nine months ended September 30, 2018 and 2017. In 2017, we recorded a large one-time non-cash tax benefit related to the implementation of the TCJA, which was enacted on December 22, 2017. The impact of the TCJA may vary due to, among other things, changes in interpretations and assumptions we have made, legislative action or other guidance to address questions that arise because of the TCJA, and any changes in accounting standards for income taxes or related interpretations in response to the TCJA. We expect to continue to incur losses before income taxes from operations as we finance our operations, expand our installation, engineering, administrative, sales and marketing staffs, and implement internal systems and infrastructure to support financing the installation of new solar energy systems. Our ability to achieve profitability depends on a number of factors, including:

- growing our customer base;
- finding investors willing to invest in our investment funds;
- maintaining and further lowering our cost of capital;
- reducing the time between system installation and interconnection to the power grid, which allows us to begin generating revenue;
- reducing the cost of components for our solar energy systems;
- maximizing the benefits of rebates, tax credits, SRECs and other available incentives; and
- reducing our operating costs by optimizing our sales, 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.

The majority of our business is conducted using one channel, direct-selling.

Historically, our primary sales channel has been a direct sales model. We also sell to customers through our inside sales team but continue to find greatest success using our direct sales channel. In addition, we have entered into sales dealer agreements with Vivint and others. We may sell through additional distribution channels in the future. We

compete against companies with experience selling solar energy systems to customers through a number of distribution channels, including homebuilders, home improvement stores, large construction, electrical and roofing companies, the internet and other third parties and companies that access customers through relationships with third parties in addition to other direct-selling companies. Our less diversified distribution channels may place us at a disadvantage with consumers who prefer to purchase products through these other distribution channels. If customers demonstrate a preference for other distribution channels, we may need to reduce our direct-selling efforts. We are also vulnerable to changes in laws related to direct sales and marketing that could impose additional limitations on unsolicited residential sales calls and may impose additional restrictions such as adjustments to our marketing materials and direct-selling processes, and new training for personnel. If additional laws affecting direct sales and marketing are passed in the markets in which we operate, it would take time to train our sales force to comply with such laws, and we may be exposed to fines or other penalties for violations of such laws. If we fail to compete effectively through our direct-selling efforts or are not successful in developing other sales channels, our financial condition, results of operations and growth prospects could be adversely affected.

We are highly dependent on our ability to attract, train and retain an effective sales force.

The success of our direct-selling channel efforts depends upon the recruitment, retention and motivation of a large number of sales personnel to compensate for a high turnover rate among sales personnel, which is a common characteristic of a direct-selling business. In order to grow our business, we need to recruit, train and retain sales personnel on a continuing basis. Sales personnel are attracted to direct-selling by competitive earnings opportunities, and direct-sellers typically compete for sales personnel by providing a more competitive earnings opportunity than that offered by the competition. We believe competitors devote substantial effort to determining the effectiveness of such incentives so that they can invest in incentives that are the most cost effective or produce the best return on investment. We have historically compensated our sales personnel on a commission basis, based on the size of the solar energy systems they sell and recently have begun compensating based on system size, contract rate and the expected number of hours the rooftop will be exposed to full sunlight. Some sales personnel may prefer a compensation structure that also includes a salary and equity incentive component. There is significant competition for sales talent in our industry, and from time to time we may need to adjust our compensation model to include such components. These adjustments have caused our customer acquisition costs to increase and could otherwise adversely impact our operating results and financial performance.

In addition to our sales compensation model, our ability to recruit, train and retain effective sales personnel could be harmed by additional factors, including:

- any adverse publicity regarding us, our solar energy systems, our distribution channel or our industry;
- lack of interest in, or the technical failure of, our solar energy systems;
- lack of a compelling product or income opportunity that generates interest for potential new sales personnel, or perception that other product or income opportunities are more attractive;
- any negative public perception of our sales personnel and direct-selling businesses in general;
- any regulatory actions or charges against us or others in our industry;
- general economic and business conditions; and
- potential saturation or maturity levels in a given market which could negatively impact our ability to attract and retain sales personnel in such market.

We are subject to significant competition for the recruitment of sales personnel from other direct-selling companies and from other companies that sell solar energy systems in particular. Regional and district managers of our sales personnel are instrumental in recruiting, retaining and motivating our sales personnel. When managers have elected to leave us and join other companies, the sales personnel they supervise have often left with them. We may experience increased attrition in our sales personnel in the future, which may impact our results of operations and growth. The impact of such attrition could be particularly acute in those jurisdictions, such as California, where contractual non-competition agreements for service providers are not enforceable or are subject to significant limitations.

It is therefore continually necessary to innovate and enhance our direct-selling and service model as well as to recruit and retain new sales personnel. If we are unable to do so, our business could be adversely affected.

We are not currently regulated as an electric utility under applicable law in the jurisdictions in which we operate (other than New York), but we may be subject to regulation as an electric utility in the future.

Except as described below with respect to New York, we are not regulated as a public utility in any of the markets in which we currently operate. As a result, we are not subject to the various federal, state and local standards, restrictions and regulatory requirements applicable to traditional utilities that operate transmission and distribution systems and that have an obligation to serve electric customers within a specified jurisdiction.

In October 2017, the Public Service Commission of the State of New York entered an order determining that residential rooftop solar energy providers are “electric corporations” (the term for electric utilities under New York state law) and requiring changes that will affect certain aspects of our business. The order, which is part of a broader proceeding before the Commission associated with regulating and overseeing distributed energy resource suppliers, is premised on the Commission’s determination that it has the jurisdiction to oversee our business, and businesses like ours, in the same way that it oversees public utilities. We have worked with the Solar Energy Industries Association, or SEIA, and others in the industry to petition the Commission for a rehearing on the order, specifically challenging its position that the statutes giving it the ability to regulate utilities also give it jurisdiction over us. Though New York’s Public Service Commission is, to our knowledge, the first state public commission to take the position that residential rooftop solar energy providers are subject to the same regulatory oversight as electric utilities, we understand from SEIA that other public service commissions are following what is happening in New York and may take similar action depending on the outcome. If we were subject to the jurisdiction of public service commissions in the same or a similar way as public utilities, those commissions could take action that could materially affect our business operations.

Any additional federal, state, or local regulations that cause us to be treated as an electric utility, or to otherwise be subject to a similar regulatory regime of commission-approved operating tariffs, rate limitations, and related mandatory provisions, could place significant restrictions on our ability to operate our business and execute our business plan by prohibiting, restricting or otherwise regulating our sale of electricity. If we were subject to the same state or federal regulatory authorities as electric utilities in the United States or if new regulatory bodies were established to oversee our business in the United States, then our operating costs would materially increase.

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

Retail sales of electricity by non-utilities such as us face regulatory hurdles in some states and jurisdictions, including states and jurisdictions that we intend to enter, where the laws and regulatory policies have not historically embraced competition to the service provided by the incumbent, vertically integrated electric utility. Some of the principal challenges pertain to whether non-customer owned systems qualify for the same levels of rebates or other non-tax incentives available for customer-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. Furthermore, in some states and utility territories third parties are limited in the way that they may deliver solar to their customers. In jurisdictions such as Arizona, South Carolina, Utah and Los Angeles, California, laws have been interpreted to either prohibit the sale of electricity pursuant to our standard PPA or regulate entities making such sales, and in some cases, such laws have led residential solar energy system providers to use leases in lieu of PPAs. In other states, neither leases nor PPAs are permissible or commercially feasible. Changes in law and reductions in, eliminations of or additional application requirements for, these benefits could reduce demand for our systems, adversely impact our access to capital and could cause us to increase the price we charge our customers for energy.

If the IRS or the U.S. Treasury Department makes a determination that the fair market value of our solar energy systems is materially lower than what we have reported in our fund tax returns, we may have to pay significant amounts to our investment funds, our fund investors and/or the U.S. government. Such determinations could have a material adverse effect on our business, financial condition and prospects.

We report in our fund tax returns that we and our fund investors claim the ITC based on the fair market value of our solar energy systems. Scrutiny by the IRS continues with respect to fair market value determinations industry-wide. The IRS is conducting an audit of one of our investment funds. We are not aware of any other audits or results of audits related to our appraisals or fair market value determinations of any of our investment funds. If as part of an examination the IRS were to review the fair market value that we used to establish our basis for claiming ITCs and

determine that the ITCs previously claimed should be reduced, we would owe certain of our investment funds or our fund investors an amount equal to 30% of the investor's share of the difference between the fair market value used to establish our basis for claiming ITCs and the adjusted fair market value determined by the IRS, plus any costs and expenses associated with a challenge to that fair market value, plus a gross up to pay for additional taxes. We could also be subject to tax liabilities, including interest and penalties, based on our share of claimed ITCs. To date, we have not been required to make such payments under any of our investment funds.

Rising interest rates could adversely impact our business.

Rising interest rates could have an adverse impact on our business by increasing our cost of capital. The majority of our cash flows to date have been from customer contracts that have been partially monetized under various investment fund structures. One of the components of this monetization is the present value of the payment streams from the customers who enter into these contracts. If the rate of return required by the fund investor rises as a result of a rise in interest rates, the present value of the customer payment stream and the total value that we are able to derive from monetizing the payment stream will each be reduced. Interest rates are at relatively low levels. It is likely that interest rates will continue to rise in the future, which would cause our costs of capital to increase.

Our investment funds contain arrangements that provide for priority distributions to fund investors until they receive their targeted rates of return. In addition, under the terms of certain of our investment funds, we may be required to make payments to the fund investors if certain tax benefits that are allocated to such fund investors are not realized as expected. Our financial condition may be adversely impacted if a fund is required to make these priority distributions for a longer period than anticipated to achieve the fund investors' targeted rates of return or if we are required to make any tax-related payments.

Our investment funds contain terms that contractually require the investment funds to make priority distributions to the fund investor, to the extent cash is available, until it achieves its targeted rate of return. The amounts of potential future distributions under these arrangements depends on the amounts and timing of receipt of cash flows into the investment fund, almost all of which is generated from customer payments related to solar energy systems that have been previously purchased (or leased, as applicable) by such fund. If such cash flows are lower than expected, the priority distributions to the investor may continue for longer than initially anticipated.

Additionally, certain of our investment funds require that, under certain circumstances, we forego distributions from the fund that we are otherwise contractually entitled to or make capital contributions to the fund that can be redirected to the fund investor such that it achieves the targeted return. These forgone distributions or capital contributions will generally occur if the fund investor has not achieved its targeted return prior to the target flip date of the investment fund. None of our investment funds have reached their target flip date at the current time and we anticipate that the first target flip date in which a fund investor is required to have achieved its targeted return is 2020.

Our fund investors also expect returns partially in the form of tax benefits and, to enable such returns, our investment funds contain terms that contractually require us to make payments to the funds that are then used to make payments to the fund investor in certain circumstances so that the fund investor receives value equivalent to the tax benefits it expected to receive when entering into the transaction. The amounts of potential tax payments under these arrangements depend on the tax benefits that accrue to such investors from the funds' activities and, in some cases, may be impacted by changes in tax law.

Due to uncertainties associated with estimating the timing and amounts of these cash distributions and allocations of tax benefits to such investors, we cannot determine the potential maximum future impact on our cash flows or payments that we could have to make under these arrangements. We may agree to similar terms in the future if market conditions require it. Any significant payments that we may be required to make or distributions to us that are reduced or diverted as a result of these arrangements could adversely affect our financial condition.

We may incur substantially more debt or take other actions that could restrict our ability to pursue our business strategies.

As of September 30, 2018, we and our subsidiaries had outstanding \$1.2 billion in principal amount of indebtedness, including through debt facilities and asset-backed securities issued by our subsidiaries. As of September 30, 2018, we had up to \$463.3 million of unused borrowing capacity remaining. These debt facilities restrict our ability to dispose of assets, incur indebtedness, incur liens, pay dividends or make other distributions to holders of our capital stock, repurchase our capital stock, make specified investments or engage in transactions with our affiliates. In addition, we do not have full access to the cash and cash equivalents held in our investments funds until distributed per the terms of the arrangements. We and our subsidiaries may incur substantial additional debt in the future, and any debt instrument we enter into in the future may contain similar, or more onerous, restrictions. These restrictions could inhibit our ability to pursue our business strategies. Additionally, our ability to make scheduled payments depends on our operating performance, which is subject to economic, financial, competitive and other factors that may be beyond our control. Furthermore, if we default on one of our debt instruments, and such event of default is not cured or waived, the lenders could terminate commitments to lend and cause all amounts outstanding with respect to the debt to be due

and payable immediately, which in turn could result in cross acceleration under other debt instruments. Our assets and cash flow may not be sufficient to fully repay borrowings under all of our outstanding debt instruments if some or all of these instruments are accelerated upon a default.

Furthermore, there is no assurance that we will be able to raise additional capital through the asset-backed securities market or other secured or unsecured debt markets or enter into new debt instruments on acceptable terms. If we are unable to satisfy financial covenants and other terms under existing or new instruments or obtain waivers or forbearance from our lenders or if we are 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.

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

As of September 30, 2018, approximately 34% of our cumulative megawatts installed were located in California. In addition, we expect future growth to occur in California, which could further concentrate our customer base and operational infrastructure. Accordingly, our business and results of operations are particularly susceptible to adverse economic, regulatory, political, weather and other conditions in California and in other markets that may become similarly concentrated.

Residential solar energy is an evolving market, which makes it difficult to evaluate our prospects.

The residential solar energy industry is constantly evolving, which makes it difficult to evaluate our prospects. We cannot be certain if historical growth rates reflect future opportunities or whether growth anticipated by us or industry analysts will be realized. Any future growth of the residential solar energy market and the success of our solar energy systems depend on many factors beyond our control, including recognition and acceptance of the residential solar energy 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 energy systems cost-effectively. If the markets for residential solar energy do not develop at the rate we expect, our business may be adversely affected.

Additionally, there is limited empirical evidence regarding the effect solar energy systems have on the resale value of customers' houses. Due to the length of our customer contracts, the system deployed on a customer's roof may be outdated prior to the expiration of the term of the customer contract reducing the likelihood of renewal of our contracts at the end of the 20-year term, and possibly increasing the occurrence of defaults. This could have an adverse effect on our business, financial condition, results of operations and cash flow. As a result, we may be unable to accurately forecast our future performance and to invest accordingly.

If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, our ability to operate our business and investors' views of us.

Section 404 of the Sarbanes-Oxley Act requires public companies to conduct an annual review and evaluation of their internal controls. Our failure to maintain the effectiveness of our internal controls in accordance with the requirements of the Sarbanes-Oxley Act could have a material adverse effect on our business. We could lose investor confidence in the accuracy and completeness of our financial reports, which could have an adverse effect on our stock price. In addition, if our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

We face competition from traditional regulated electric utilities, from less-regulated third party energy service providers, other solar companies and from new renewable energy companies.

The solar energy and renewable energy industries are both highly competitive and continually evolving as participants strive to distinguish themselves within their markets and compete with large traditional utilities. We believe that our primary competitors are the traditional utilities that supply electricity to our potential customers. Traditional utilities generally have substantially greater financial, technical, operational and other resources than we do. As a result, 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, including the ability to initiate proceedings before state public utility commissions to reduce the value of net metering. Traditional utilities could also offer other value-added products or services that could help them to compete with us even if the cost of electricity they offer is higher than ours. In addition, a majority of utilities' sources of electricity is non-solar, which may allow utilities to sell electricity more cheaply than electricity generated by our solar energy systems.

We also compete with companies that are not regulated like traditional utilities but that have access to the traditional utility electricity transmission and distribution infrastructure pursuant to state and local pro-competitive and consumer choice policies. These energy service companies are able to offer customers electricity supply-only solutions that are competitive with our solar energy system options on both price and usage of renewable 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 new customers, particularly those who wish to avoid long-term contracts or have an aesthetic or other objection to putting solar panels on their roofs.

Additionally, we compete with solar companies with business models that are similar to ours. 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. In addition, our System Sales face increasing competition from other national and local solar energy companies who sell solar energy systems and may offer a broader suite of companion products. We believe the solar industry is becoming increasingly commoditized, and if we are unable to offer differentiated products, establish or maintain a consumer brand that resonates with homeowners or compete with the pricing offered by our competitors, our sales and market share position may be adversely affected.

In addition, we compete with solar companies in the downstream value chain of solar energy. For example, we face competition from purely finance driven organizations that acquire customers and then subcontract out the installation of solar energy systems, from installation businesses that seek financing from external parties, from large construction companies and utilities, and increasingly from sophisticated electrical and roofing companies. Some of these competitors specialize in the residential solar energy market, and some may provide energy at lower costs than we do. Additionally, some of our competitors may offer their products through sales channels that they have more fully developed, such as retail sales. Further, some of our competitors are integrating vertically in order to ensure supply and to control costs. Many of our competitors also have significant brand name recognition and have extensive knowledge of our target markets. For us to remain competitive, we must distinguish ourselves from our competitors by offering an integrated approach that successfully competes with each level of products and services offered by our competitors at various points in the value chain. If our competitors develop an integrated approach similar to ours including sales, financing, engineering, manufacturing, installation, maintenance and monitoring services, this will reduce our marketplace differentiation.

We also compete with solar companies that offer community solar products and utility companies that provide renewable power purchase programs. Some customers might choose to subscribe to a community solar project or renewable subscriber programs instead of installing a solar energy system on their home, which could affect our sales. Additionally, some utility companies (and some utility-like entities, such as community choice aggregators in California) have generation portfolios that are increasingly renewable in nature. In California, for example, due to recent legislation utility companies and community choice aggregators in that state are required to have generation portfolios comprised of 60% renewable energy by 2030, and state regulators are planning for utility companies and community choice aggregators to sell 100% greenhouse gas free electricity to retail customers by 2045. As utility companies offer increasingly renewable portfolios to retail customers, those customers might be less inclined to install a solar energy system at their home, which could adversely affect our growth.

As the solar industry grows and evolves, we will also face new competitors who are not currently in the market. Our industry is characterized by low technological barriers to entry and well-capitalized companies could choose to enter the market and compete with us. Our failure to adapt to changing market conditions and to compete successfully with existing or new competitors will limit our growth and will have a material adverse effect on our business and prospects.

Developments in alternative technologies or improvements in distributed solar energy generation may materially adversely affect demand for our offerings.

Significant developments in alternative technologies, such as advances in other forms of distributed solar power generation, storage solutions such as batteries, the widespread use or adoption of fuel cells for residential or commercial properties or improvements in other forms of centralized power production may materially and adversely affect our business and prospects in ways we do not currently anticipate. Any failure by us to adopt new or enhanced technologies or processes, or to react to changes in existing technologies, could materially delay deployment of our solar energy systems, which could result in product obsolescence, the loss of competitiveness of our systems, decreased revenue and a loss of market share to competitors.

A failure to hire and retain a sufficient number of employees in key functions would constrain our ability to timely complete our customers' projects.

To support our business, we need to hire, train, deploy, manage and retain a substantial number of skilled installers and electricians in the markets where there is heightened or increasing demand for solar energy products. Competition for qualified personnel in our industry has increased substantially, and we expect it to continue to do so, particularly for skilled electricians and other personnel involved in the installation of solar energy systems. We also compete with

the homebuilding and construction industries for skilled labor. As these industries seek to hire additional workers, our cost of labor may increase. Companies with whom we compete to hire installers may offer compensation or incentive plans that certain installers may view as more favorable. We periodically assess the compensation plans and policies for our service providers, including our installers and electricians, and, if deemed necessary, may decide to revise those plans and policies. Our installers and electricians may not react well to any such revisions, which in turn could adversely affect retention, motivation and productivity. Additionally, we continually monitor our workforce requirements in the markets in which we operate. Any workforce reductions in markets where sales volume does not support the number of installation and other personnel could in turn adversely affect retention, motivation and productivity. We may also subcontract certain aspects of the installation process to independent contractors. Training these independent contractors and monitoring them for compliance with our policies may require significant management oversight and may present additional risks and challenges compared to those related to managing our employees.

Furthermore, trained installers are typically able to more efficiently install solar energy systems. Shortages of skilled labor could significantly delay installations or otherwise increase our costs. While we do not currently have any unionized employees, we have expanded, and may continue to expand, into areas such as the Northeast, where labor unions are more prevalent. The unionization of our labor force could also increase our labor costs. In addition, a significant portion of our business has been concentrated in states such as California, where market conditions are particularly favorable to distributed solar energy generation. We have experienced and may in the future experience greater than expected turnover in our installers in those jurisdictions which would adversely impact the geographic mix of new solar energy system installations.

Because we are a licensed electrical contractor in every jurisdiction in which we operate, we are required to employ licensed electricians. As we expand into new markets, we are required to hire and/or contract with seasoned licensed electricians in order for us to qualify for the requisite state and local licenses. Because of the high demand for these seasoned licensed electricians, these individuals currently or in the future may demand greater compensation. In addition, our inability to attract and retain these qualifying electricians may adversely impact our ability to continue operations in current markets or expand into new areas.

If we cannot meet our hiring, retention and efficiency goals, we may be unable to complete our customers' projects on time, 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.

We act as the licensed general contractor for our customers and are subject to risks associated with construction, cost overruns, delays, 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 every market we service, and we are responsible for every customer installation. We are the general contractor, electrician, construction manager and installer for all our solar energy systems. We may be liable to customers for any damage we cause to their home, belongings or property during the installation of our systems, including any re-roofing services provided under our contracts. In addition, because the solar energy systems we deploy are high-voltage energy systems, we may incur liability for the failure to comply with electrical standards and manufacturer recommendations. Furthermore, prior to obtaining permission to operate our solar energy systems, the systems must pass various inspections. Any delay in passing, or inability to pass, such inspections, would adversely affect our results of operations. Because our profit on a particular installation is based in part on assumptions as to the cost of such project, damage for which we are liable, cost overruns, delays or other execution issues may cause us to not achieve our expected results or cover our costs for that project.

In addition, the installation of solar energy systems is 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 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 authority having jurisdiction over our operations and our solar energy systems. Any new government regulations or utility policies pertaining to our systems, or changes to existing government regulations or utility policies pertaining to our systems, may result in significant additional expenses to us and our customers and, as a result, could cause a significant reduction in demand for our systems.

We depend on a limited number of suppliers of solar energy system components and technologies to adequately meet anticipated demand for our solar energy systems. Due to the limited number of suppliers in our industry, the acquisition of any of these suppliers by a competitor or any shortage, delay, price change, imposition of tariffs or

duties or other limitation in our ability to obtain components or technologies we use could result in sales and installation delays, cancellations and loss of market share.

We purchase solar panels, inverters and other system components from a limited number of suppliers, making us susceptible to quality issues, shortages and price changes. If we fail to develop, maintain and expand our relationships with our suppliers, our ability to adequately meet anticipated demand for our solar energy systems may be adversely affected, 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 rely upon to meet anticipated demand ceases or reduces production due to its financial condition, acquisition by a competitor or otherwise, is unable to increase production as industry demand increases or is otherwise unable to allocate sufficient production to us, it may be difficult to quickly identify alternative suppliers or to qualify alternative products on commercially reasonable terms, and our ability to satisfy this demand may be adversely affected. There are a limited number of suppliers of solar energy system components and technologies. While we believe there are other sources of supply for these products available, transitioning to a new supplier may result in additional costs and delays in acquiring our solar products and deploying our systems, and may require us to obtain the approval of our financing partners in order to utilize new products. These issues could harm our business or financial performance.

There have also been periods of industry-wide shortages of key components, including solar panels, in times of rapid industry growth. 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. The solar industry is growing and, as a result, shortages of key components, including solar panels, may be more likely to occur, which in turn may result in price increases for such components. Even if industry-wide shortages do not occur, suppliers may decide to allocate key components with high demand or insufficient production capacity to more profitable customers, customers with long-term supply agreements or customers other than us and our supply of such components may be reduced as a result.

We have entered into multi-year agreements with certain of our major suppliers. These agreements are denominated in U.S. dollars. Since our revenue is also generated in U.S. dollars, we are mostly insulated from currency fluctuations. However, since our suppliers often incur a significant amount of their costs by purchasing raw materials and generating operating expenses in foreign currencies, if the value of the U.S. dollar depreciates significantly or for a prolonged period of time against these other currencies, this may cause our suppliers to raise the prices they charge us, which could harm our financial results. As noted above, the U.S. government has imposed a 30% tariff (decreasing by 5% each year for four years) on imports of solar cells not partially or fully assembled into other products and a 30% tariff (decreasing by 5% each year for four years) on imported solar panels from most foreign countries. It is unclear what further actions the current U.S. presidential administration may take with respect to existing and proposed trade agreements, or restrictions on trade generally. The existing tariffs, and any new tariffs, duties or other trade measures, or shortages, delays, price changes or other limitation in our ability to obtain components or technologies we use could limit our growth, cause cancellations or adversely affect our profitability, and result in loss of market share and damage to our brand.

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

Our quarterly and annual operating results are difficult to predict and may fluctuate significantly in the future. We have experienced seasonal and quarterly fluctuations in the past. However, given that we are in a growing industry, the true extent of these fluctuations may have been masked by our historical growth rates and thus may not be readily apparent from our historical operating results and may be difficult to predict. For example, the amount of revenue we recognize in a given period depends in part on the types of customer contracts we have entered into—because revenue from System Sales is recognized when the system is placed into service whereas revenue from our PPAs and Solar Leases is recognized over the contract life, which is typically 20 years—and, in the case of PPAs and Solar Leases is dependent in part on the amount of energy generated by solar energy systems under such contracts. As a result, revenue derived from PPAs is impacted by seasonally shorter daylight hours in winter months. In addition, our ability to install solar energy systems is impacted by weather, such as during the winter months in the Northeastern United States. Such delays can impact the timing of when we can install and begin to generate revenue from solar energy systems. As such, our past quarterly operating results may not be good indicators of future performance.

In addition to the other risks described in this “Risk Factors” section, the following factors could cause our operating results to fluctuate:

- the expiration or initiation of any rebates or incentives;
- significant fluctuations in customer demand for our offerings;
- our ability to complete installations and interconnect to the power grid in a timely manner;
- the availability and costs of suitable financing;
- the amount and timing of sales of SRECs;
- our ability to continue to expand our operations, and the amount and timing of expenditures related to this expansion;

actual or anticipated changes in our growth rate relative to our competitors;

announcements by us or our competitors of 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 traditional utilities; and

actual or anticipated developments in our competitors' businesses or the competitive landscape.

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, key operating metrics and other operating results in future periods may fall short of the expectations of investors and financial analysts, which could have an adverse effect on the trading price of our common stock.

The profitability and residual value of our solar energy systems during and at the end of the associated term of the PPA or Solar Lease may be lower than projected today and adversely affect our financial performance and valuation.

We maintain ownership of the solar energy systems that we install under our PPAs or Solar Leases. We amortize the costs of our solar energy systems over a 30-year estimated useful life, which exceeds the period of the component warranties and the corresponding payment streams from our contracts with our customers. If we incur repair and maintenance costs on these systems after the warranties have expired, and if they then fail or malfunction, we will be liable for the expense of repairing these systems without a chance of recovery from our suppliers. We are also contractually obligated to remove, store and reinstall the solar energy systems, typically for a nominal fee, if customers need to replace or repair their roofs. However, customer fees may not cover our costs to remove, store and reinstall the solar energy systems. In addition, we typically bear the cost of removing the solar energy systems at the end of the term of the customer contract if the customer does not renew his or her contract or purchase the system. 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. We also face other factors that could increase the costs or diminish the production of a solar energy system, such as unanticipated damage or malfunctions, animal interference and weather-related matters. If the residual value of the systems is less than we expect at the end of the customer contract, after giving effect to any associated removal and redeployment costs, we may be required to accelerate all or some of the remaining unamortized costs. If the profitability or the residual value of the systems is lower than expected, this could materially impair our future operating results and estimated retained value.

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

The installation of solar energy systems requires our employees to work at heights with complicated and potentially dangerous electrical systems and at potentially high temperatures. The evaluation and modification of buildings as part of the installation process requires our employees to work in locations that may contain potentially dangerous levels of asbestos, lead, mold or other materials known or believed to be hazardous to human health. We also maintain a fleet of over 700 trucks and other vehicles to support our installers and operations. There is substantial risk of serious injury or death if proper safety procedures are not followed. Our operations are subject to regulation under OSHA, DOT, and equivalent state laws. Changes to OSHA, DOT or state 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. We could be exposed to increased liability in the future. In the past, we have had workplace accidents and received citations from OSHA regulators for alleged safety violations, resulting in fines. Any such 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 or financial performance.

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

We agree to maintain the solar energy systems installed on our customers' homes in connection with a PPA or Solar Lease during the length of the term of our customer contracts, which is typically 20 years. We are exposed to any liabilities arising from the systems' failure to operate properly and are generally under an obligation to ensure that each system remains in good condition during the term of the agreement. We also agree to provide a workmanship warranty and maintain the solar energy systems we sell to customers for a period of one to ten years. As part of our operations and maintenance work, we provide a pass-through of the inverter and panel manufacturers' warranty coverage to our System Sales customers, which generally range from ten to 20 years. We also take advantage of

manufacturers' warranty coverage when maintaining solar energy systems installed under PPAs and Solar Leases. One or more of these third-party manufacturers could cease operations and no longer honor these warranties, leaving us to fulfill these potential obligations to our customers or to our fund investors without underlying warranty coverage. We, either ourselves or through our investment funds, bear the cost of such major equipment. Even if the investment fund bears the direct expense of such replacement equipment, we could suffer financial losses associated with a loss of production from the solar energy systems.

To be competitive in the market and to comply with the requirements of our jurisdictions, our Solar Leases contain a performance guarantee in favor of the lessee. Solar Leases with performance guarantees require us to refund money to the lessee if the solar energy system fails to generate a stated minimum amount of electricity in a 12-month period. We may also suffer financial losses associated with such refunds if significant performance guarantee payments are triggered.

Our failure to accurately predict future liabilities related to material quality or performance expenses could result in unexpected volatility in our financial condition. Because of the long estimated useful life of our solar energy systems, 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. We have made these assumptions based on the historic performance of similar systems or on accelerated life cycle testing. Our assumptions could prove to be materially different from the actual performance of our systems, causing us to incur substantial expense to repair or replace defective solar energy systems in the future or to compensate customers for systems that do not meet their performance guarantees. Equipment defects, serial defects or operational deficiencies also would reduce our revenue from customer contracts because the customer payments under such agreements are dependent on system production or would require us to make refunds under performance guarantees. Any widespread product failures or operating deficiencies may damage our market reputation and adversely impact our financial results.

We are responsible for providing maintenance, repair and billing on solar energy systems that are owned or leased by our investment funds on a fixed fee basis, and our financial performance could be adversely affected if our cost of providing such services is higher than we project.

We typically provide a workmanship warranty for periods of five to 20 years to our investment funds for every system we sell to them. We are also generally contractually obligated to cover the cost of maintenance, repair and billing on any solar energy systems that we sell or lease to our investment funds. We are subject to a maintenance services agreement under which we are required to operate and maintain the system and perform customer billing services for a fixed fee that is calculated to cover our future expected maintenance and servicing costs of the solar energy systems in each investment fund over the term of the PPA or Solar Lease with the covered customers. If our solar energy systems require an above-average number 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 are damaged in the event of a natural disaster beyond our control, such as an earthquake, tornado, wildfire, tsunami or hurricane, losses could be outside the scope of insurance policies or exceed 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. When required to do so under the terms of a particular investment fund, we purchase property and business interruption insurance or other insurance policies with industry standard coverage and limits approved by the investor's third-party insurance advisors to hedge against risk, but such coverage may not cover our losses, and we have not acquired such coverage for all of our funds.

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

If our solar energy systems or other products were to injure someone, we could be exposed to product liability claims. In addition, it is possible that our products could cause property damage as a result of product malfunctions, defects, improper installation, fire or other causes. We rely on our general liability insurance to cover product liability claims. Any product liability claims 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, penalties or fines, increase our insurance rates, 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 new customers, thus affecting our growth and financial performance.

Failure by our component suppliers to use ethical business practices and comply with applicable laws and regulations may adversely affect our business.

We do not control our suppliers or their business practices. Accordingly, we cannot guarantee that they follow 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, which could increase our costs and result in delayed delivery of our products, product shortages or other disruptions of our operations. Violation of labor or other laws by our suppliers or the divergence of a supplier'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.

Damage to our brand and reputation, or change or loss of use of our brand, could harm our business and results of operations.

We depend significantly on our reputation for high-quality products, best-in-class customer service and the brand name “Vivint Solar” to attract new customers and grow our business. If we fail to continue to deliver our solar energy systems within the planned timelines, if our offerings do not perform as anticipated or if we damage any of our customers’ properties or delay or cancel projects, our brand and reputation could be significantly impaired. Future technical improvements may allow us to offer lower prices or offer new technology to new customers; however, technical limitations in our current solar energy systems may prevent us from offering such lower prices or new technology to our existing customers. The inability of our current customers to benefit from technological improvements could cause our existing customers to lower the value they perceive our existing products offer and impair our brand and reputation.

We have focused particular attention on growing our direct sales force, leading us in some instances to take on candidates who we later determined did not meet our standards. In addition, given our direct sales business model and the sheer number of interactions our sales and other personnel have with customers and potential customers, it is inevitable that some customers’ and potential customers’ interactions with our company will be perceived as less than satisfactory. This has led to instances of customer complaints, some of which have affected our digital footprint on rating websites and social media platforms. If we cannot manage our hiring and training processes to avoid or minimize these issues to the extent possible, our reputation may be harmed and our ability to attract new customers would suffer.

Given our relationship with our sister company Vivint and the similarity in our names, customers may associate us with any problems experienced with Vivint, such as complaints with the Better Business Bureau. Because we have no control over Vivint, we cannot take remedial action to cure any issues Vivint has with its customers, and our brand and reputation may be harmed if we are mistaken for the same company.

In addition, if we were to no longer use, lose the right to continue to use, or if others use, the “Vivint Solar” brand, we could lose recognition in the marketplace among customers, suppliers and partners, which could affect our growth and financial performance, and would require financial and other investment, and management attention in new branding, which may not be as successful.

Marketplace confidence in our liquidity and long-term business prospects is important for building and maintaining our business.

Our financial condition, operating results and business prospects may suffer materially if we are unable to establish and maintain confidence about our liquidity and business prospects among consumers and within our industry. Our solar energy systems require ongoing maintenance and support. If we were to reduce operations now or in the future, existing buyers of our systems might have difficulty in having us repair or service our systems, which remain our responsibility under the terms of our customer contracts. As a result, consumers may be less likely to purchase our solar energy systems now if they are uncertain that our business will succeed or that our operations will continue for many years. Similarly, suppliers and other third parties will be less likely to invest time and resources in developing business relationships with us if they are not convinced that our business will succeed. Accordingly, in order to build and maintain our business, we must maintain confidence among customers, suppliers and other parties in our liquidity and long-term business prospects. We may not succeed in our efforts to build this confidence.

If we fail to manage our recent and future operations and 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 growth in recent periods with the cumulative capacity of our solar energy systems growing from 864.9 megawatts as of December 31, 2017 to 1,006.6 megawatts as of September 30, 2018, 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 strain on our management, operational and financial infrastructure. Our operations, growth and expansion require significant time and effort on the part of our management team as it is required to maintain and expand our relationships with customers, suppliers and other third parties and attract new customers, suppliers and financing, as well as manage multiple geographic locations.

In addition, our current and planned operations, personnel, information technology and other systems and procedures might be inadequate to support our future growth and may require us to make additional unanticipated investments in our infrastructure. 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 operations and growth, we may be unable to meet our or industry analysts' expectations regarding growth, opportunity and financial targets, take advantage of market opportunities, execute our business strategies, meet our investment fund commitments or respond to competitive pressures. This could also result in declines in quality or customer satisfaction, increased costs, difficulties in introducing new offerings or other operational difficulties. Any failure to effectively manage our operations and growth could adversely impact our business and reputation.

Expansion into new markets could be costly and time-consuming. Historically, we have only provided our offerings to residential customers, which could put us at a disadvantage relative to companies who also compete in other markets.

We have historically only provided our offerings to residential customers. We compete with companies who sell solar energy systems in the commercial, industrial and government markets, in addition to the residential market. While we believe that in the future we could have opportunities to expand our operations into other markets, there are no assurances that our design and installation systems will work for non-residential customers or that we will be able to compete successfully with companies with historical presences in such markets or we may not realize the anticipated benefits of entering such markets, and entering new markets has numerous risks, including the following:

• incurring significant costs if we are required to adapt our current or develop new design and installation processes for use in non-residential applications;

- diversion of our management and employees from our core residential business;

• difficulty adapting our current or developing new marketing strategies and sales channels to non-residential customers;

• inability to obtain key customers, brand recognition and market share and compete successfully with companies with historical presences in such markets; and

• inability to achieve the financial and strategic goals for such market.

If we choose to pursue opportunities in additional markets, including batteries or electric vehicle charging stations, and are unable to successfully compete in such markets, our operating results and growth prospects could be materially adversely affected. Additionally, there is intense competition in the residential solar energy market in the markets in which we operate. As new entrants continue to enter into these markets, we may be unable to gain or maintain market share and we may be unable to compete with companies that earn revenue in both the residential market and non-residential markets.

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

In the future we may acquire companies, project pipelines, products or technologies or enter into joint ventures or other strategic initiatives. We may not realize the anticipated benefits of any future acquisition, and any acquisition has numerous risks. These risks include the following:

• difficulty in assimilating the operations and personnel of the acquired company;

• difficulty in effectively integrating the acquired technologies or products with our current 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 operating results;

• potential failure of the due diligence processes to identify significant issues with product quality, intellectual property infringement and other 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.

Mergers and acquisitions of companies are inherently risky, and if we do not complete the integration of acquired businesses successfully and in a timely manner, we may not realize the anticipated benefits of the acquisitions to the extent anticipated, which could adversely affect our business, financial condition or results of operations.

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

We are highly dependent on the efforts and abilities of the principal members of our senior management team, and the loss of one or more key executives could have a negative impact on our business.

We also depend on our ability to retain and motivate key employees and attract qualified new employees. None of our key executives are bound by employment agreements for any specific term, and we do not maintain key person life insurance policies on any of our executive officers. Our compensation structure, which includes salary, bonus, equity and benefits components, is important to our ability to attract, retain and motivate our employees. If we do not provide adequate compensation, or appropriately structure our equity grants, we may be unable to maintain our current workforce or attract new talent in the future, and we may be unable to replace key members of our management team and key employees if we lose their services. Integrating new employees into our 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, results of operations and prospects.

We may be subject to intellectual property rights claims by third parties, which are extremely costly to defend, could require us to pay significant damages and could limit our ability to use certain technologies.

Third parties, including our competitors, may own patents or other intellectual property rights that cover aspects of our technology or business methods. Such parties may claim we have misappropriated, misused, violated or infringed third party intellectual property rights, and, if we gain greater recognition in the market, we face a higher risk of being the subject of claims that we have violated others' intellectual property rights. Any claim that we violate a third party's intellectual property rights, whether with or without merit, could be time-consuming, expensive to settle or litigate and could divert our management's attention and other resources. If we do not successfully settle or defend an intellectual property claim, we could be liable for significant monetary damages and could be prohibited from continuing to use certain technology, business methods, content or brands. To avoid a prohibition, we could seek a license from third parties, which could require us to pay significant royalties, increasing our operating expenses. If a license is not available at all or not available on reasonable terms, we may be required to develop or license a non-violating alternative, either of which could require significant effort and expense. If we cannot license or develop a non-violating alternative, we would be forced to limit or stop sales of our offerings and may be unable to effectively compete. Any of these results would adversely affect our business, results of operations, financial condition and cash flows. To deter other companies from making intellectual property claims against us or to gain leverage in settlement negotiations, we may be forced to significantly increase the size of our intellectual property portfolio through internal efforts and acquisitions from third parties, both of which could require significant expenditures. However, a robust intellectual property portfolio may provide little or no deterrence, particularly for patent holding companies or other patent owners that have no relevant product revenues.

We use "open source" software in our solutions, which may restrict how we distribute our offerings, 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 currently use in our solutions, and expect to continue to use in the future, 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. We do not plan to integrate our proprietary software with open source software in ways that would require the

release of the source code of our proprietary software to the public, however, our use and distribution 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 to the public or remove the source code of our proprietary software. 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 remove the software. 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 sale of our offerings if re-engineering could not 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 commercialize our offerings. We cannot guarantee that we have incorporated 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.

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

The energy produced and revenue and cash receipts generated by a solar energy system depend on suitable solar, atmospheric and weather conditions, all of which are beyond our control. Furthermore, components of our systems, such as panels and inverters, could be damaged by severe weather or other natural disasters, such as hailstorms, lightning or wildfires. Although we maintain insurance to cover for many such casualty events, our investment funds would be obligated to bear the expense of repairing the damaged solar energy systems, sometimes subject to limitations based on our ability to successfully make warranty claims. Our economic model and projected returns on our systems require us to achieve certain production results from our systems and, in some cases, we guarantee these results for both our customers and our investors. If the systems underperform for any reason, our financial results could suffer.

Sustained unfavorable weather also could delay our installation of solar energy systems, leading to increased expenses and decreased revenue and cash receipts in the relevant periods. We have experienced seasonal fluctuations in our operations. The amount of revenue we recognize in a given period from PPAs is dependent in part on the amount of energy generated by solar energy systems under such contracts. As a result, operating leases and incentives revenue is impacted by seasonally shorter daylight hours in winter months. In addition, our ability to install solar energy systems is impacted by weather. We have limited ability to install solar energy systems during the winter months in the Northeastern United States. Such delays can impact the timing of when we can install and begin to generate revenue from solar energy systems. However, given that we are in a growing industry, the true extent of these fluctuations may have been masked by our historical growth rates and thus may not be readily apparent from our historical operating results and may be difficult to predict. As such, our historical operating results may not be indicative of future performance. Furthermore, weather patterns could change, making it harder to predict the average annual amount of sunlight striking each location where we install a solar energy system. This could make our solar energy systems less economical individually or in the aggregate. Any of these events or conditions could harm our business, financial condition, results of operations and prospects.

Disruptions to our solar monitoring systems could negatively impact the operation of our business and our revenues and increase our expenses.

Our ability to accurately charge our customers for the energy produced by our solar energy systems depends on our ability to monitor our customers' solar energy systems. Our customer agreements require our customers to maintain a broadband internet connection so that we may receive data regarding solar energy system production from their home networks. We could incur significant expenses or disruptions of our operations in connection with failures of our solar monitoring systems, including failures of our customers' home networks that would prevent us from accurately monitoring solar energy production. In addition, sophisticated hardware and operating system software and applications that we procure from third parties may contain defects in design or manufacture, including "bugs" and other problems that could unexpectedly interfere with the operation of our systems. The costs to us to eliminate or alleviate viruses and bugs, or any problems associated with failures of our customers' home networks could be significant, and the efforts to address these problems could result in interruptions, delays or cessation of service that may impede our sales, distribution or other critical functions. When a customer's solar monitoring system is not properly communicating with us, we estimate the production of their solar energy systems. Such estimates may prove inaccurate and could cause us to underestimate the power being generated by our solar energy systems and undercharge our customers, thereby harming our results of operations.

We are exposed to the credit risk of our customers.

Our customers most commonly purchase energy or lease solar energy systems from us pursuant to one of two types of long-term contracts: a PPA or a Solar Lease. The terms of PPAs and Solar Leases are typically for 20 years and require the customer to make monthly payments to us. Accordingly, we are subject to the credit risk of our customers. As of September 30, 2018, the average FICO score of our customers was approximately 760. However, as we grow our business, the risk of customer defaults could increase. Our reserve for this exposure is estimated to be \$4.5 million as of September 30, 2018, and our future exposure may exceed the amount of such reserves. While we do not currently extend credit to customers interested in System Sales, many of those customers are interested in financing the purchase of a solar energy system. While these customers may seek third-party financing through their own lender or a lender with whom we have a relationship, if they do not have sufficient credit to qualify for a loan, they may be unable to purchase a solar energy system. This could reduce our potential customer pool and limit our System Sales.

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 focuses on contracts and transactions with residential customers. We must comply with numerous federal, state and local laws and regulations that govern matters relating to our interactions with consumers, including those pertaining to privacy and data security, consumer financial and credit transactions, home improvement contracts, warranties, door-to-door solicitation as well as specific regulations pertaining to sales and installations of solar energy systems. These laws and regulations are dynamic and subject to potentially differing interpretations, and various federal, state and local legislative and regulatory bodies may initiate investigations, 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.

Several states in which we operate, including Arizona, California, Florida, Maryland, Nevada, New Mexico, New York and Utah, have enacted new laws that provide enhanced rights and require increased disclosures to customers. Most of these laws and regulations are specific to the solar industry and require changes to our contracts and processes. Some of the laws have been enacted along with other changes to state law that further impact the residential solar industry. Other laws and regulations, such as the ones that relate to licensing of sales representatives, are applicable to a wide array of industries, and failure to comply with such regulations could result in citations, fines, license suspensions, revocations and other penalties. Further, to the extent that states undertake enforcement actions against us or other states enact further regulations applicable to our industry, we may be required to expend additional resources in order to modify our business practices to meet these regulatory requirements.

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. For example, in March 2018, the New Mexico Attorney General's office filed an action against us and certain of our officers alleging violation of state consumer protection statutes. In September 2018, the California Contractors State License Board, or CSLB, disclosed that it intended to refer a customer complaint to the California Attorney General's Office for further action. The CSLB subsequently withdrew such recommendation and notified us that it intends to issue a licensing citation with a de minimis fine. If federal, state or other local regulators or agencies were to initiate an investigation against us or enact regulations relating to the marketing of our products to residential consumers, responding to such investigation or complying with such regulations could divert management's attention to our business, require us to modify our operations and incur significant additional expenses, which could have an adverse effect on our business, financial condition and results of operations or could reduce the number of our potential customers.

We cannot ensure that our sales force will comply with our standard practices and policies, as well as applicable laws and regulations, including sales licensure requirements. Any such non-compliance, or the perception of noncompliance, potentially could expose us to claims, proceedings, litigation, investigations, and/or enforcement actions 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 the laws, regulations and industry standards that apply to us.

Any unauthorized access to, or disclosure or theft of personal information or other proprietary information we gather, store or use could harm our reputation and subject us to claims or litigation.

We receive, store and use personal information of our customers, including names, addresses, e-mail addresses, credit information and other housing and energy use information. We also store and use personal information of our

employees. In addition, we previously used certain shared information and technology systems with Vivint, and Vivint continues to store some of our historical data. We take certain steps in an effort to protect the security, integrity and confidentiality of the personal information and other proprietary and confidential information we collect, store or transmit, but there is no guarantee that inadvertent or unauthorized use or disclosure will not occur or that third parties will not gain unauthorized access to this information despite our efforts. Because techniques used to obtain unauthorized access or sabotage systems change frequently and generally are not identified until they are launched against a target, we and our suppliers or vendors, including Vivint, may be unable to anticipate these techniques or to implement adequate preventative or mitigation measures. In addition, due to a potential time lapse between when a sales representative leaves us and when we are made aware of the separation, sales representatives may have continued access to our customers' information for a period when they should not.

We are also subject to laws and regulations relating to the collection, use, retention, security and transfer of personal information of our customers. In many cases, these laws apply not only to third-party transactions, but also to transfers of information between one company and its subsidiaries. Several jurisdictions have passed new laws in this area, and other jurisdictions are considering imposing additional restrictions. These laws continue to develop and may be inconsistent from jurisdiction to jurisdiction. In addition to government regulation, privacy advocates and industry groups may propose new and different self-regulatory standards that either legally or contractually apply to us, such as the Payment Card Industry Data Security Standard, or PCI DSS, which may affect any processes associated with handling credit card numbers. In the event we fail to be compliant with the PCI DSS, fines and other penalties could result. Complying with emerging and changing requirements may cause us to incur costs or require us to change our business practices. Any actual or alleged failure by us, our affiliates or other parties with whom we do business to comply with privacy-related or data protection laws, regulations and industry standards could result in proceedings against us by governmental entities or others, which could have a detrimental effect on our business, results of operations and financial condition.

Any actual or perceived unauthorized use or disclosure of, or access to, any personal information or other proprietary or confidential information maintained by us or on our behalf, whether through breach of our systems, breach of the systems of our suppliers or vendors, including Vivint, by an unauthorized party, or through employee or contractor error, theft or misuse, or otherwise, could harm our business. If any such unauthorized use or disclosure of, or access to, such personal information were to occur or to be believed to have occurred, our operations could be seriously disrupted, and we could be subject to demands, claims and litigation by private parties, and investigations, related actions, and penalties by regulatory authorities. In addition, we could incur significant costs in notifying affected persons and entities and otherwise complying with the multitude of federal, state and local laws and regulations relating to unauthorized access to, or use or disclosure of, personal information. Finally, any perceived or actual unauthorized access to, or use or disclosure of, such information could harm our reputation, substantially impair our ability to attract and retain customers and have an adverse impact on our business, financial condition and results of operations.

We are involved, and may become involved in the future, in legal proceedings that, if adversely adjudicated or settled, could adversely affect our financial results.

We are, and may in the future become, party to litigation. For examples, see Note 17—Commitments and Contingencies. While we intend to defend against these actions vigorously, the ultimate outcomes of these cases are presently not determinable as they are in preliminary phases. In general, litigation claims can be expensive and time consuming to bring or defend against, may result in the diversion of management attention and resources from our business and business goals and could result in settlements or damages that could significantly affect financial results and the conduct of our business. It is not possible to predict the final resolution of the litigation to which we currently are or may in the future become party, and the impact of certain of these matters on our business, prospects, financial condition, liquidity, results of operations and cash flows.

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, or FASB, the Securities and Exchange Commission, or 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 affected certain elements of our accounting for revenue and costs

incurred to acquire contracts as we adopted this standard on January 1, 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.

Risks Related to our Relationship with Vivint

Our inability to resolve any disputes that arise between us and Vivint with respect to our past and ongoing relationships may adversely affect our financial results, and such disputes may also result in claims for indemnification.

Disputes may arise between Vivint and us in a number of areas relating to our past and ongoing relationships, including the following:

- intellectual property, labor, tax, employee benefits, indemnification and other matters arising from our separation from Vivint;
- employee retention and recruiting;
- our ability to use, modify and enhance the intellectual property that we have licensed from Vivint;
- business combinations or divestitures;
- exclusivity arrangements;
- the nature, quality and pricing of products and services Vivint agrees to provide to us; and
- business opportunities that may be attractive to both Vivint and us.

We have entered into certain agreements with Vivint. In August 2017, we entered into a sales dealer agreement with Vivint. Under this agreement, each party will act as a dealer for the other party to market, promote and sell each other's products. The agreement has a two-year term, which will be automatically renewed for successive one-year terms unless written notice of termination is provided by one of the parties to the other no less than 90 days prior to the end of the then current term. The products, territories and consideration that is payable by each party to the other is determined in accordance with the agreement. There can be no assurances regarding the number of sales and installations of our products that Vivint will be able to generate, or the number of leads that we will be able to generate. In addition, as we work to expand our customer opportunities and product offerings through our relationship with Vivint, our business and results of operations may be adversely affected by factors that affect Vivint's business and our relationship. Pursuant to the terms of a Non-Competition Agreement we have entered into with Vivint, as amended, we and Vivint each have agreed not to solicit for employment any member of the other's executive or senior management team, or any of the other's employees who primarily manage sales, installation or services of the other's products and services until the termination of the sales dealer agreement. The commitment not to solicit each other's employees lasts for 180 days after such employee finishes employment with us or Vivint. Historically, we had recruited a significant number of our sales personnel from Vivint. This agreement may require us to obtain personnel from other sources, and any inability to do so may limit our ability to continue scaling our business if we are unable to do so. Notwithstanding the above, a number of sales representatives work for both Vivint and us. To the extent there is any confusion concerning the relationship between us and Vivint with respect to the products and services we offer and the products and services of Vivint, such sales representatives could expose us to increased claims, proceedings, litigation and investigations by consumers and regulatory authorities. In addition, having sales representatives who work for both Vivint and us could distract such sales representatives, impact the effectiveness of our sales force, and potentially increase the turnover of our existing sales representatives who may feel displaced by the addition of Vivint sales representatives to our sales force.

We may not be able to resolve any potential conflicts relating to these agreements or otherwise, and even if we do, the resolution may be less favorable than if we were dealing with an unaffiliated party. In addition, we have indemnification obligations under some of the agreements we have entered into with Vivint, and disputes between us and Vivint may result in claims for indemnification. However, we do not currently expect that these indemnification obligations will materially affect our potential liability compared to what it would be if we did not enter into these agreements with Vivint.

Risks Related to Our Common Stock

The price of our common stock may be volatile, and the value of your investment could decline.

The trading price of our common stock may be highly volatile. From our initial public offering on October 1, 2014 to September 30, 2018, the closing price of our common stock has ranged from a high of \$16.01 to a low of \$2.22. Our stock price could continue to be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include:

- our financial condition and the availability and terms of future financing;
- changes in laws or regulations applicable to our industry or offerings, including any new tariffs or trade regulations that affect our ability to import goods at attractive prices or at all;
- additions or departures of key personnel;
- actual or anticipated changes in expectations regarding our performance by investors or securities analysts;
- securities litigation involving us;
- price and volume fluctuations in the overall stock market;
- volatility in the market price and trading volume of companies in our industry or companies that investors consider comparable;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- the failure of securities analysts to cover our common stock;
- our ability to protect our intellectual property and other proprietary rights;
- sales of our common stock by us, our stockholders or our employees, including sales of equity awards granted to our employees to cover tax withholding obligations;
- litigation or disputes involving us, our industry or both;
- major catastrophic events;
- general economic and market conditions; and
- potential acquisitions.

Further, 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, interest rate changes or international currency fluctuations, may cause the market price of our common stock to decline. If the market price of our common stock decreases, investors may not realize any return on investment and may lose some or all of their investments. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We could become the target of additional securities litigation in the future, which could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

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, for as long as we continue to be 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" including, but not limited to, 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 have utilized, and we plan in future filings with the Securities and Exchange Commission, or SEC, to continue to utilize, 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 could remain an “emerging growth company” until the earliest of (1) December 31, 2019, (2) the last day of the first fiscal year in which our annual gross revenue exceeds \$1.1 billion, (3) the date that we become a “large accelerated filer” as defined in Rule 12b-2 under the Exchange Act, which would occur if we become a seasoned issuer and the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter and (4) the date on which we have issued more than \$1 billion in non-convertible debt securities during the preceding three-year period.

Even after we no longer qualify as an emerging growth company, we may still qualify as a “smaller reporting company,” which would allow us to take advantage of many of the same exemptions from disclosure requirements. Similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation in periodic reports and proxy statements and have certain other reduced disclosure obligations in their SEC filings.

We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

Our stock price could decline due to the large number of outstanding shares of our common stock eligible for future sale.

Sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur, could cause the market price of our common stock to decline. These sales could also make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate.

As of September 30, 2018, we had 119.3 million outstanding shares of common stock. These shares may be sold in the public market in the United States, subject to prior registration in the United States, if required, or reliance upon an exemption from U.S. registration, including, in the case of shares held by affiliates or control persons, compliance with the volume restrictions of Rule 144.

In addition, we have granted and expect to continue to grant equity awards to our directors and employees as additional compensation in an effort to align their interests with those of our stockholders. Approximately 2.7 million shares of our common stock are reserved for future issuance under our Long-Term Incentive Plan, and these shares will issue, vest and be immediately tradable without restriction on the date that our Sponsor and its affiliates achieve specified returns on their invested capital.

Further, equity awards for 10.4 million shares of common stock remained outstanding as of September 30, 2018, with 1.8 million of those shares being vested and exercisable as of September 30, 2018. Additionally, “sell-to-cover” transactions are utilized in connection with the vesting and settlement of equity awards that are granted to our employees so that shares of our common stock are sold on behalf of our employees in an amount sufficient to cover the tax withholding obligations associated with these awards. As a result of these transactions, a significant number of shares of our stock may be sold over a limited time period in connection with significant vesting events. During the month of May 2018, approximately 2.3 million restricted stock units vested and settled, which increased the volume of our shares that would otherwise have been sold during that time.

Stockholders owning an aggregate of 84.4 million shares of our common stock are entitled, under contracts providing for registration rights, to require us to register shares of our common stock owned by them for public sale in the United States, subject to the restrictions of Rule 144. In October 2014, we filed a registration statement on Form S-8 to register 22.9 million shares previously issued or reserved for future issuance under our equity compensation plans and agreements, and we registered an additional 12.9 million shares in March 2017. Under these registration

statements, subject to the satisfaction of applicable vesting periods, the shares of common stock issued upon exercise of outstanding options and vested restricted stock units will be available for immediate resale in the United States in the open market. Sales of our common stock as restrictions end or pursuant to registration rights 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 our stock price to fall and make it more difficult for investors to sell shares of our common stock.

Our Sponsor and its affiliates control us, and their interests may conflict with ours or investors' in the future.

As of September 30, 2018, 313 Acquisition LLC, which is controlled by our Sponsor and its affiliates, beneficially owned approximately 69% of our common stock. Moreover, under our organizational documents and the stockholders agreement with 313 Acquisition LLC, for so long as our existing owners and their affiliates retain significant ownership of us, we will agree to nominate to our board individuals designated by our Sponsor, whom we refer to as the Sponsor directors. In addition, for so long as 313 Acquisition LLC continues to own shares representing a majority of the total voting power, we will agree to nominate to our board individuals appointed by Summit Partners and Todd Pedersen. Even when our Sponsor and its affiliates and certain of its co-investors cease to own shares of our stock representing a majority of the total voting power, for so long as our Sponsor and its affiliates continue to own a significant percentage of our stock our Sponsor will still be able to significantly influence the composition of our board of directors and the approval of actions requiring stockholder approval. In addition, under the stockholders agreement, affiliates of our Sponsor will have consent rights with respect to certain actions involving our company, provided a certain aggregate ownership threshold is maintained collectively by our Sponsor and its affiliates, together with Summit Partners, Todd Pedersen and Alex Dunn and their respective affiliates. Accordingly, for such period of time, our Sponsor and certain of its co-investors will have significant influence with respect to our management, business plans and policies, including the appointment and removal of our officers. In particular, for so long as our Sponsor and its affiliates continue to own a significant percentage of our stock, our Sponsor will be able to cause or prevent a change of control of our company or a change in the composition of our board of directors and could preclude any unsolicited acquisition of our company. The concentration of ownership could deprive investors of an opportunity to receive a premium for shares of common stock as part of a sale of our company and ultimately might affect the market price of our common stock.

Our Sponsor and its affiliates engage in a broad spectrum of activities, including investments in the energy sector. In the ordinary course of their business activities, our Sponsor and its affiliates may from time to time acquire and hold interests in businesses that compete directly or indirectly with us. For example, affiliates of our Sponsor regularly invest in utility companies and solar and renewable energy companies that may compete with us. Our certificate of incorporation provides that none of our Sponsor, any of its affiliates or any director who is not employed by us (including any non-employee director who serves as one of our officers in both his or her director and officer capacities) or his or her affiliates will have any duty to refrain from engaging, directly or indirectly, in the same business activities or similar business activities or lines of business in which we operate. Our Sponsor also may pursue acquisition opportunities that may be complementary to our business, and, as a result, those acquisition opportunities may not be available to us. In addition, our Sponsor may have an interest in pursuing acquisitions, divestitures and other transactions that, in its judgment, could enhance its investment, even though such transactions might involve risks to investors.

We have elected to take advantage of the "controlled company" exemption to the corporate governance rules for New York Stock Exchange, or NYSE, listed companies, which could make our common stock less attractive to some investors or otherwise harm our stock price.

Because we qualify as a "controlled company" under the corporate governance rules for NYSE listed companies, we are not required to have a majority of our board of directors be independent, nor are we required to have a compensation committee or an independent nominating function. In light of our status as a controlled company, in the future we could elect not to have a majority of our board of directors be independent or not to have a compensation committee or nominating and governance committee. Accordingly, should the interests of 313 Acquisition LLC or our Sponsor differ from those of other stockholders, the other stockholders may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance rules for NYSE listed companies. Our status as a controlled company could make our common stock less attractive to some investors or otherwise harm our stock price.

Provisions in our certificate of incorporation, bylaws, stockholders agreement and under Delaware law might discourage, delay or prevent a change of control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Our certificate of incorporation, bylaws and stockholders agreement contain provisions that could depress the trading price of our common stock by discouraging, delaying or preventing a change of control of our company or changes in our management that the stockholders of our company may believe advantageous. These provisions include:

- establishing a classified board of directors so that not all members of our board of directors are elected at one time;
- authorizing “blank check” preferred stock that our board of directors could issue to increase the number of outstanding shares to discourage a takeover attempt;
- limiting the ability of stockholders to call a special stockholder meeting;
- limiting the ability of stockholders to act by written consent;
- providing that the board of directors is expressly authorized to make, alter or repeal our bylaws;
- establishing advance notice requirements for nominations for elections to our board of directors or for proposing matters that can be acted upon by stockholders at stockholder meetings;
- requiring our Sponsor to consent to certain actions, as described under the section of our 2018 Proxy Statement captioned “Related Party Transactions—Agreements with Our Sponsor,” for so long as our Sponsor, Summit Partners, Todd Pedersen and Alex Dunn or their respective affiliates collectively own, in the aggregate, at least 30% of our outstanding shares of common stock;
- the removal of directors only for cause and only upon the affirmative vote of the holders of at least 66-2/3% in voting power of all the then-outstanding shares of stock of our company entitled to vote thereon, voting together as a single class, if Blackstone and its affiliates beneficially own, in the aggregate, less than 30% in voting power of the stock of our company entitled to vote generally in the election of directors; and
- that certain provisions may be amended only by the affirmative vote of the holders of at least 66-2/3% in voting power of all the then-outstanding shares of stock of our company entitled to vote thereon, voting together as a single class, if Blackstone and its affiliates beneficially own, in the aggregate, less than 30% in voting power of the stock of our company entitled to vote generally in the election of directors.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they change their recommendations regarding our stock adversely, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. If any of the analysts who do now, or may in the future, cover us change their recommendation regarding our stock adversely, or provide more favorable relative recommendations about our competitors, our stock price would likely decline. If any analyst who may cover us were to 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 our stock price or trading volume to decline.

Item 6. Exhibits

- 10.1† Loan Agreement, among Vivint Solar Asset 1 Project Company, LLC, Wells Fargo Bank, National Association, and the parties named therein, dated as of August 3, 2018
- 31.1 Certification of Chief Executive Officer, pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002
- 31.2 Certification of Chief Financial Officer pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002
- 32.1* Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- 32.2* Certification of 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 Extension Schema Document
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document
- 101.DEF XBRL Taxonomy Extension Definition Linkbase Document
- 101.LAB XBRL Taxonomy Extension Label Linkbase Document
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

† Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

* The Certifications attached as Exhibits 32.1 and 32.2 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by

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reference into any filing of Vivint Solar, 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 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, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

VIVINT SOLAR, INC.

Date: November 6, 2018 /s/ David Bywater
David Bywater

Chief Executive Officer

(Principal Executive Officer)

Date: November 6, 2018 /s/ Dana Russell
Dana Russell

Chief Financial Officer and Executive Vice President

(Principal Financial Officer)