

**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, 2016

OR

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

For the transition period from _____ to _____

Commission File Number 001-34044

REAL GOODS SOLAR, INC.

(Exact name of registrant as specified in its charter)

COLORADO
(State or other jurisdiction of
incorporation or organization)

26-1851813
(I.R.S. Employer
Identification No.)

**833 WEST SOUTH BOULDER ROAD
LOUISVILLE, COLORADO 80027-2452**
(Address of principal executive offices)

(303) 222-8300
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities and Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. YES NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). YES NO

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input checked="" type="checkbox"/>

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date:

Class	Outstanding at November 4, 2016
Class A Common Stock (\$.0001 par value)	8,048,414

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This report may contain forward-looking statements that involve risks and uncertainties. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they provide our current beliefs, expectations, assumptions and forecasts about future events, and include statements regarding our future results of operations and financial position, business strategy, budgets, projected costs, plans and objectives of management for future operations. The words “anticipate,” “believe,” “plan,” “estimate,” “expect,” “future,” “intend,” “may,” “will” and similar expressions as they relate to us are intended to identify such forward-looking statements. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any of these forward-looking statements.

Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements include, without limitation, the following: our ability to operate with our existing financial resources or raise funds to meet our financial obligations and implement our strategy; our history of operating losses; our ability to achieve profitability; our ability to generate sufficient cash flow to fund our operations; our success in implementing our plans to increase future sales, and installations and revenue; the impact of our present indebtedness and projected future borrowings on our financial health and our ability to pay interest and principal on our indebtedness; restrictions imposed by our current indebtedness; our ability to satisfy the conditions under the Notes (as defined below) permitting release of funds from the restricted cash accounts and for payments to be made in shares of our Class A common stock; restrictions on certain transactions and potential premiums and penalties under our outstanding warrants and the Notes (as defined below); rules, regulations and policies pertaining to electricity pricing and technical interconnection of customer-owned electricity generation such as net energy metering; the continuation and level of government subsidies and incentives for solar energy; our failure to timely or accurately complete financing paperwork on behalf of customers; the adoption and general demand for solar energy; the impact of a drop in the price of conventional energy on demand for solar energy systems; existing and new regulations impacting solar installations including electric codes; delays or cancellations for system installations where revenue is recognized on a percentage-of-completion basis; seasonality of customer demand and adverse weather conditions inhibiting our ability to install solar energy systems; changing and updating technologies and the issues presented by these new technologies related to customer demand and our product offering; geographic concentration of revenue from the sale of solar energy systems in Hawaii and east coast states, loss of key personnel and ability to attract necessary personnel; loss or suspension of licenses required for installation of solar energy systems; adverse outcomes arising from litigation and legal disputes; our ability to continue to obtain services and components from suppliers, installers and other vendors; disruption of our supply chain from equipment manufacturers and potential shortages of components for solar energy systems; factors impacting the timely installation of solar energy systems; competition; costs associated with safety and construction risks; continued access to competitive third party financiers to finance customer solar installations; our ability to meet customer expectations; risks and liabilities associated with placing employees and technicians in our customers’ homes and businesses; product liability claims; warranty claims and failure by manufacturers to perform under their warranties to us; increases in interest rates and tightening credit markets; continued or future non-compliance with Nasdaq’s continued listing requirements; our inability to maintain effective disclosure controls and procedures and internal control over financial reporting; volatile market price of our Class A common stock; possibility of future dilutive issuances of securities and its impact on our ability to obtain additional financing; the low likelihood that we will pay any cash dividends on our Class A common stock for the foreseeable future; compliance with public reporting requirements; anti-takeover provisions in our organizational documents; and such other factors as discussed throughout Part I, Item 1A, Risk Factors and Part II, Item 7, Management’s Discussion and Analysis of Financial Conditions and Results of Operations of our Annual Report on Form 10-K for the year ended December 31, 2015 and Part I, Item 2, Management’s Discussion and Analysis of Financial Conditions and Results of Operations and Part II, Item 1A, Risk Factors included in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2016 and June 30, 2016 and this report.

Any forward-looking statement made by us in this report is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

Unaudited Interim Condensed Consolidated Financial Statements

We have prepared our unaudited interim condensed consolidated financial statements included herein pursuant to the rules and regulations of the U.S. Securities and Exchange Commission. Certain information and note disclosures normally included in annual financial statements prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) have been condensed or omitted pursuant to these rules and regulations, although we believe that the disclosures made are adequate to make the information not misleading. In our opinion, the unaudited interim financial statements contain all adjustments (consisting of only normal recurring adjustments) necessary to present fairly, in all material respects, our condensed consolidated financial position as of September 30, 2016, the interim results of operations for the three and nine months ended September 30, 2016 and 2015, and cash flows for the nine months ended September 30, 2016 and 2015. These interim statements have not been audited. The balance sheet as of December 31, 2015 was derived from our audited consolidated financial statements included in our annual report on Form 10-K. The interim condensed consolidated financial statements contained herein should be read in conjunction with our audited financial statements, including the notes thereto, for the year ended December 31, 2015.

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REAL GOODS SOLAR, INC.
Condensed Consolidated Balance Sheets (unaudited)

(in thousands, except share data)	September 30, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash	\$ 1,378	\$ 594
Restricted cash	8,250	—
Accounts receivable, net	2,571	4,374
Costs in excess of billings	224	930
Inventory, net	1,384	2,051
Deferred costs on uncompleted contracts	588	935
Other current assets	863	662
Discontinued operations	<u>2,675</u>	<u>2,853</u>
Total current assets	17,933	12,399
Property and equipment, net	679	1,015
Goodwill	1,338	1,338
Net investment in sales-type leases and other assets	1,572	1,405
Discontinued operations	<u>717</u>	<u>878</u>
Total assets	<u>\$ 22,239</u>	<u>\$ 17,035</u>
LIABILITIES AND SHAREHOLDERS' DEFICIT		
Current liabilities:		
Line of credit	\$ 3,598	\$ 774
Convertible debt, net of deferred costs and discount of \$1,976	2,309	—
Accounts payable	6,354	9,121
Accrued liabilities	1,796	1,278
Billings in excess of costs on uncompleted contracts	239	858
Deferred revenue and other current liabilities	1,572	918
Derivative liabilities	1,233	—
Discontinued operations	<u>4,042</u>	<u>4,510</u>
Total current liabilities	21,143	17,459
Convertible debt, net of deferred costs and discount of \$2,635	3,079	—
Other liabilities	1,480	22
Derivative liabilities	1,890	342
Discontinued operations	<u>225</u>	<u>225</u>
Total liabilities	<u>27,817</u>	<u>18,048</u>
Commitments and contingencies (Note 4)		
Shareholders' deficit:		
Class A common stock, \$.0001 par value, 150,000,000 shares authorized, 2,532,210 and 615,059 shares issued and outstanding at September 30, 2016 and December 31, 2015, respectively	8	8
Additional paid-in capital	166,717	156,433
Accumulated deficit	<u>(172,303)</u>	<u>(157,454)</u>
Total shareholders' deficit	<u>(5,578)</u>	<u>(1,013)</u>
Total liabilities and shareholders' deficit	<u>\$ 22,239</u>	<u>\$ 17,035</u>

See accompanying notes.

REAL GOODS SOLAR, INC.
Condensed Consolidated Statements of Operations

(in thousands, except per share data)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2016	2015	2016	2015
	(unaudited)		(unaudited)	
Net revenue	\$ 2,463	\$ 10,438	\$ 12,286	\$ 35,775
Cost of goods sold	2,346	8,880	11,669	30,871
Gross profit	117	1,558	617	4,904
Expenses:				
Selling and operating	1,613	3,430	5,504	10,417
General and administrative	1,266	1,304	3,936	4,375
Share based compensation	175	131	517	531
Restructuring costs	—	66	37	424
Litigation	—	1,084	24	1,584
Depreciation and amortization	101	102	316	376
Total expenses	3,155	6,117	10,334	17,707
Loss from continuing operations	(3,038)	(4,559)	(9,717)	(12,803)
Other income	—	74	17	422
Interest expense	(1,330)	(54)	(2,253)	(423)
Change in fair value of derivative liabilities	(535)	660	(268)	6,924
Debt accretion expense and loss on extinguishment	(2,831)	—	(2,831)	—
Loss before income taxes	(7,734)	(3,879)	(15,052)	(5,880)
Income tax (expense) benefit	—	(2)	(27)	22
Loss from continuing operations, net of tax	(7,734)	(3,881)	(15,079)	(5,858)
Loss from discontinued operations, net of tax	(1)	(397)	230	(712)
Net loss	\$ (7,735)	\$ (4,278)	\$ (14,849)	\$ (6,570)
Net loss per share – basic and diluted:				
From continuing operations	\$ (10.27)	\$ (6.33)	\$ (22.44)	\$ (17.34)
From discontinued operations	(0.00)	(0.64)	0.34	(2.10)
Net loss per share – basic and diluted	\$ (10.27)	\$ (6.97)	\$ (22.10)	\$ (19.44)
Weighted-average shares outstanding:				
Basic and diluted	753	614	672	338

See accompanying notes.

REAL GOODS SOLAR, INC.
Condensed Consolidated Statement of Changes in Shareholders' Deficit (unaudited)

(in thousands, except share data)	Class A Common Stock		Additional Paid - in Capital	Accumulated Deficit	Total Shareholders' Deficit
	Shares	Amount			
Balances, January 1, 2016	615,059	\$ 8	\$ 156,433	\$ (157,454)	\$ (1,013)
Issuance of common stock and other equity changes related to compensation	—	—	517	—	517
Proceeds from warrant exercises, net of costs	287,521	—	1,620	—	1,620
Fair value of preferred stock liability converted to common stock	1,583,940	—	4,324	—	4,324
Issuance of common stock related to line of credit	29,082	—	167	—	167
Adjustment to common stock warrant liability for warrants extinguished /exchanged	10,934	—	103	—	103
Fractional shares issued in connection with reverse split	5,674	—	—	—	—
Issuance of warrants in the 2016 note and preferred stock offerings	—	—	3,553	—	3,553
Net loss	—	—	—	(14,849)	(14,849)
Balances, September 30, 2016	<u>2,532,210</u>	<u>\$ 8</u>	<u>\$ 166,717</u>	<u>\$ (172,303)</u>	<u>\$ (5,578)</u>

See accompanying notes.

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REAL GOODS SOLAR, INC.
Condensed Consolidated Statements of Cash Flows

(in thousands except share data)	For the Nine Months Ended September 30, (unaudited)	
	2016	2015
Operating activities		
Net loss	\$ (14,849)	\$ (6,570)
Income/(loss) from discontinued operations	230	(712)
Loss from continuing operations	(15,079)	(5,858)
Adjustments to reconcile net loss from continuing operations to net cash used in operating activities – continuing operations:		
Depreciation	316	376
Amortization of debt discount and issuance costs	1,669	—
Share-based compensation	517	531
Debt accretion expense and loss on extinguishment	2,831	—
Change in valuation of derivative liabilities	268	(6,924)
Loss (gain) on sale of assets	10	(160)
Bad debt expense	111	165
Changes in operating assets and liabilities:		
Accounts receivable	1,692	1,868
Costs in excess of billings on uncompleted contracts	706	1,174
Inventory	667	1,737
Deferred costs on uncompleted contracts	347	991
Net investment in sales-type leases and other current assets	(167)	(90)
Other assets	(201)	(35)
Accounts payable	(186)	(6,324)
Accrued liabilities	(92)	(588)
Billings in excess of costs on uncompleted contracts	(619)	(536)
Deferred revenue and other current liabilities	654	(1,484)
Other liabilities	(52)	(77)
Net cash used in operating activities – continuing operations	(6,608)	(15,234)
Net cash provided by operating activities – discontinued operations	101	1,075
Net cash used in operating activities	(6,507)	(14,159)
Investing activities		
Purchase of property and equipment	—	(150)
Proceeds from sale of property and equipment	10	181
Net cash provided by investing activities	10	31
Financing activities		
Proceeds from warrant exercises, net of costs	1,586	15,050
Proceeds from convertible debt, net of costs and amount held in restricted cash	1,533	—
Proceeds from the issuance of convertible preferred stock, net of costs	2,242	—
Principal payments on revolving line of credit	(13,323)	(41,316)
Principal borrowings on revolving line of credit	15,243	39,688
Net cash provided by financing activities	7,281	13,422
Net change in cash	784	(706)
Cash and cash equivalents at beginning of period	594	1,947
Cash and cash equivalents at end of period	\$ 1,378	\$ 1,241
Supplemental cash flow information		
Income taxes paid	\$ —	\$ 19
Interest paid	\$ 161	\$ 212
Non-cash items		
Transfer from accounts payable to other liabilities for amounts paid by insurance carrier	\$ 1,510	\$ —
Transfer of accounts payable to vendor line of credit	\$ 1,071	\$ —
Payment on line of credit in Class A common stock	\$ 167	\$ —
Debt discount arising from warrants issued in conjunction with 2016 Note Offering	\$ 2,500	\$ —
Accrued closing costs on the Notes	\$ 651	\$ —
Embedded derivative liability with April 2016 Offering	\$ 2,616	\$ —
Common stock warrant liability with February 2015 Offering	\$ —	\$ 12,246
Issuance of Class A common stock to related party for conversion of subordinated debt and accrued interest	\$ —	\$ 4,238
Consideration transferred to Elemental Energy LLC	\$ —	\$ 1,244
Change in common stock warrant liability in conjunction with exercise/extinguishment of warrants	\$ 103	\$ 7,262

See accompanying notes.

Notes to Condensed Consolidated Financial Statements

1. Organization, Nature of Operations, and Principles of Consolidation

Real Goods Solar, Inc. (the “Company” or “RGS”) is a residential and small commercial solar energy engineering, procurement, and construction firm.

Discontinued Operations

During 2014, the Company committed to a strategic shift of its business resulting in a plan to sell certain net assets and rights, and the attrition of substantially completed contracts over the following twelve months comprising its large commercial installations business. Accordingly, the assets and liabilities, operating results, and operating and investing activities cash flows for the large commercial segment are presented as a discontinued operation, separate from the Company’s continuing operations, for all periods presented in these condensed consolidated financial statements and footnotes, unless indicated otherwise. See Note 10. Discontinued Operations.

Liquidity and Financial Resources Update

The Company has experienced recurring operating losses and negative cash flow from operations in recent years. As a result of these losses, the Company did not pay vendors on a timely basis and, accordingly, experienced difficulties obtaining credit terms from its equipment suppliers that limited the Company’s ability to convert its backlog in an expeditious manner, which resulted in customer cancellations of contracts.

The Company, starting with the fourth quarter of 2014, implemented measures to reduce its cash outflow for operations such that the required level of sales to achieve break-even results was reduced. These measures included (i) exiting the large commercial segment which was operating at both an operating and cash flow loss, (ii) reducing staffing levels, (iii) raising prices for its products and (iv) efforts to enhance accounts receivable collections and optimize inventory levels. As a result, for the nine months ended September 30, 2016, net cash used in operating activities from continuing operations improved by \$8.6 million compared to the nine months ended September 30, 2015.

As a result of these circumstances, the Company arranged for additional financial capital:

- On April 1, 2016, the Company issued \$10.0 million of Senior Secured Convertible Notes due April 1, 2019 (each, a “Note”) and Series G warrants to purchase Class A common stock, raising net proceeds of approximately \$9.4 million (the “2016 Note Offering”) of which the Company has received \$1.75 million as unrestricted cash as of September 30, 2016. Through November 4, 2016, the Company has received aggregate unrestricted cash of \$7.6 million, including \$5.8 million which has been released from the restricted cash accounts after September 30, 2016.
- On May 25, 2016, the Company issued 29,082 shares of Class A common stock to Solar Solutions and Distribution, LLC (“Solar Solutions”) in payment of \$167,513 due under the Amended and Restated Loan Agreement with Solar Solutions.
- On September 14, 2016, the Company issued \$2.8 million of convertible preferred stock and 509,091 Series H warrants. The Company received, after offering costs, \$2.2 million in cash at the closing, and received \$1.6 million from the exercise of 285,454 Series H warrants on September 30, 2016.

Commencing October 3, 2016, principal and interest on our Note began to convert into Class A common equity, with the following activity through November 4, 2016:

Amount of principal converted to Class A common stock	\$	7.1million
Releases of cash from restricted cash	\$	5.8million
Net increase in shareholders' equity from conversions	\$	5.9million

The Company has used the proceeds from the releases from the restricted cash account to reduce accounts payable, purchase materials to convert its backlog to revenue, and for other corporate purposes.

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The Company has prepared its business plan for the ensuing twelve months, and as described below, believes it has sufficient financial resources to operate for the ensuing 12-month period. The Company's objectives in preparing this plan included expanding the size of the Company's sales and construction organizations to generate gross margin that is in excess of its reduced fixed operating cost infrastructure and thereby reducing the Company's present operating losses in an effort to return the Company to profitable operations in the future. Elements of this plan include, among others, (i) realizing operating costs savings from reductions in staff, of which substantially all had been realized as of September 30, 2016, (ii) the positive impact of the strategic decision to exit the large commercial segment which operated at both a substantial cash and operating loss, (iii) hiring and training additional field and e-sales force personnel to grow sales, (iv) optimizing the Company's construction capability through authorized third-party integrators to realize the revenue from installation of the Company's backlog and minimize the impact on gross margin of idle construction crew time, (v) changing the mix of marketing expenditures to achieve a lower cost of acquisition than that employed in prior periods, (vi) realizing the benefits of new vendor terms negotiated by the Company that will reduce the cost of materials acquired by the Company, (vii) increasing sales and installations with small commercial customers, and (viii) continued internal efforts to accelerate the conversion of the Company's accounts receivable to cash. The Company believes that as a result of (i) additional capital realized through November 4, 2016 as described above, (ii) additional capital realized from the release of the remaining \$2.4 million of cash in the restricted cash accounts from the 2016 Note Offering, and (iii) the actions it has already implemented to reduce its fixed operating cost infrastructure, the Company has sufficient financial resources to operate for the ensuing 12 months.

The Company is listed on Nasdaq and, accordingly, for continued listing, must comply with Nasdaq's minimum shareholders' equity requirement of \$2.5 million. To comply with the Nasdaq requirement, the Company will need to undertake an equity offering.

2. Significant Accounting Policies

The Company made no changes to its significant accounting policies during the nine months ended September 30, 2016.

Principles of Consolidation and Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared by the Company's management in accordance with GAAP for interim financial information and in compliance with the rules and regulations of the U.S. Securities and Exchange Commission. Accordingly, these unaudited consolidated financial statements do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of our management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation have been included. The results of operations for the three and nine months ended September 30, 2016 are not necessarily indicative of the expected results for the year ending December 31, 2016. These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2015. Intercompany balances and transactions have been eliminated.

Use of Estimates and Reclassifications

The preparation of the condensed consolidated financial statements in accordance with GAAP requires the Company to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. 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.

Certain amounts in the 2015 financial statements have been reclassified to conform to the current year presentation.

Derivative Liabilities

The Company accounts for common stock warrants and put options in accordance with applicable accounting guidance provided in Financial Accounting Standards Board ("FASB") ASC 480, *Liabilities – Distinguishing Liabilities from Equity*, as either liabilities or as equity instruments depending on the specific terms of the warrant agreement. Certain of the Company's warrants are accounted for as liabilities due to provisions either allowing the warrant holder to request redemption, at the intrinsic value of the warrant, upon a change of control and/or providing for an adjustment to the number of shares of the Company's Class A common stock underlying the warrants and the exercise price in connection with dilutive future funding transactions. The Company classifies these derivative liabilities on the Condensed Consolidated Balance Sheet as long term liabilities, which are revalued at each balance sheet date subsequent to their initial issuance. The Company used a Monte Carlo pricing model to value these derivative liabilities. The Monte Carlo pricing model, which is based, in part, upon unobservable inputs for which there is little or no market data, requires the Company to develop its own assumptions.

The Company used 10,000 simulations in the Monte Carlo pricing model to value the warrants and the embedded derivative in the Notes. If factors change and different assumptions are used, the warrant liability and the change in estimated fair value could be materially different. Changes in the fair value of the warrants and embedded derivative are reflected in the condensed consolidated statement of operations as change in fair value of derivative liabilities, with an offsetting non-cash entry recorded as an adjustment to the derivative liability. In the event warrants are exercised or expire without being exercised, the fair value is reduced by the number of warrants exercised or expired multiplied by the fair value of each warrant at the time of exercise or expiration, with a credit to additional paid-in capital.

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The Company accounts for some of its financial instruments under ASC 815, *Derivatives and Hedging*, and accordingly separate accounting recognition is provided for embedded derivatives within a financial instrument.

The following table reflects original assumptions at April 1, 2016 and at September 30, 2016 for embedded derivative liabilities issued in the 2016 Note Offering

	Exercise Price	Closing Market Price (average)	Risk-free Rate	Market Price Volatility	Remaining Term (years)	Probability of change in control
Embedded Derivative April 2016	variable	\$ 14.600	0.90%	49.0%	3.0	15.0%
Embedded Derivative September 2016	variable	\$ 2.2500	0.83%	49.0%	2.5	15.0%

The table below summarizes the Company's derivative warrant activity, adjusted to reflect the one-for-twenty reverse stock split on June 2, 2016 for the nine months ended September 30, 2016:

	2013 & 2014 Issuances	2015 Issuances	Total
Derivative warrants outstanding at December 31, 2015	31,410	13,736	45,146
Issuances	-	1,034	1,034
Contractual anti-dilution adjustments	203,691	112	203,803
Exchanged for Class A common stock	-	(9,291)	(9,291)
Exercised/expired	-	(4,030)	(4,030)
Derivative warrants outstanding at September 30, 2016	<u>235,101</u>	<u>1,561</u>	<u>236,662</u>

	2013 & 2014 Issuances	2015 Issuances	2016 Issuances	Total
Fair value of derivatives at December 31, 2015	\$ 193	\$ 149	\$ -	\$ 342
Adjustment for warrants exercised/extinguished	-	(103)	-	(103)
Fair value of embedded derivatives in Notes	-	-	2,616	2,616
Changes in fair value, net	49	(43)	262	268
Fair value of derivatives at September 30, 2016	<u>\$ 242</u>	<u>\$ 3</u>	<u>\$ 2,878</u>	<u>\$ 3,123</u>

Fair Value Measurement

ASC 820, *Fair Value Measurements*, clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability.

ASC 820 requires that the valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. ASC 820 establishes a three-tier fair value hierarchy, which prioritizes inputs that may be used to measure fair value as follows:

- Level 1 — Observable inputs that reflect quoted prices for identical assets or liabilities in active markets.
- Level 2 — Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

When determining the fair value measurements for assets or liabilities required or permitted to be recorded at and/or marked to fair value, the Company considers the principal or most advantageous market in which it would transact and considers assumptions that market participants would use when pricing the asset or liability. When possible, the Company looks to active and observable markets to price identical assets. When identical assets are not traded in active markets, the Company looks to market observable data for similar assets.

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The following tables summarize the basis used to measure certain financial assets and liabilities at fair value on a recurring basis in the condensed consolidated balance sheets:

Balance at September 30, 2016 (in thousands)	Total	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Common stock warrant liability	\$ 245	\$ —	\$ —	\$ 245
Embedded derivative liability	2,878	—	—	2,878
Total fair value	<u>\$ 3,123</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 3,123</u>

For the Company's Level 3 measures, fair value is based on a Monte Carlo pricing model that is based, in part, upon unobservable inputs for which there is little or no market data, requiring the Company to develop its own inputs. The Company used a market approach to valuing these derivative liabilities. The following table summarizes activity for the Company's derivative liabilities measured at fair value on a recurring basis using significant unobservable inputs (i.e. Level 3) for the nine months ended September 30, 2016:

(in thousands)	Fair Value Measurements Using Significant Unobservable Inputs
Fair value of derivative liabilities at December 31, 2015	\$ 342
Change in the fair value of derivative liabilities, net	564
Adjustment for warrants exercised/extinguished	(103)
Adjustments for extinguished preferred stock	(296)
Issuance of Notes containing embedded derivative	<u>2,616</u>
Fair value of derivative liabilities at September 30, 2016	<u>\$ 3,123</u>

Recently Issued Accounting Standards

ASU 2016-15

On August 26, 2016, the FASB issued Accounting Standards Update No. 2016-15 ("ASU 2016-15"), *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments*, which was issued to provide clarification on how certain cash receipts and cash payments are reported in the statement of cash flows. This ASU addresses eight specific cash flow issues in an effort to reduce existing diversity between companies. The standard is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods therein. Early adoption is permitted and the Company is assessing the impact of ASU 2016-15 on its condensed consolidated statements of cash flows.

ASU 2016-09

On March 30, 2016, the FASB issued Accounting Standards Update 2016-09 ("ASU 2016-09"), *Simplifying Employee Share-Based Payment Accounting*, which was issued to simplify some of the accounting guidance for share-based compensation. Among the areas impacted by the amendments in this ASU is the accounting for income taxes related to share-based payments, accounting for forfeitures, classification of awards as equity or liabilities, and classification on the statement of cash flows. This ASU is effective for fiscal years beginning after December 15, 2016, with early adoption permitted. The Company expects to adopt this ASU on January 1, 2017. Management is evaluating the impact that the adoption of ASU 2016-09 will have on its consolidated financial position, results of operations and cash flows.

ASU 2016-02

On February 25, 2016, the FASB issued Accounting Standards Update No. 2016-02 ("ASU 2016-02"), *Leases*, which requires lessees to record a lease liability and right-of-use asset on the condensed consolidated balance sheet. While the new guidance for lessors is largely unchanged, sales-type leases must apply a modified retrospective approach for leases existing at the earliest reported comparative period. The standard is effective for financial statements issued for fiscal years beginning after December 15, 2018, and interim periods therein. Early adoption is permitted and the Company is assessing the impact of ASU 2016-02 on its condensed consolidated financial statements.

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ASU 2015-03

On April 7, 2015, the FASB issued Accounting Standards Update No. 2015-03 (“ASU 2015-03”), *Simplifying the Presentation of Debt Issuance Costs*, which requires debt issuance costs to be presented in the balance sheet as a direct deduction from the associated debt liability. For public business entities, the standard is effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years. For all other entities, the standard is effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within fiscal years beginning after December 15, 2016. Early adoption is permitted for financial statements that have not been previously issued. The new guidance will be applied on a retrospective basis. The Company has adopted ASU 2015-03 and the convertible debt is presented net of discount and issuance costs on its condensed consolidated balance sheet.

ASU 2014-15

On August 27, 2014, the FASB issued Accounting Standards Update No. 2014-15 (“ASU 2014-15”), *Presentation of Financial Statements – Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern*. ASU 2014-15 is intended to define management’s responsibility to evaluate whether there is substantial doubt about an organization’s ability to continue as a going concern and to provide related footnote disclosures.

Under GAAP, financial statements are prepared with the presumption that the reporting organization will continue to operate as a going concern, except in limited circumstances. Financial reporting under this presumption is commonly referred to as the going concern basis of accounting. The going concern basis of accounting is critical to financial reporting because it establishes the fundamental basis for measuring and classifying assets and liabilities.

Currently, GAAP lacks guidance about management’s responsibility to evaluate whether there is substantial doubt about the organization’s ability to continue as a going concern or to provide related footnote disclosures. ASU 2014-15 provides guidance to an organization’s management, with principles and definitions that are intended to reduce diversity in the timing and content of disclosures that are commonly provided by organizations today in the financial statement footnotes.

The amendments in ASU 2014-15 are effective for the Company on January 1, 2017, with early application permitted for unissued financial statements. The Company is assessing the impact of ASU 2014-15 on its condensed consolidated financial statements.

ASU 2014-09

On May 28, 2014, the FASB issued Accounting Standards Update No. 2014-09 (“ASU 2014-09”), which created Topic 606, *Revenue From Contracts With Customers* (“Topic 606”) and superseded the revenue recognition requirements in Topic 605, *Revenue Recognition*, including most industry-specific revenue recognition guidance. In addition, ASU 2014-09 superseded the cost guidance in Subtopic 605-35, *Revenue Recognition—Construction-Type and Production-Type Contracts*, and created new Subtopic 340-40, *Other Assets and Deferred Costs—Contracts with Customers*. In summary, the core principle of Topic 606 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

The amendments in ASU 2014-09 are effective for the Company on January 1, 2018 and it is assessing the impact on its condensed consolidated financial statements.

3. Line of Credit

On January 19, 2016, the Company entered into a waiver and consent agreement with Silicon Valley Bank in which it consented to the assignment of the revolving credit facility to Solar Solutions and waived any claims against Silicon Valley Bank. On January 19, 2016, Solar Solutions acquired the revolving credit facility from Silicon Valley Bank.

On March 30, 2016, the Company entered into an Amended and Restated Loan Agreement with Solar Solutions (the “Loan”) which, among other items, (i) extended the term to March 31, 2017, and (ii) allowed for certain eligible inventories to be included in the borrowing base.

On May 25, 2016, the Company entered into the First Loan Modification Agreement, effective as of May 19, 2016, with Solar Solutions to amend the terms of the Loan (the “First Modification Agreement”). The First Modification Agreement amended the Loan to, among other things, (i) reschedule the payment of \$167,513.41 due on May 15, 2016 to a date on or before June 3, 2016 and (ii) require the Company to issue to Solar Solutions 29,082 shares of Class A common stock at a price of \$5.76 per share as a payment on the revolving line of credit under the Loan.

Generally, the Loan provides for advances not to exceed a maximum amount based upon a borrowing base availability of 75.0% of eligible accounts receivable and a variable rate of eligible inventory as defined in the Loan. The maximum amount of the Loan is currently \$4.0 million, (it was automatically reduced to \$4.0 million on October 1, 2016 pursuant to the terms of the Loan) and it is reduced to \$3.0 million on January 1, 2017. Borrowings bear interest at the greater of (a) the greater of the prime rate or 4.0%, plus 3.0%, and (b) 7.0%. The amended maturity date for the Loan is currently March 31, 2017. The line of credit has a facility fee of 2.0% per year of the average daily unused portion of the available line of credit and a loan administration and collateral monitoring labor fee of \$4,000 per month.

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On August 22, 2016, the Company entered into the Second Loan Modification Agreement, effective as of August 19, 2016, with Solar Solutions (the “Second Modification Agreement”). The Second Loan Modification Agreement amended the Loan to delay the time periods at which reductions in the percentage value of certain of the Company’s accounts receivable occurs for purposes of calculating the borrowing base under the Loan. As amended, the value of each of the accounts receivable in question may be included in the borrowing base calculation (a) initially, 100%, (b) beginning on the later of October 1, 2016 or 270 days after the applicable invoice date, 50%, and (c) beginning on the later of November 30, 2016 or 360 days after the applicable invoice date, not at all. The impact of the amendment was to increase the percentage of the value of such accounts receivable the Company was allowed to include in its borrowing base calculation.

4. Commitments and Contingencies

The Company leases offices and warehouse space through non-cancelable operating leases. Some of these leases contain escalation clauses, based on increases in property taxes and building operating costs, and renewal options ranging from one month to three years.

The Company also leases a fleet of vehicles classified as operating leases. The lease terms range from 36 to 60 months.

The following schedule represents the remaining future minimum payments of all leases as of September 30, 2016:

(in thousands)	
2016	\$ 189
2017	370
2018	379
2019	275
2020	260
2021 and thereafter	334
	<u>\$ 1,807</u>

The Company incurred rent expense of \$0.1 million and \$0.2 million for the three months ended September 30, 2016 and 2015, respectively and \$0.5 million and \$0.8 million for the nine months ended September 30, 2016 and 2015, respectively.

The Company is subject to risks and uncertainties in the normal course of business, including legal proceedings; governmental regulation, such as the interpretation of tax and labor laws; contractual matters including warranty claims in the discontinued large commercial segment; and the seasonal nature of its business due to weather-related factors. The Company has accrued for costs incurred with respect to identified risks and uncertainties based upon the facts and circumstances currently available.

From time to time, we are involved in legal proceedings that we consider to be in the normal course of business.

5. Convertible Debt and Convertible Preferred Stock

2016 Note Offering

On April 1, 2016, the Company entered into a securities purchase agreement for a private placement of 10 million units, each consisting of \$1 of Notes and one Series G warrant to purchase a fraction of one share of Class A common stock. On the same day the Company closed the transaction and issued an aggregate of \$10.0 million of Notes and Series G warrants exercisable into 248,973 shares of Class A common stock. Under the terms of the Notes, the Company maintains a reserve of Class A common stock for issuance that is subject to adjustment periodically to reflect 200% of the potential shares issuable. As of November 4, 2016, the Company has reserved up to 6,200,000 shares of Class A common stock for issuance pursuant to the terms of the Notes.

In accordance with relevant accounting guidance for debt with conversion and other options, the Company separately accounts for the liability and equity components of the Notes by allocating the proceeds between the liability component, and equity component over their relative fair values after initially allocating the fair value of the embedded conversion option. The equity component of the Notes and the embedded derivative liability are recognized as a debt discount on the issuance date. The debt discount, is amortized to interest expense using the effective interest method over three years, or the life of the Notes.

In connection with the issuance of the Notes, the Company incurred approximately \$1.4 million of debt issuance costs, which primarily consisted of underwriting commissions and warrants, and legal and other professional fees, and allocated these costs to the liability component of the host debt instrument, and is recorded as a contra account to the debt liability on the balance sheet. The amount allocated to the liability component is amortized to interest expense over the contractual life of the Notes using the effective interest method.

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The Company's outstanding Note balances as of September 30, 2016 consisted of the following (in thousands):

	<u>September 30, 2016</u>
Liability component:	
Principal	\$ 10,000
Less: debt discount, net	(3,566)
Less: debt issuance costs, net	(1,045)
Net carrying amount	<u>\$ 5,389</u>

As of September 30, 2016, the carrying value of the Notes was \$5.4 million. The effective interest rate on the liability component was 58% for the period from the date of issuance through September 30, 2016. The following table sets forth total interest expense recognized related to the Notes during the three and nine months ended September 30, 2016 (in thousands):

	<u>Three Months Ended September 30, 2016</u>	<u>Nine Months Ended September 30, 2016</u>
Contractual interest expense	\$ 207	\$ 407
Amortization of debt issuance costs	170	311
Amortization of debt discount	580	1,062
Total interest expense on Notes	<u>\$ 957</u>	<u>\$ 1,780</u>

On April 1, 2016, the Company received \$0.75 million of the proceeds from the sale of the units from the 2016 Note Offering. The remaining proceeds of \$9.25 million were deposited into restricted cash accounts that are subject to Deposit Account Control Agreements between the Bank of Hawaii, the Company, and the applicable investor. The Notes provide for distribution of the proceeds held pursuant to the Deposit Account Control Agreement as described on Form 8-K filed on April 1, 2016, as amended. On May 12, 2016, the Notes were amended to provide for the release of cash from the restricted cash accounts as described in the following paragraph.

On May 12, 2016, the Company agreed to request withdrawal of its registration statement and entered into separate termination and amendment agreements with the investors in the 2016 Note Offering pursuant to which the parties terminated the registration rights agreement entered into in connection with the 2016 Note Offering and the investors agreed (i) to release \$1 million from the restricted cash accounts on the 3rd business day following the Company's filing of a Current Report on Form 8-K disclosing that it has received shareholder approval pursuant to Nasdaq Rule 5635(d) to issue shares of Class A common stock pursuant to the terms of the Notes without giving effect to the exchange cap set forth therein an amount that may exceed 20% of the Company's issued and outstanding shares of Class A common stock before the issuance of the Notes and the exercise of the Series G warrants without giving effect to the exercise floor price set forth therein, (ii) the Company would be eligible for an additional release of \$1 million on the 5th day following the date the Investors are eligible to resell shares of Class A common stock pursuant to Securities Act Rule 144, which occurred on October 6, 2016; (iii) subsequent releases from the restricted cash accounts will occur on the current schedule following the Rule 144 eligibility date; and (iv) the first payment of principal and interest under the Notes would be due on November 1, 2016. At the Company's scheduled shareholder meeting on May 27, 2016, voters approved the issuance of Class A common stock in exchange for Notes and Series G warrants issued in the 2016 Note Offering.

As of September 30, 2016 the remaining proceeds in the restricted cash account was \$8.25 million. As of November 4, 2016 the remaining proceeds in the restricted cash account was \$2.4 million.

The Notes are convertible at any time, at the option of the holders, into shares of Class A common stock at the lower of a fixed and floating conversion price. The initial fixed conversion price was \$16.07 per share, subject to adjustment for stock splits and similar events. The floating conversion price is equal to the lowest of (i) 85% of the arithmetic average of the five lowest volume-weighted average prices of the Class A common stock during the 20 consecutive trading day period ending on the trading day immediately preceding the delivery of the applicable conversion notice by such holder of Notes, (ii) 85% of the volume-weighted average price of the Class A common stock on the trading day immediately preceding the delivery of the applicable conversion notice by such holder of Notes, and (iii) 85% of the volume-weighted average price of the Class A common stock on the trading day of the delivery of the applicable conversion notice by such holder of Notes. The floating conversion price was \$1.74 and, as permitted under the Notes, the Company has reduced the fixed conversion price on several occasions or limited time periods in an effort to encourage conversion to (i) increase the shareholders' equity of the company and meet the Nasdaq's minimum requirement for shareholders' equity of the Company and (ii) to obtain at an earlier date additional financial capital to commence its business turnaround strategy. Between October 18 and 28, 2016 the Company reduced the conversion price to \$1.35, between October 28 and November 1, 2016 the Company reduced the conversion price to \$1.00 (there were no subsequent conversions at this price), and between November 1 and 2, 2016 the Company reduced the conversion price to \$0.75. The average conversion price for the conversion of all Notes through November 4, 2016 was \$1.41.

Under the terms of the Notes, principal and interest payments have been deferred until November 1, 2016 at which time, interest accrued at 8% per annum is due in full, and thereafter, the Company shall make 28 equal monthly principal payments of approximately \$ 0.36 million plus accrued interest. The Company has the option, upon satisfaction of certain conditions, to make such principal and interest payments, in whole or in part, through the issuance of Class A common stock at the floating conversion price previously described. At September 30, 2016, the Company had accrued interest of \$0.4 million included in accrued liabilities on the balance sheet.

2016 Convertible Preferred Stock offering

On September 14, 2016, pursuant to the terms of an Underwriting Agreement, the Company sold to the underwriters an aggregate of 2,800 units (representing gross proceeds of \$2,800,000) (each, a "Unit"), each Unit consisting of one share of the Company's Series A 12.5% Mandatorily Convertible Preferred Stock, stated value \$1,000 per share (the "Preferred Stock") and convertible into shares of the Company's Class A common stock, and one Series H Warrant to purchase approximately 181.8181 shares of Class A common stock at an exercise price of \$5.50. The Series H Warrants are exercisable immediately for a term of 5-years and include the following reprice adjustment provision: If the Exercise Price on the earlier of the date of (i) repayment in full of the Notes and (ii) the maturity date of the Notes (such earlier date, the "Adjustment Date") exceeds eighty-five percent (85%) of the lowest Weighted Average Price of the Common Stock during the five (5) consecutive Trading Day period ending on, and including, the Adjustment Date (the "Adjusted Exercise Price"), the Exercise Price hereunder shall be reset to the Adjusted Exercise Price, subject to further adjustment hereunder. The public offering price for each Unit was \$1,000 and the underwriters' discount was \$70 per Unit. At the closing, the Company issued an aggregate of 2,800 shares of Preferred Stock and Series H Warrants exercisable into an aggregate of 509,091 shares of Class A common stock.

In accordance with relevant accounting guidance for instruments with conversion and other options, the Company separately accounts for the liability and equity components of the Units by allocating the proceeds between the liability component, and equity component over their relative fair values. The equity component of the Units is recognized as a debt discount on the issuance date. The debt discount has been fully amortized to expense as of September 30, 2016, since all of the Preferred Stock has been converted to Class A common stock, and is included in Debt accretion expense and loss on extinguishment.

In connection with the issuance of the Units, the Company incurred approximately \$0.6 million of issuance costs, which primarily consisted of underwriting commissions, legal and other professional fees, and allocated these costs to the preferred stock liability component and the warrant equity component over their relative fair values, and is recorded as a contra account to the debt liability and additional paid-in capital on the balance sheet. The amount allocated to the liability component was fully amortized to expense as of September 30, 2016, since all of the Preferred Stock has been converted to Class A common stock, and is included in Interest expense.

By September 29, 2016, all of the convertible preferred stock was converted to Class A common stock, extinguishing the debt. As the trading price of the Company's stock was higher at conversion than the effective conversion price per share to the debt holder, the Company recorded a loss on extinguishment for this 14-day period. As of September 30, 2016, the amount recorded as an increase to shareholders' equity for the September 14, 2016 offering was equal to the cash received at the closing, net of costs, and upon subsequent exercises of Series H warrants aggregating to \$3.8 million.

The Convertible Preferred Stock was recorded as follows:

Statement of Changes in Stockholders' Deficit:	
Fair Value of Preferred Stock Liability converted to common stock	\$ 4,324
Issuance of warrants for preferred stock offering	1,053
Proceeds from warrant exercises	1,570
Statement of Operations:	
Amortization of debt discount and interest expense	(304)
Debt extinguishment	(2,831)
Increase in stockholders' deficit	\$ 3,812
Cash received from convertible preferred stock and warrants:	
Preferred stock, net of costs	\$ 2,242
Warrants, net of costs	1,570
Increase in cash	\$ 3,812

6. Shareholders' Equity

The following transactions were completed during the nine months ended September 30, 2016:

2016 Convertible Preferred Stock offering

In connection with the issuance of the September 14, 2016 Units, the Company issued Series H warrants exercisable into 509,091 shares of Class A common stock. The fair value of the Series H warrants issued was \$1.3 million and is recorded in Equity. The following table reflects original assumptions as of September 14, 2016 for Series H Warrants issued in the 2016 Convertible Preferred Stock offering:

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	<u>Exercise Price</u>	<u>Closing Market Price</u>	<u>Risk-free Rate</u>	<u>Market Price Volatility</u>	<u>Remaining Term (years)</u>
Series H Warrant	\$ 5.50	\$ 4.88	1.210%	127.60%	5.0

2016 Note Offering

In connection with the issuance of the Notes, the Company issued Series G warrants exercisable into 291,298 shares of Class A common stock. The fair value of the Series G warrants issued was \$3.5 million and is recorded in Equity. The following table reflects original assumptions as of April 1, 2016 for Series G Warrants issued in the 2016 Note Offering:

	<u>Exercise Price</u>	<u>Closing Market Price</u>	<u>Risk-free Rate</u>	<u>Market Price Volatility</u>	<u>Remaining Term (years)</u>
Series G Warrant	\$ 16.56	\$ 14.20	1.240%	121.21%	5.0

June 2016 Reverse Stock Split

On June 2, 2016, the Company executed a reverse stock split of all outstanding shares of the Company's Class A common stock at a ratio of one-for-twenty, whereby twenty shares of Class A common stock were combined into one share of Class A common stock. The reverse split was previously authorized by a vote of the Company's shareholders on May 27, 2016. The Company did not decrease its authorized shares of capital stock in connection with the reverse stock split. Share amounts are presented to reflect the reverse split in all periods.

Option and Warrant Exercises

During the three and nine months ended September 30, 2016 and 2015, the Company issued no shares of its Class A common stock to employees upon the exercise of stock options. During the nine months ended September 30, 2016 and 2015, the Company issued 287,521 and 3,021,581 shares of its Class A common stock pursuant to the exercise of warrants and capital raising transactions, respectively.

At September 30, 2016, the Company had the following shares of Class A common stock reserved for future issuance:

Stock options and grants outstanding under incentive plans	5,263
Common stock warrants outstanding - derivative liability	236,662
Common stock warrants outstanding - equity security	<u>542,205</u>
Total shares reserved for future issuance	<u><u>784,130</u></u>

7. Share-Based Compensation

During the nine months ended September 30, 2016, under its 2008 Long-Term Incentive Plan, as amended, the Company did not grant any stock options and cancelled 1,021 stock options versus grants of 5,008 stock options and cancellations of 3,901 stock options during the nine months ended September 30, 2015. Substantially all stock options vest at 2% per month for the 50 months beginning with the first day of the eleventh month after date of grant.

Total share-based compensation expense recognized was \$0.2 million and \$0.1 million during the three months ended September 30, 2016 and 2015, respectively, and \$0.5 million and \$0.5 million during the nine months ended September 30, 2016 and 2015, respectively. Share-based compensation expense is reported separately on the Company's condensed consolidated statements of operations.

8. Net Income (Loss) Per Share

Basic net income/(loss) per share excludes any dilutive effects of options, warrants or the Notes. The Company computes basic net income/(loss) per share using the weighted average number of shares of its Class A common stock outstanding during the period. The Company computes diluted net income/(loss) per share using the weighted average number of shares of its Class A common stock and common stock equivalents outstanding during the period. The Company excluded common stock equivalents of 6.5 million and 1.6 million for the nine months ended September 30, 2016 and 2015, respectively, from the computation of diluted net loss per share because their effect was antidilutive.

9. Segment Information

The Company operates as three reportable segments: (1) Residential – the installation of solar energy systems for homeowners, including lease financing thereof, and for small businesses (small commercial) in the continental U.S.; (2) Sunetric – the installation of solar energy systems for both homeowners and business owners (commercial) in Hawaii; and (3) Other – corporate operations. The Company discontinued its former large commercial segment and it is presented as discontinued operations.

Financial information for the Company's segments and a reconciliation of the total of the reportable segments' income/(loss) from operations (measures of profit or loss) to the Company's consolidated net loss are as follows:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net revenue:				
Residential	\$ 1,427	\$ 6,894	\$ 8,475	\$ 24,861
Sunetric	1,036	3,544	3,811	10,914
Other	—	—	—	—
Consolidated net revenue	<u>2,463</u>	<u>10,438</u>	<u>12,286</u>	<u>35,775</u>
Income/(loss) from operations:				
Residential	(1,399)	(1,809)	(3,556)	(4,787)
Sunetric	(100)	114	(1,189)	(52)
Other	(1,539)	(2,864)	(4,972)	(7,964)
Consolidated loss from continuing operations	<u>(3,038)</u>	<u>(4,559)</u>	<u>(9,717)</u>	<u>(12,803)</u>
Reconciliation of consolidated loss from operations to consolidated net loss:				
Other income	—	74	17	422
Interest expense	(1,330)	(54)	(2,253)	(423)
Change in valuation of derivative liabilities	(535)	660	(268)	6,924
Debt accretion expense and loss on extinguishment	(2,831)	—	(2,831)	—
Income tax (expense)/benefit	—	(2)	(27)	22
Income/(loss) from discontinued operations, net of tax	(1)	(397)	230	(712)
Net loss	<u>\$ (7,735)</u>	<u>\$ (4,278)</u>	<u>\$ (14,849)</u>	<u>\$ (6,570)</u>

The following is a reconciliation of reportable segments' assets to the Company's consolidated total assets. The Other segment includes certain unallocated corporate amounts.

(in thousands)	September 30, 2016	December 31, 2015
Total assets – continuing operations:		
Residential	\$ 6,609	\$ 9,229
Sunetric	1,637	3,041
Other	10,601	1,034
	<u>\$ 18,847</u>	<u>\$ 13,304</u>
Total assets – discontinued operations:		
Commercial	3,392	3,731
	<u>\$ 22,239</u>	<u>\$ 17,035</u>

10. Discontinued Operations

The following is a reconciliation of the major line items constituting pretax income/(loss) of discontinued operations to the after-tax loss of discontinued operations that are presented in the condensed consolidated statements of operations as indicated:

(in thousands)	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2016	2015	2016	2015
Major line items constituting pretax income/(loss) of discontinued operations:				
Net revenue	\$ 59	\$ 117	\$ 405	\$ 1,026
Cost of goods sold	17	343	47	922
Selling and operating	37	163	110	613
General and administrative	6	8	18	116
Restructuring costs	—	—	—	31
Depreciation and amortization	—	—	—	56
Pretax income/(loss) of discontinued operations	<u>(1)</u>	<u>(397)</u>	<u>230</u>	<u>(712)</u>
Income/(loss) on discontinued operations	<u>\$ (1)</u>	<u>\$ (397)</u>	<u>\$ 230</u>	<u>\$ (712)</u>

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The following is a reconciliation of the carrying amounts of major classes of assets and liabilities of the discontinued operations to the total assets and liabilities of the discontinued operations presented separately in the condensed consolidated balance sheets as indicated:

<u>(in thousands)</u>	<u>September 30,</u> <u>2016</u>	<u>December 31,</u> <u>2015</u>
Carrying amounts of major classes of assets included as part of discontinued operations:		
Current assets:		
Accounts receivable, net	\$ 2,247	\$ 1,560
Costs in excess of billings on uncompleted contracts	321	1,105
Inventory, net	56	112
Other current assets	51	76
Total major classes of current assets of the discontinued operations	<u>2,675</u>	<u>2,853</u>
Noncurrent assets:		
Other noncurrent assets	717	878
Total noncurrent assets of discontinued operations	717	878
Total assets of the discontinued operations in the balance sheet	<u>\$ 3,392</u>	<u>\$ 3,731</u>
Carrying amounts of major classes of liabilities included as part of discontinued operations:		
Current liabilities:		
Accounts payable	\$ 1,692	\$ 1,978
Accrued liabilities	2,237	2,394
Deferred revenue and other current liabilities	113	138
Total current liabilities of discontinued operations	<u>4,042</u>	<u>4,510</u>
Noncurrent liabilities:		
Other liabilities	225	225
Total major classes of noncurrent liabilities of the discontinued operations	225	225
Total liabilities of the discontinued operations in the balance sheet	<u>\$ 4,267</u>	<u>\$ 4,735</u>

11. Subsequent Events

From October 1, 2016 through November 8, 2016, \$7.7 million of the Notes were converted to Class A common stock and cash of \$5.8 million held in restricted cash at September 30, 2016 was released to the Company. The Company has used a portion of the cash received to reduce accounts payable. The Company issued 6.0 million shares in conjunction with the conversion of these Notes.

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

We recommend users read the following discussion and analysis of our financial condition and results of operations in conjunction with the condensed consolidated financial statements and related notes included elsewhere in this document. This section is designed to provide information that will assist in understanding our condensed consolidated financial statements, changes in certain items in those statements from period to period, the primary factors that caused those changes, and how certain accounting principles, policies and estimates affect the condensed consolidated financial statements.

Discontinued Operations

During 2014, we committed to a plan to sell certain contracts and rights comprising our large commercial installations business, otherwise known as our former Commercial segment. At the same time, we determined not to enter into further large commercial installation contracts in the mainland United States. Most contracts in process at December 31, 2014 were substantially completed during 2015 and we expect any remaining work to be completed in 2016. We now report this business as a discontinued operation, separate from our continuing operations. The following management discussion and analysis of financial condition and results of operations is for our continuing operations, unless indicated otherwise.

Overview

We are a residential and small commercial solar energy engineering, procurement and construction firm. We also perform most of our own sales and marketing activities to generate leads and secure projects. We offer turnkey services, including design, procurement, permitting, build-out, grid connection, financing referrals and warranty and customer satisfaction activities. Our solar energy systems use high-quality solar photovoltaic modules. We use proven technologies and techniques to help customers achieve meaningful savings by reducing their utility costs. In addition, we help customers lower their emissions output and reliance upon fossil fuel energy sources.

We, including our predecessors, have more than 35 years of experience in residential solar energy and trace our roots to 1978, when Real Goods Trading Corporation sold the first solar photovoltaic panels in the United States. We have designed and installed over 25,000 residential and commercial solar systems since our founding.

During 2014, we discontinued our entire former Commercial segment and sold the assets associated with our catalog segment (a portion of the Other segment). As a result of this major strategic shift, we now operate as three reportable segments: (1) Residential – the installation of solar energy systems for homeowners, including lease financing thereof, and for small businesses (small commercial) in the continental U.S.; (2) Sunetric – the installation of solar energy systems for both homeowners and business owners (commercial) in Hawaii; and (3) Other – corporate operations. We believe this new structure enables us to more effectively manage our operations and resources.

We generally recognize revenue from solar energy systems sold to our customers when we install the solar energy system. Our business requires that we incur costs of acquiring solar panels and labor to install solar energy systems on our customer rooftops up-front and receive cash from customers thereafter. As a result, during periods when we are increasing sales, we expect to have negative cash flow from operations, a portion of which we offset with borrowings under our line of credit. We account for our leases of solar energy systems as sales-type leases.

Backlog

Backlog represents the dollar amount of revenue that we may recognize in the future from signed contracts to install solar energy systems that have not yet been installed without taking into account possible future cancellations. Backlog is not a measure defined by GAAP, and is not a measure of contract profitability. Our methodology for determining backlog may not be comparable to methodologies used by other companies in determining their backlog amounts. The backlog amounts we disclose are net of cancellations and include anticipated revenues associated with: (1) the original contract amounts; and (2) change orders for which we have received written confirmations from the applicable customers.

Backlog may not be indicative of future operating results, and projects in our backlog may be cancelled, modified or otherwise altered by customers. We can provide no assurance as to the profitability of our contracts reflected in backlog.

The following table summarizes changes to our backlog by segment during the nine-month period ended September 30, 2016:

(in thousands)	Residential	Sunetric	Totals
Backlog of December 31, 2015	\$ 9,502	\$ 7,195	\$ 16,697
Bookings from new awards (“Sales”)	5,270	203	5,473
Cancellations and reductions on existing contracts	(1,250)	47	(1,203)
Amounts recognized in revenue upon installation	(3,684)	(1,100)	(4,784)
Backlog at March 31, 2016	9,838	6,345	16,183
Bookings from new awards (“Sales”)	3,673	386	4,059
Cancellations and reductions on existing contracts	(2,249)	(441)	(2,690)
Amounts recognized in revenue upon installation	(3,037)	(1,533)	(4,570)
Backlog at June 30, 2016	8,225	4,757	12,982
Bookings from new awards (“Sales”)	3,714	78	3,792
Cancellations and reductions on existing contracts	(890)	(961)	(1,851)
Amounts recognized in revenue upon installation	(1,327)	(1,003)	(2,330)
Backlog at September 30, 2016	\$ 9,722	\$ 2,871	\$ 12,593

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During the prior twelve months, we have experienced a high level of contract cancellations, which we attribute to (i) the fact that our financial conditions, as previously disclosed, limited our access to solar panels such that we were not able to install solar energy systems in a time frame to satisfy certain customers and (ii) our history of operating losses and resulting declining stock price affecting customer decisions. We determined that for optimum internal operations, and customer satisfaction, that a backlog equivalent to a few months of sales is optimal. Further, we have determined that our sales efforts should be broadened to additional states to minimize the impact of weather on our seasonal results, and to better balance the construction capacity of our internal and third-party installers.

We did not emphasize originating new sales during the first three quarters of 2016 as the company did not have sufficient financial capital for growth.

We intend to continue the optimization of our e-sales call-center based sales organization with the goal of increasing our future sales awards, both for our current states of operation and new states where we may operate in future periods. Our customers currently finance their acquisition of solar energy systems using their own cash, or a loan they receive from a financial provider. We believe that to be successful in increasing our sales and resultant revenue, we need to:

- Expand the size of our call center sales organization.
- Expand the size of our east coast residential and Sunetric field sales and construction organizations.
- Expand our digital marketing program, as well as increase our spending to generate customer leads while achieving our desired cost of acquisition.
- Make available to our customers, additional third-party providers to finance customer acquisitions of our solar energy systems.
- Expand our network of authorized third party installers.
- Commence sales into new states of operations.

In order to effectively pursue the above tactics, we have determined we need to obtain additional financing, see Note 1. Organization, Nature of Operations, and Principles of Consolidation and Note 6. Shareholders' Equity. We compete with larger, better-financed firms for customers, employees, and the services of third party financiers and installers and, accordingly, there can be no assurance that we will be successful in meeting our goals for increasing sales and revenue.

Recent Developments

During 2016, in conjunction with our plans to position the Company for future profitable operations, we have:

- Raised \$10 million of convertible debt before offering expenses.
- Raised \$2.8 million of convertible preferred stock before offering expenses. Raised \$1.6 million from the exercise of warrants.
- Reduced selling and operating and general and administrative expenses with the goal of lowering the required amount of future revenue to achieve break-even, or better, operating results in the future.

Critical Accounting Policies and Estimates

There were no material changes to our critical accounting policies or estimates during the nine months ended September 30, 2016 from those disclosed in our annual report on Form 10-K for the year ended December 31, 2015.

Results of Operations

Three Months Ended September 30, 2016 Compared to Three Months Ended September 30, 2015

Net revenue. Net revenue decreased \$7.9 million, or 76.4%, to \$2.5 million during the three months ended September 30, 2016 from \$10.4 million during the three months ended September 30, 2015. Net revenue for our residential segment decreased \$5.5 million, or 79.3%, to \$1.4 million during the three months ended September 30, 2016 from \$6.9 million during the three months ended September 30, 2015, primarily due to a lack of access to capital for growth and which caused delays in material purchases and limited our access to third party installers, coupled with fewer sales during the current period in the California market. The residential segment megawatts installed decreased by 1.2 megawatts, or 80.1%, to 0.3 megawatts during the three months ended September 30, 2016 from 1.5 megawatts during the three months ended September 30, 2015. The Sunetric segment megawatts installed decreased by 0.6 megawatts, or 68.6%, to 0.3 megawatts during the three months ended September 30, 2016 from 0.9 megawatts during the three months ended September 30, 2015.

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Gross profit. Gross profit decreased \$1.4 million, or 92.5%, to \$0.1 million or 4.8% of net revenue during the three months ended September 30, 2016 from \$1.6 million or 14.9% of net revenue during the three months ended September 30, 2015. Gross profit for our residential segment decreased \$1.0 million, or 119.0%, to \$(0.2) million or (11.5)% of net revenue during the three months ended September 30, 2016 from \$0.8 million or 12.5% of net revenue during the three months ended September 30, 2015. The decrease in the residential segment's gross profit margin percentage was due primarily to the proportionate greater absorption of fixed costs associated with the decline in revenue of \$5.5 million from the prior year quarter. Gross profit for our Sunetric segment was \$0.3 million or 27.1% of net revenue during the three months ended September 30, 2016 as compared to \$0.7 million or 19.6% of net revenue during the three months ended September 30, 2015. The increase in the Sunetric segment's gross profit margin percentage results from installing a majority of commercial projects with higher margins.

Selling and operating expenses. Selling and operating expenses decreased \$1.8 million, or 53.0%, to \$1.6 million or 65.5% of net revenue during the three months ended September 30, 2016 from \$3.4 million or 32.9% of net revenue during the three months ended September 30, 2015. Selling and operating expenses for our residential segment decreased \$1.3 million, or 55.3%, to \$1.1 million or 76.8% of net revenue during the three months ended September 30, 2016 from \$2.4 million or 35.6% of net revenue during the three months ended September 30, 2015. The decrease in the residential segment's selling and operating expenses was attributable to the reduction of revenue and headcount, creating a new commission payout structure, and management's decision to reduce the costs for customer leads. Selling and operating expenses for our Sunetric segment were \$0.3 million or 29.9% of net revenue during the three months ended September 30, 2016 from \$0.6 million or 16.1% of net revenue during the three months ended September 30, 2015.

General and administrative expenses. General and administrative expenses remained largely unchanged at \$1.3 million during the three months ended September 30, 2016 and 2015. However due to the decline in revenue during the three months ended September 30, 2016 general and administrative expenses were 51.4% of net revenue compared to 12.5% of net revenue during the three months ended September 30, 2015.

Litigation expenses. Litigation expenses during the three months ended September 30, 2016 was \$0.00 compared to \$1.1 million associated with the legal costs of responding to the U.S. Securities and Exchange Commission subpoena related to the settlement of the PIPE litigation in July 2015 during the three months ended September 30, 2015.

Restructuring costs. There were no restructuring costs during the three months ended September 30, 2016. Restructuring costs were \$0.1 million during the three months ended September 30, 2015 and were related to the costs of closings of California offices.

Depreciation and Amortization. Depreciation and Amortization were \$0.1 million during each of the three months ended September 30, 2016 and September 30, 2015.

Interest expense. Interest expense increased \$1.2 million to \$1.3 million during the three months ended September 30, 2016 from \$0.1 million during the three months ended September 30, 2015. The increase arises from interest, amortization of debt issuance costs related to the 2016 Note Offering and 2016 preferred stock offering.

Change in valuation of derivative liabilities, net. We recorded a noncash loss of \$0.5 million during the three months ended September 30, 2016 compared to a noncash gain of \$0.7 million during the three months ended September 30, 2015.

Debt accretion expense and loss on extinguishment. We recorded accretion expense and loss on extinguishment of \$2.8 million during the three months ended September 30, 2016 and \$0.00 during the three months ended September 30, 2015. On September 14, 2016, the Company raised \$2.8 million of convertible preferred stock that was accounted for as debt. By September 29, 2016, all of the convertible preferred stock was converted to Class A common stock of the Company, extinguishing the debt. As the trading price of the Company's stock was higher at conversion than the effective conversion price per share to the debt holder, a loss on extinguishment is recorded for this 14-day period.

Income tax (expense)/benefit. Income tax (expense)/benefit was negligible during the three months ended September 30, 2016 and the three months ended September 30, 2015.

Loss from continuing operations. Our loss from continuing operations during the three months ended September 30, 2016 was \$7.7 million, or \$(10.27) per share, as compared to a loss from continuing operations of \$3.9 million, or \$(6.33) per share, during the three months ended September 30, 2015.

Loss from discontinued operations. Our loss from discontinued operations during the three months ended September 30, 2016 was \$1,000, or \$(0.00) per share, as compared to a loss from discontinued operations of \$0.4 million, or \$(0.64) per share, during the three months ended September 30, 2015.

Nine Months Ended September 30, 2016 Compared to Nine Months Ended September 30, 2015

Net revenue. Net revenue decreased \$23.5 million, or 65.7%, to \$12.3 million during the nine months ended September 30, 2016 from \$35.8 million during the nine months ended September 30, 2015. Net revenue for our residential segment decreased \$16.4 million, or 65.9%, to \$8.5 million during the nine months ended September 30, 2016 from \$24.9 million during the nine months ended September 30, 2015, primarily due to a lack of access to capital for growth and which caused delays in material purchases and limited our access to third party installers coupled with fewer sales during the current period in the California market. The residential segment megawatts installed decreased by 3.9 megawatts, or 66.8%, to 1.9 megawatts during the nine months ended September 30, 2016 from 5.8 megawatts during the nine months ended September 30, 2015. The Sunetric segment megawatts installed decreased by 1.7 megawatts, or 63.7%, to 1.0 megawatts during the nine months ended September 30, 2016 from 2.7 megawatts during the nine months ended September 30, 2015.

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Gross profit. Gross profit decreased \$4.3 million, or 87.4%, to \$0.6 million or 5.0% of net revenue during the nine months ended September 30, 2016 from \$4.9 million or 13.7% of net revenue during the nine months ended September 30, 2015. Gross profit for our residential segment decreased \$2.6 million, or 77.7%, to \$0.7 million or 8.6% of net revenue during the nine months ended September 30, 2016 from \$3.3 million or 13.1% of net revenue during the nine months ended September 30, 2015. The decrease in the residential segment's gross profit percentage was due to the proportionate greater absorption of fixed costs associated with the decline in revenue of \$16.4 million from the prior year nine months to date. Gross profit for our Sunetric segment was \$(0.1) million or (2.9)% of net revenue during the nine months ended September 30, 2016 as compared to \$1.6 million or 15.1% of net revenue during the nine months ended September 30, 2015. The decrease in the Sunetric segment's gross profit percentage was due to a greater decrease in revenue when compared to the decrease in fixed indirect costs for the nine months ended September 30, 2016.

Selling and operating expenses. Selling and operating expenses decreased \$4.9 million, or 47.2%, to \$5.5 million or 44.8% of net revenue during the nine months ended September 30, 2016 from \$10.4 million or 29.1% of net revenue during the nine months ended September 30, 2015. Selling and operating expenses for our residential segment decreased \$3.6 million, or 48.3%, to \$3.8 million or 45.1% of net revenue during the nine months ended September 30, 2016 from \$7.4 million or 29.7% of net revenue during the nine months ended September 30, 2015. The decrease in the residential segment's selling and operating expenses was attributable to the reduction of revenue and headcount, creating a new commission payout structure, and management's decision to reduce the costs of customer leads. Selling and operating expenses for our Sunetric segment were \$0.8 million or 22.6% of net revenue during the nine months ended September 30, 2016 from \$1.6 million or 14.6% of net revenue during the nine months ended September 30, 2015.

General and administrative expenses. General and administrative expenses decreased \$0.5 million, or 10.1%, to \$3.9 million or 32.0% of net revenue during the nine months ended September 30, 2016 from \$4.4 million or 12.2% of net revenue during the nine months ended September 30, 2015. General and administrative expenses for our Sunetric segment were \$0.2 million or 5.3% of net revenue during the nine months ended September 30, 2016 as compared to \$0.1 million or 0.6% of net revenue during the nine months ended September 30, 2015. General and administrative expenses for our other segment remained largely unchanged compared to the prior year period as most of the reductions in headcount and reduction of expenses had already been realized as of September 30, 2015.

Restructuring Costs. Restructuring costs were \$0.04 million during the nine months ended September 30, 2016 and \$0.4 million during the nine months ended September 30, 2015. Restructuring costs are related to the costs of obtaining a fairness opinion provided and of legal services in connection with the conversion of subordinated debt to equity as well as costs related to the closings of California offices.

Litigation expenses. Litigation expenses during the nine months ended September 30, 2016 were \$0.02 million compared to \$1.6 million during the nine months ended September 30, 2015 pursuant to our recording a charge associated with the settlement of the PIPE litigation in July 2015 and the legal costs of responding to the U.S. Securities and Exchange Commission subpoena regarding the same transaction.

Depreciation and Amortization. Depreciation and amortization were \$0.3 for the nine months ended September 30, 2016 and were \$0.4 million during the nine months ended September 30, 2015.

Other income. Other income was \$0.1 million for the nine months ended September 30, 2015; a reversal of previously accrued interest expense arising from the settlement of a sales tax audit.

Interest expense. Interest expense increased \$1.9 million to \$2.3 million during the nine months ended September 30, 2016 from \$0.4 million during the nine months ended September 30, 2015. The increase arises from interest, amortization of debt issuance costs related to the 2016 Note Offering and 2016 preferred stock offering.

Change in derivative liabilities, net. We recorded noncash loss of \$0.3 million during the nine months ended September 30, 2016 compared to a noncash gain of \$6.9 million during the nine months ended September 30, 2015, a decrease of \$7.2 million.

Debt accretion expense and loss on extinguishment. We recorded accretion expense and loss on extinguishment of \$2.8 million during the nine months ended September 30, 2016 and \$0.00 during the nine months ended September 30, 2015. On September 14, 2016, the Company raised \$2.8 million of convertible preferred stock that was accounted for as debt. By September 29, 2016, all of the convertible preferred stock was converted to Class A common stock of the Company, extinguishing the debt. As the trading price of the Company's stock was higher at conversion than the effective conversion price per share to the debt holder, a loss on extinguishment is recorded for this 14-day period.

Income tax (expense)/benefit. Income tax (expense)/benefit was negligible during the nine months ended September 30, 2016 and the nine months ended September 30, 2015.

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Loss from continuing operations. As a result of the above factors, our loss from continuing operations during the nine months ended September 30, 2016 was \$15.0 million, or \$(22.44) per share, as compared to a loss from continuing operations of \$5.9 million, or \$(17.34) per share, during the nine months ended September 30, 2015.

Income/(loss) from discontinued operations. Our gain from discontinued operations during the nine months ended September 30, 2016 was \$0.2 million, or \$0.34 per share, as compared to a loss from discontinued operations of \$0.7 million, or \$(2.10) per share, during the nine months ended September 30, 2015.

Seasonality

Our quarterly net revenue and operating results for solar energy system installations are difficult to predict and have, in the past, and may, in the future, fluctuate from quarter to quarter as a result of changes in state, federal, or private utility company subsidies, as well as weather, economic trends and other factors. We have historically experienced seasonality in our solar installation business, with the first quarter representing our lowest installation quarter of the year primarily due to adverse weather. We have historically experienced seasonality in our sales of solar systems, with the fourth and first quarters of the year being less sales orders than the second and third quarters.

Liquidity and Capital Resources

We have implemented measures to reduce our cash outflow from operations from prior years. These measures included (i) exiting the large commercial segment which was operating at both an operating and cash flow loss, (ii) reducing staffing levels, (iii) raising prices for our products and (iv) efforts to enhance accounts receivable collections and optimize inventory levels. As a result of implementing these measures, for the nine months ended September 30, 2016, net cash used in operating activities from continuing operations improved by \$8.6 million compared to the nine months ended September 30, 2015. As a result of these circumstances, the Company arranged for additional financial capital:

- On April 1, 2016, the Company issued \$10.0 million of Notes and Series G warrants, raising net proceeds of \$9.4 million of which the Company had received \$1.75 million as unrestricted cash as of September 30, 2016. Through November 4, 2016, the Company has received aggregate unrestricted cash of \$7.6 million, including \$5.8 million which has been released from the restricted cash accounts after September 30, 2016.
- On May 25, 2016, the Company issued 29,082 shares of Class A common stock to Solar Solutions in payment of \$167,513 due under the Loan.
- On September 14, 2016, the Company issued \$2.8 million of convertible preferred stock and 509,091 Series H warrants. The Company received, after offering costs, \$2.2 million in cash at the closing and received \$1.6 million from the exercise of 285,454 Series H warrants on September 30, 2016.

Commencing October 3, 2016, principal and interest on our Note began to convert into Class A common equity, with the following activity through November 4, 2016:

Amount of principal converted to Class A common stock	\$	7.1million
Releases of cash from restricted cash	\$	5.8million
Net increase in shareholders' equity from conversions	\$	5.9million

The Company has used the proceeds from the releases from the restricted cash account to reduce accounts payable, purchase materials to convert its backlog to revenue, and for other corporate purposes.

The Company has prepared its business plan for the ensuing twelve months, and as described below, believes it has sufficient financial resources to operate for the ensuing 12-month period. The Company's objectives in preparing this plan included expanding the size of the Company's sales and construction organizations to generate gross margin that is in excess of its reduced fixed operating cost infrastructure and thereby reducing the Company's present operating losses in an effort to return the Company to profitable operations in the future. Elements of this plan include, among others, (i) realizing operating costs savings from reductions in staff, of which substantially all had been realized as of September 30, 2016, (ii) the positive impact of the strategic decision to exit the large commercial segment which operated at both a substantial cash and operating loss, (iii) hiring and training additional field and e-sales force personnel to grow sales, (iv) optimizing the Company's construction capability through authorized third-party integrators to realize the revenue from installation of the Company's backlog and minimize the impact on gross margin of idle construction crew time, (v) changing the mix of marketing expenditures to achieve a lower cost of acquisition than that employed in prior periods, (vi) realizing the benefits of new vendor terms negotiated by the Company that will reduce the cost of materials acquired by the Company, (vii) increasing sales and installations with small commercial customers, and (viii) continued internal efforts to accelerate the conversion of the Company's accounts receivable to cash. The Company believes that as a result of (i) additional capital realized through November 4, 2016 as described above, (ii) additional capital realized from the release of the remaining \$2.4 million of cash in the restricted cash accounts from the 2016 Note Offering, and (iii) the actions it has already implemented to reduce its fixed operating cost infrastructure, the Company has sufficient financial resources to operate for the ensuing 12 months.

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We expect that we will have a cash outflow from operating activities for the remainder of the year as we will utilize cash to (i) principally continue to reduce our present accounts payable and (ii) in order to increase the revenue of the Company, to fund an anticipated level of rooftop installations for customers, expand our e-sales and field sales organizations as well as increase marketing spend for lead generation.

NASDAQ Non-Compliance

On April 14, 2016, the Company received a letter from The Nasdaq Stock Market LLC (“Nasdaq”), notifying the Company that it no longer complied with Nasdaq Listing Rule 5550(b)(1) due to the Company’s failure to maintain a minimum of \$2,500,000 in shareholders’ equity or meet the alternatives of market value of listed securities or net income from continuing operations. On July 7, 2016, Nasdaq granted the Company a 180-day extension to October 11, 2016 to comply with Nasdaq Listing Rule 5550(b).

On October 17, 2016, the Company received a letter from Nasdaq, notifying the Company that it did not meet the terms of the extension and that it would be subject to delisting unless it requests a hearing before a Nasdaq Listing Qualifications Panel (the “Panel”). Accordingly, the Company has requested a hearing. As a result, any suspension or delisting action will be stayed pending the issuance of the Panel decision and the expiration of any extension granted by the Panel. The Company’s Class A common stock currently remains listed on Nasdaq under the symbol RGSE. However, there can be no assurance that the Company will be able to regain compliance.

As explained in Note 1 to these interim financial statements, to comply with the Nasdaq requirement for minimum shareholders’ equity, we will have to undertake an equity offering.

Cash Flows

The following table summarizes our primary sources (uses) of cash during the periods presented:

(in thousands)	For the Nine Months Ended September 30,	
	2016	2015
Net cash provided by (used in):		
Operating activities – continuing operations	\$ (6,608)	\$ (15,234)
Operating activities – discontinued operations	101	1,075
Operating activities	<u>(6,507)</u>	<u>(14,159)</u>
Investing activities	10	31
Financing activities	<u>7,281</u>	<u>13,422</u>
Net increase (decrease) in cash	<u>\$ 784</u>	<u>\$ (706)</u>

Continuing Operations

Operating activities. Our operating activities used net cash of \$6.6 million and \$15.2 million during the nine months ended September 30, 2016 and 2015, respectively. Our net cash used in operating activities during the nine months ended September 30, 2016 was primarily due to our net loss of \$14.8 million decreased by noncash items of \$5.7 million and a net decrease in working capital assets and liabilities of \$2.7 million. Our net cash used in operating activities during the nine months ended September 30, 2015 was primarily due to our net loss of \$5.9 million, increased by noncash items of \$6.0 million and a net increase in working capital assets and liabilities of \$3.3 million.

Investing activities. During the nine months ended September 30, 2016, we received proceeds of \$10,000 for the sale of equipment. During the nine months ended September 30, 2015, we received proceeds of \$0.2 million for the sale of equipment that was offset by the acquisition of property and equipment.

Financing activities. Our financing activities provided net cash of \$7.3 million and \$13.4 million during the nine months ended September 30, 2016 and 2015, respectively. Our net cash provided by financing activities during the nine months ended September 30, 2016 reflected the net proceeds received from the 2016 Note Offering of \$1.6 million, proceeds from the issuance of convertible preferred stock and warrants of \$3.8 million and additional borrowings on our line of credit of \$1.9 million. Our net cash provided by financing activities during the nine months ended September 30, 2015 reflected the net proceeds on the issuance of Class A common stock and warrants of \$15.1 million offset by net repayments against our revolving line of credit of \$1.6 million.

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Discontinued Operations

Operating activities. Our operating activities provided net cash of \$0.1 million and provided \$1.1 million during the nine months ended September 30, 2016 and 2015, respectively. The change in cash provided by discontinued operations between the nine months ended September 30, 2016 and the nine months ended September 30, 2015 was attributed to the continued wind-down of remaining commercial projects.

Off-Balance Sheet Arrangements

We do not participate in transactions that generate relationships with unconsolidated entities or financial partnerships, such as special purpose entities or variable interest entities, which have been established for the purpose of facilitating off-balance sheet arrangements or other limited purposes and as a result we do not have and are not reasonably likely to have in the future any off-balance sheet arrangements.

Risk Factors

We caution that there are risks and uncertainties that could cause our actual results to be materially different from those indicated by forward-looking statements that, from time-to-time, we make in filings with the U.S. Securities and Exchange Commission, news releases, reports, proxy statements, registration statements and other written communications as well as oral forward-looking statements made by our representatives. These risks and uncertainties include, but are not limited to, those risks set forth in Part II, Item 1A of this and other quarterly reports and listed in the section entitled “RISK FACTORS” in our Annual Report on Form 10-K for the year ended December 31, 2015 which is on file with the U.S. Securities and Exchange Commission. Except for the historical information contained herein, the matters discussed in this analysis are forward-looking statements that involve risk and uncertainties, including, but not limited to, general economic and business conditions, competition, pricing, brand reputation, consumer trends, and other factors which are often beyond our control.

The risks and uncertainties we have described are not the only ones facing our Company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations. We do not undertake any obligation to update forward-looking statements except as required by law.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our chief executive officer, principal financial officer, and principal accounting officer conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and Rule 15d-15(e) under the Exchange Act. Based upon their evaluation as of September 30, 2016, they have concluded that those disclosure controls and procedures are effective.

Changes in Internal Control over Financial Reporting

No changes in our internal control over financial reporting occurred during the three months ended September 30, 2016 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

From time to time, we are involved in legal proceedings that we consider to be in the normal course of business. Except as discussed below, there have been no material changes with respect to outstanding legal proceedings disclosed in Item 3 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

As previously reported, in June 2015, the Company received a subpoena from the U.S. Securities and Exchange Commission (“SEC”) requesting certain information pertaining to the Company’s July 2014 private placement offering (the “2014 PIPE Offering”). The Company established a special committee of the board of directors to review the facts and circumstances surrounding the PIPE offering and engaged outside counsel to assist it with its review. On May 11, 2016, the Company was advised by the staff of SEC (the “Staff”) that the Staff did not intend to recommend any enforcement action against the Company with respect to the investigation commenced by the Staff in June 2015.

In the course of responding to the SEC subpoena and as a result of other actions taken around the subpoena, the Company incurred litigation expenses of \$2.0 million which are shown on the Consolidated Statements of Operations for year ended December 31, 2015. The Company and its legal advisors believe its expenses in responding to SEC subpoena, which were incurred after June 30, 2015, should be fully paid by its insurance carrier as they are directly related to the 2014 PIPE Offering and the Company reached its retention limit for that event during the second quarter of 2015. Our insurance carrier has denied coverage for these expenses on the grounds that the SEC subpoena does not constitute a “claim” covered by the policy, but, nevertheless, in March 2016 the insurance carrier agreed to advance funds to pay amounts we contend constitute defense costs, while reserving all rights, including the right to recoup all amounts advanced. We vigorously dispute the position of our insurance carrier in this matter. If our insurance carrier prevails in recouping the amounts advanced or ceases to advance funds to pay amounts incurred by us in this matter, we will face material reductions in cash available for operations. The Company has recorded a liability for amounts advanced by the insurance carrier of \$1.5 million through September 30, 2016. We do not expect costs or expense in this matter to be material in the future, however.

The insurance carrier and the Company expect to enter into settlement negotiations surrounding this matter within calendar year 2016. If the Company and the insurance carrier cannot reach a mutually agreeable settlement through negotiation, the Company expects the insurance carrier to assert its claims in other

forums which may include arbitration or a court of law. If the insurance carrier should so assert its claims in arbitration or a court of law, the Company cannot predict with any degree of accuracy the outcome of such action, but the Company intends to vigorously assert its claims against the insurance carrier.

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In April 2009, the Company, Regrid Power, Inc., one of the Company's subsidiaries ("Regrid") and Gaia, Inc., (formerly known as GAIAM) (collectively the "Indemnitors") entered into a General Indemnity Agreement (the "Indemnity Agreement") with Argonaut Insurance Company (the "Carrier"). The Indemnity Agreement was designed to provide assurances to the Carrier in the event that the Carrier issued, procured or refrained from cancelling one or more bonds for the benefit of one or more of Indemnitors on or after the date of the Indemnity Agreement. In 2013, the Carrier issued a \$624,000 Final Acceptance Payment and Performance Bond (the "Bond") to secure the Company's performance under a contract to construct a large commercial photovoltaic project (the "Project") for the benefit of a third party (the "Beneficiary").

Pursuant to the Indemnity Agreement, the Indemnitors are jointly and severally liable to the Carrier in the maximum amount of the Bond, plus certain costs of the Carrier, in the event that the Bond is called by the Beneficiary. The Bond's original expiry date was October 15, 2015, unless earlier released by the Beneficiary. In October 2015 the Carrier agreed to extend the maturity of the Bond to December 31, 2016 and in October 2016, contingent upon the Company finalizing certain collateral obligations, the Carrier agreed to extend the maturity of the Bond to December 31, 2017.

The Project was completed and operational in late 2012. Subsequently, the Beneficiary raised certain warranty related issues pertaining to the Project. The Company currently maintains a specific warranty liability for the Project of approximately \$200,000.

As previously disclosed, on August 18, 2016, the Carrier commenced litigation against the Indemnitors in the federal district court in Denver, Colorado to, among other claims, compel one or more of the Indemnitors to deliver the remaining \$424,000 due under the Indemnity Agreement. The Company has responded to the Carrier's complaint with the parties having agreed to the Company posting the remaining \$424,000 to the cash collateral prior to the end of 2016. As of October 31, 2016, the Company has posted an additional \$325,000 as cash collateral. On or before December 1, 2016, the Company will post the remaining \$99,000 and the Carrier has agreed to extend the maturity of the Bond to December 31, 2017.

Item 1A. Risk Factors

Except for the risk factors appearing below, there have been no material changes from the risk factors disclosed in Item 1A of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 and in Part II, Item 1A of the Company's Quarterly Reports on Form 10-Q for the periods ended March 31, 2016 and June 30, 2016.

We need to increase our sales, installations and revenue in order to achieve our goal of initially operating at break-even, and profitability thereafter.

Our current levels of sales, installations and revenue are insufficient for profitable operations. We have developed plans, to be implemented during 2017, to increase sales and installation revenue. We believe that the recently obtained additional financial resources allow us to begin to implement our plans. If we are unsuccessful in executing these plans, we will be unable to increase sales, installations and resulting revenue and will not achieve our goal of operating at break-even, and profitability thereafter.

The Company has offered lower conversion prices to the holders of the Notes to induce them to convert their Notes to Class A common stock and expects to continue doing so until the Notes are fully converted, resulting in an increase in the number of shares of Class A common stock issued upon conversion and additional dilution to our shareholders.

The terms of the Notes permit the Company's board of director to lower the fixed conversion price of the Notes with the consent of the Required Holders (as defined in the Notes). The benefits to the Company of conversions of the Notes into Class A common stock are twofold: (i) conversions result in release of cash from the restricted cash account which the Company may then use to fund its operations and (ii) conversions result in the Company recording additions to shareholders' equity contributing to the Company's efforts to regain compliance with Nasdaq's requirement for minimum shareholders' equity. In addition, the Company intends to raise additional financial capital to meet the Nasdaq requirement for shareholders' equity. The Note holders have a right to approve future equity issuance and the Company believes that they are less likely to consent for as long as the Notes remain outstanding. Conversion of the Notes into shares of Class A common stock will dilute existing shareholders and lowering the conversion price compared to the contractually provided conversion price will lead to additional dilution.

We must meet The Nasdaq Capital Market continued listing requirements or we risk delisting, which may decrease our stock price and make it harder for our shareholders to trade our stock.

Our Class A common stock is currently listed for trading on The Nasdaq Capital Market. We must continue to satisfy Nasdaq's continued listing requirements or risk delisting of our securities. Delisting would have an adverse effect on the price of our Class A common stock and likely also on our business.

As previously disclosed, on April 14, 2016, we received notice from Nasdaq that we were not in compliance with the Nasdaq minimum stockholders' equity requirement in Nasdaq Listing Rule 5550(b) (nor the alternatives of market value of listed securities or net income from continuing operations). On July 7, 2016, Nasdaq granted the Company a 180-day extension to October 11, 2016 to comply with Nasdaq Listing Rule 5550(b). On October 17, 2016, the Company received a letter from Nasdaq notifying the Company that it did not meet the terms of the extension and that it would be subject to delisting unless it requests a hearing before a Nasdaq Listing Qualifications Panel (the "Panel"). Accordingly, the Company has requested a hearing. As a result, any suspension or delisting action will be stayed pending the issuance of the Panel decision and the expiration of any extension granted by the Panel. The Company's Class A common stock currently remains listed on Nasdaq under the symbol RGSE.

There can be no assurance that we will be able to regain compliance with the Nasdaq continued listing requirements, or that our Class A common stock will not be delisted from The Nasdaq Capital Market in the future. If our Class A common stock is delisted from Nasdaq, it may trade on the over-the-counter market, which may be a less liquid market. In such case, our shareholders' ability to trade, or obtain quotations of the market value of, shares of our Class A common stock would be severely limited because of lower trading volumes and transaction delays. These factors could contribute to lower prices and larger spreads in the bid and ask prices for our securities.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

As previously reported on October 3, 2016, holders of the Notes converted principal and interest due under the Notes in the aggregate amount of approximately \$1.04 million into 596,472 shares of Common Stock at a conversion price of \$1.74 per share. The Company has previously reported the terms of the Notes and the expected maximum number of shares of Class A common stock underlying the Notes that may be issued through the conversion of the Notes. As previously reported, the issuance of the shares of Class A common stock issuable upon conversion of the Notes was exempt from registration under Securities Act Section 4(a)(2) and Securities Act Rule 506(b). The holders of the Notes are sophisticated accredited investors and acquired the Notes for their own accounts for investment purposes. The transaction document for the 2016 Note Offering state that the securities in question have not been registered under the Securities Act and cannot be sold or otherwise transferred without registration or an exemption therefrom and provide for the placement of a restrictive legend on any stock certificates issued upon conversion of the Notes, subject to the terms of the transaction documents.

Item 5. Other Information

In accordance with the terms of the Notes, on November 7, 2016 the Company offered to the Holders a temporary reduction of the fixed conversion price of the Notes to \$0.50 per share of the Company's Class A common stock until 9:29 a.m. Eastern Time on November 8, 2016.

As a result, Holders converted an aggregate of approximately \$0.2 million of principal and interest due under the Notes at \$0.50 per share of the Company's Class A common stock and the Company issued 450,623 shares of the Company's Class A common stock. The Company expects to continue to offer the Holders the ability to convert the remaining amounts owed under the Notes at a reduced fixed conversion price as deemed appropriate and in the Company's interest. Such reduced fixed conversion price likely will be equal to or lower than \$0.50 (but in no event will the conversion price be less than the \$0.25 minimum conversion price set forth in the Notes).

As of November 8, 2016, Holders have converted an aggregate of \$8.4 million of principal and interest under the Notes, and the Company has issued 5,966,726 shares of the Company's Class A common stock at conversion prices between \$0.50 and \$1.74 per share.

After giving effect to the conversions made as of November 8, 2016, there remains outstanding Notes with an aggregate principal amount of approximately \$2.6 million. The following table updates previously reported information about the total number of shares of the Company's Class A common stock issuable under the Notes if the Company elects to convert all remaining principal and interest under the Notes into shares of Class A common stock in lieu of paying cash. The following table assumes that from the date hereof: (a) installment payments of principal and interest are timely made on the last business day of every month beginning on October 31, 2016; (b) no such regularly scheduled installment payments are accelerated or deferred; (c) the indicated conversion price remains the same until the Notes are paid in full; (d) the Holders do not convert the Notes at their election; and (e) no event of default occurs. This table is provided for illustrative purposes only, as it is unlikely that these assumptions will be fully accurate at all relevant times. The Company's ability to convert principal, interest and any other amounts owed under the Notes into shares of Class A common stock in lieu of paying cash is contingent on the Company's satisfying certain equity conditions set forth in the Notes. There can be no assurance that the Company will be able to satisfy such equity conditions.

Assumed Conversion Price	Approximate Number of Shares Potentially Issuable
\$1.00	2,600,000
\$0.75	3,500,000
\$0.50	5,200,000
\$0.25	10,400,000

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Item 6.

Exhibits

Exhibit No.	Description
1.1	Underwriting Agreement, dated September 9, 2016, between Real Goods Solar, Inc., Roth Capital Partners, LLC and WestPark Capital, Inc. (Incorporated by reference to Exhibit 1.1 to Real Goods Solar's Current Report on Form 8-K filed September 13, 2016 (Commission File No. 001-34044))
3.1*	Articles of Incorporation of Real Goods Solar, Inc.
3.2*	Certificate of Designation of Preferences, Rights and Limitations of Series A 12.5% Mandatorily Convertible Preferred Stock
4.1	Form of Series H Warrant, dated September 14, 2016, issued to investors participating in the September 14, 2016 public unit offering (Incorporated by reference to Exhibit 4.17 to Amendment No. 5 to Real Goods Solar's Registration Statement on Form S-1 filed September 7, 2016 (Commission File No. 333-211915))
4.2	Form of Real Goods Solar Series A 12.5% Mandatorily Convertible Preferred Stock Certificate (Incorporated by reference to Exhibit 4.18 to Amendment No. 3 to Real Goods Solar's Registration Statement on Form S-1 filed August 25, 2016 (Commission File No. 333-211915))
4.3	Representative Warrant to Purchase Units Consisting of Series A 12.5% Mandatorily Convertible Preferred Stock and Series H Warrant to Purchase Common Stock, dated September 14, 2016, issued to Roth Capital Partners, LLC (Incorporated by reference to Exhibit 4.1 to Real Goods Solar's Current Report on Form 8-K filed September 14, 2016 (Commission File No. 001-34044))
10.1	Second Loan Modification Agreement, dated August 22, 2016, and effective as of August 19, 2016, among Real Goods Solar, Inc., RGS Financing, Inc., Real Goods Energy Tech, Inc., Alteris Renewables, Inc., Real Goods Syndicated, Inc., Mercury Energy, Inc., Real Goods Solar, Inc. – Mercury Solar, Elemental Energy, LLC, Sunetric Management LLC and Solar Solutions and Distribution, LLC (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed August 24, 2016 (Commission File No. 001-34044))
10.2	Form of Lock-Up Agreement, dated September 14, 2016, entered into by each of the directors, officers, and Riverside Renewable Energy Investments, LLP, in connection with the September 14, 2016 public unit offering (Incorporated by reference to Exhibit 10.1 to Real Goods Solar's Current Report on Form 8-K filed September 14, 2016 (Commission File No. 001-34044))
31.1*	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934
31.2*	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934
32.1**	Certification of the Principal 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 the Principal 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.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase.
101.DEF	XBRL Taxonomy Extension Definition Linkbase.
101.LAB	XBRL Taxonomy Extension Label Linkbase.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase.

* Filed herewith

** Furnished herewith

SIGNATURES

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

Real Goods Solar, Inc.
(Registrant)

Date: November 8, 2016

By: /s/ Dennis Lacey
Dennis Lacey
Chief Executive Officer
(authorized officer)

Date: November 8, 2016

By: /s/ Alan Fine
Alan Fine
Principal Financial Officer and Treasurer

Date: November 8, 2016

By: /s/ Thomas Mannik

Thomas Mannik
Principal Accounting Officer and Controller

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* Filed herewith

** Furnished herewith

ARTICLES OF INCORPORATION
OF
REAL GOODS SOLAR, INC.

ARTICLE I
NAME

The name of the Corporation shall be Real Goods Solar, Inc.

ARTICLE II
CORPORATE PURPOSE

The nature of the business of the Corporation and the objects and purpose to be transacted, promoted, and carried on by it are to engage generally in any lawful business.

ARTICLE III
DURATION

The Corporation shall have perpetual existence.

ARTICLE IV
SHARES OF STOCK

A. Authorized Capital Stock. The aggregate number of shares that the Corporation shall have authority to issue is two hundred fifty million (250,000,000), consisting of one hundred fifty million (150,000,000) shares of Class A Common Stock, par value \$.0001 per share, fifty million (50,000,000) shares of Class B Common Stock, par value \$.0001 per share, and fifty million (50,000,000) shares of Preferred Stock, par value \$.0001 per share (the "Preferred Stock"). The Class A Common Stock and Class B Common Stock are sometimes referred to in these Articles as the "Common Stock". References to these "Articles" shall be understood to mean these Articles of Incorporation as set forth herein and as amended from time to time hereafter in accordance with the provisions of these Articles and of applicable law.

B. Preemptive Rights. Unless subsequently granted by the Board of Directors, shareholders of the Common Stock of the Corporation shall not have the preemptive right to acquire unissued shares or securities convertible into such shares or carrying a right to subscribe to or acquire shares. Such provisions shall apply to both shares outstanding and to newly issued shares.

C. Dividends. No dividends or any other distribution may be paid or declared or set aside for Class B Common Stock unless an equal amount is paid or declared or set aside for the Class A Common Stock, and no dividends or any other distribution may be paid or declared or set aside for Class A Common Stock unless an equal amount is paid or declared or set aside for the Class B Common Stock. In the case

of dividends or other distributions payable in Common Stock of the Corporation or any of its subsidiaries, such distributions or dividends shall be in the same proportion with respect to each class of Common Stock, but only shares of Class A Common Stock (or common stock of a subsidiary which shall be identical in all material respects to Class A Common Stock) shall be distributed with respect to Class A Common Stock and only shares of Class B Common Stock (or common stock of a subsidiary which shall be identical in all material respects to Class B Common Stock) shall be distributed with respect to Class B Common Stock. In the case of any combination or reclassification of Class A Common Stock, the shares of Class B Common Stock shall also be combined or reclassified so that the relationship between the number of shares of Class B Common Stock and Class A Common Stock outstanding immediately following such combination or reclassification shall be the same as the relationship between the Class B Common Stock and the Class A Common Stock immediately prior to such combination or reclassification.

D. Voting. Each holder of Class A Common Stock shall have one (1) vote on all matters submitted to shareholders for each share of Class A Common Stock standing in the name of such holder on the books of the Corporation. Each holder of Class B Common Stock shall have ten (10) votes on all matters submitted to shareholders for each share of Class B Common Stock standing in the name of such holder on the books of the Corporation. Except as otherwise provided in these Articles or as otherwise provided by law, all shares of Common Stock of the Corporation entitled to vote shall vote as a single group on all matters submitted to the shareholders. Following the initial issuance of shares of Class B Common Stock, the Corporation may not issue any additional shares of Class B Common Stock (except in connection with stock splits and stock dividends) and the provisions of these Articles relating to the rights of the Class B Common Stock may not be amended unless and until such action is authorized by the holders of a majority of the voting power of the shares of Class A Common Stock and of Class B Common Stock entitled to vote, each voting separately as a class. In the election of directors, cumulative voting shall not be allowed.

E. Quorum and Voting Requirements. At all meetings of the shareholders, the holders of a majority of the votes eligible to be cast shall constitute a quorum. If a quorum is present, the affirmative vote of a majority of the votes eligible to be cast on the subject matter shall be the act of the shareholders unless the vote of a greater number or voting by groups is required by the Colorado Business Corporation Act or these Articles. Any action required or permitted by Articles 101 to 117 of the Colorado Business Corporation Act to be taken at a shareholders' meeting may be taken without a meeting if shareholders holding shares having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all of the shares entitled to vote thereon were present and voted consent to such action in writing.

F. Liquidation. In the event of either an involuntary or a voluntary liquidation or dissolution of the Corporation, the holders of Class A and Class B Common Stock shall share ratably all assets and surplus funds of the Corporation available for distribution to the holders of Common Stock.

G. Provisions Relating to Transfer of the Class B Common Stock.

1. Permitted Transfers. The holder of record of Class B Common Stock (a "Class B Holder") may transfer all or any part of the shares of Class B Common Stock held by it provided, that the Corporation shall not effect such transfer unless the Class B Holder shall have elected in writing either (i) to transfer such shares as shares of Class B Common Stock or (ii) to convert such shares into shares of Class A Common Stock

simultaneously with such transfer in accordance with the terms of Section H of this Article IV. No change in control, merger, consolidation, reorganization or similar transaction affecting a Class B Holder that is a corporation or partnership shall be deemed to be a transfer of the shares of Class B Common Stock.

2. Pledge. A Class B Holder may pledge such holder's shares of Class B Common Stock to a pledgee pursuant to a bona fide pledge of such shares as collateral security for indebtedness due to the pledgee, provided that such shares shall not be transferred to or registered in the name of the pledgee and shall remain subject to the provisions of this Section G. In the event of foreclosure or other similar action by the pledgee, such pledged shares of Class B Common Stock may only be transferred pursuant to the terms of Section G(1) hereof.

3. Record Holder. Shares of Class B Common Stock shall not be registered in "street" or "nominee" name. The Corporation shall note on the certificates for shares of Class B Common Stock the restrictions on transfer imposed by this Section G.

H. Conversion Rights. Subject to the terms and conditions of this Section H, each share of Class B Common Stock shall be convertible at any time or from time to time at the option of a Class B Holder into one (1) share of Class A Common Stock. At any time when the holders of a majority of the outstanding shares of Class B Common Stock approve the conversion of all or part of the Class B Common Stock into Class A Common Stock, then each outstanding share of Class B Common Stock designated for conversion shall be converted into one (1) share of Class A Common Stock as of the close of business on the date approved by the holders of a majority of the outstanding shares of Class B Common Stock.

1. Conversion Procedure. A Class B Holder desiring conversion shall (a) surrender the certificate or certificates evidencing the Class B Common Stock being converted, duly endorsed by such Class B Holder to the Corporation or in blank or accompanied by proper instruments of transfer to the Corporation, and (b) give written notice to the Corporation that such Class B Holder elects to convert such Class B Holder's Class B Common Stock. As soon as practicable after receipt of such notice and deposit of such certificate, the Corporation shall issue and deliver to the converting Class B Holder a certificate or certificates, or evidence of uncertificated shares, for the number of full shares of Class A Common Stock to which the Class B Holder shall be entitled pursuant to this Section H. Such conversion shall be deemed to have been made as of the close of business on the date upon which the Corporation receives such notice and deposit, and the person or persons entitled to receive the Class A Common Stock issuable upon conversion of such Class B Common Stock shall be treated for all purposes as the record holder or holders of such Class A Common Stock as of the close of business on such date.

2. Reservation of Class A Common Stock. The Corporation shall at all times reserve and keep available, solely for the purpose of issuing Class A Common Stock upon conversion of the outstanding shares of Class B Common Stock, such number of shares of Class A Common Stock as shall be issuable upon the conversion of all such outstanding shares of Class B Common Stock. All shares of Class A Common Stock which shall be issued upon conversion of the shares of Class B Common Stock, will, upon issuance, be fully paid and nonassessable. All shares of Class B Common Stock converted into Class A Common Stock shall be cancelled and restored to the status of authorized but unissued shares of Class B Common Stock.

I. Preferred Stock. The Board of Directors is expressly authorized, at any time and from time to time, to provide for the issuance of shares of Preferred Stock in one or more series or classes, with such designations, preferences, limitations and relative rights as shall be expressed in articles of amendment to these Articles, which shall be adopted by the Board of Directors and shall be effective without shareholder action, as provided in Section 7-106-102 of the Colorado Business Corporation Act; provided, however, that the Board of Directors shall not issue or authorize any voting Preferred Stock without the consent or approval of a majority of the Class B Common Stock.

ARTICLE V DIRECTORS

The number of persons constituting the Board of Directors of the Corporation shall be fixed by the Bylaws of the Corporation. Directors need not be residents of the State of Colorado or shareholders of the Corporation and shall exercise all the powers conferred on the Corporation by these Articles and by the laws of the State of Colorado.

ARTICLE VI INDEMNIFICATION

The Corporation shall indemnify its directors and officers to the fullest extent authorized or permitted by law, as now or hereafter in effect, and such right to indemnification shall continue as to a person who has ceased to be a director or officer of the Corporation and shall inure to the benefit of his or her heirs, executors and personal and legal representatives; provided, however, that except for proceedings to enforce rights to indemnification, the Corporation shall not be obligated to indemnify any director or officer (or his or her heirs, executors or personal or legal representatives) in connection with a proceeding (or part thereof) initiated by such person unless such proceeding (or part thereof) was authorized or consented to by the Board of Directors or the shareholders representing a majority of the Common Stock. The right to indemnification conferred by this Article VI shall include the right to be paid by the Corporation the expenses incurred in defending or otherwise participating in any proceeding in advance of its final disposition.

The Corporation may, to the extent authorized from time to time by the Board of Directors, provide rights to indemnification and to the advancement of expenses to employees and agents of the Corporation similar to those conferred in this Article to the directors and officers of the Corporation.

The rights to indemnification and to the advance of expenses conferred in this Article shall not be exclusive of any other right which any person may have or hereafter acquire under these Articles, the Bylaws of the Corporation, any statute, agreement, vote of shareholders or disinterested directors or otherwise.

Any repeal or modification of this Article by the shareholders of the Corporation shall not adversely affect any rights to indemnification and to the advancement of expenses of a director or officer of the Corporation existing at the time of such repeal or modification with respect to any acts or omissions occurring prior to such repeal or modification.

ARTICLE VII
LIMITATION ON DIRECTOR'S LIABILITY

A director's personal liability to the Corporation or its shareholders is limited to the fullest extent permitted by the Colorado Business Corporation Act, as amended from time to time. Any limitation on liability in effect prior to the date of these Articles shall remain in full force and effect. Any repeal or modification of this Article VII shall not adversely affect any right or protection of a director hereunder existing at the time of such repeal or modification.

ARTICLE VIII
OFFICES

A. Registered Agent. The street address of the initial registered office of the Corporation is 1560 Broadway, Denver, Colorado 80202. The name of its initial registered agent at such address is Corporation Service Company.

B. Principal Office. The address of the Corporation's initial principal office is 360 Interlocken Boulevard, Broomfield, Colorado 80021.

ARTICLE IX
INCORPORATOR

The name and mailing address of the sole incorporator and the individual causing these Articles to be delivered for filing are Thomas R. Stephens, 1899 Wynkoop Street, Suite 800, Denver, Colorado 80202.

REAL GOODS SOLAR, INC.
CERTIFICATE OF DESIGNATION OF PREFERENCES,
RIGHTS AND LIMITATIONS
OF
SERIES A 12.5% MANDATORILY CONVERTIBLE PREFERRED STOCK

PURSUANT TO SECTIONS 7-106-102, 7-110-101 AND 7-110-102 OF THE
COLORADO GENERAL CORPORATION LAW

The undersigned, Dennis Lacey and Michael McCloskey, do hereby certify that:

1. They are the Chief Executive Officer and Secretary, respectively, of Real Goods Solar, Inc., a Colorado corporation (the "Corporation").
2. The Corporation is authorized to issue 50 million shares of preferred stock, none of which have been issued.
3. The following resolutions were duly adopted by the board of directors of the Corporation (the "Board of Directors") on September 9, 2016:

WHEREAS, the certificate of incorporation of the Corporation provides for a class of its authorized stock known as preferred stock, consisting of 50 million shares, \$0.0001 par value per share, issuable from time to time in one or more series;

WHEREAS, the Board of Directors is authorized to fix the dividend rights, dividend rate, voting rights, conversion rights, rights and terms of redemption and liquidation preferences of any wholly unissued series of preferred stock and the number of shares constituting any series and the designation thereof, of any of them; and

WHEREAS, it is the desire of the Board of Directors, pursuant to its authority as aforesaid, to fix the rights, preferences, limitations and other matters relating to a series of the preferred stock, which shall consist of up to 2,940 shares of the preferred stock which the Corporation has the authority to issue, as follows:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors does hereby provide for the issuance of a series of preferred stock for cash or exchange of other securities, rights or property and does hereby fix and determine the rights, preferences, limitations and other matters relating to such series of preferred stock as follows:

TERMS OF PREFERRED STOCK

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

“Affiliate” means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 of the Securities Act.

“Alternate Consideration” shall have the meaning set forth in Section 7(e).

“Attribution Parties” shall have the meaning set forth in Section 6(d).

“Bankruptcy Event” means any of the following events: (a) the Corporation or any Significant Subsidiary (as such term is defined in Rule 1-02(w) of Regulation S-X) thereof commences a case or other proceeding under any bankruptcy, reorganization, arrangement, adjustment of debt, relief of debtors, dissolution, insolvency or liquidation or similar law of any jurisdiction relating to the Corporation or any Significant Subsidiary thereof; (b) there is commenced against the Corporation or any Significant Subsidiary thereof any such case or proceeding that is not dismissed within 60 days after commencement; (c) the Corporation or any Significant Subsidiary thereof is adjudicated insolvent or bankrupt or any order of relief or other order approving any such case or proceeding is entered; (d) the Corporation or any Significant Subsidiary thereof suffers any appointment of any custodian or the like for it or any substantial part of its property that is not discharged or stayed within 60 calendar days after such appointment; (e) the Corporation or any Significant Subsidiary thereof makes a general assignment for the benefit of creditors; (f) the Corporation or any Significant Subsidiary thereof calls a meeting of its creditors with a view to arranging a composition, adjustment or restructuring of its debts; or (g) the Corporation or any Significant Subsidiary thereof, by any act or failure to act, expressly indicates its consent to, approval of or acquiescence in any of the foregoing or takes any corporate or other action for the purpose of effecting any of the foregoing.

“Base Set Price” shall have the meaning set forth in Section 7(b).

“Beneficial Ownership Limitation” shall have the meaning set forth in Section 6(d).

“Business Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“Buy-In” shall have the meaning set forth in Section 6(c)(iv).

“Change of Control Transaction” means the occurrence after the date hereof of any of: (a) an acquisition after the date hereof by an individual or legal entity or “group” (as described in Rule 13d-5(b)(1) promulgated under the Exchange Act) of effective control (whether through legal or beneficial ownership of capital stock of the Corporation, by contract or otherwise) of in excess of 33% of the voting securities of the Corporation (other than by means of conversion or exercise of Preferred Stock and the other Securities); (b) the Corporation merges into or consolidates with any other Person, or any Person merges into or consolidates with the Corporation and, after giving effect to such transaction, the stockholders of the Corporation immediately prior to such transaction own less than 66% of the aggregate voting power of the Corporation or the successor entity of such transaction; (c) the Corporation sells or transfers all or substantially all of its assets to another Person and the stockholders of the Corporation immediately prior to such transaction own less than 66% of the aggregate voting power of the acquiring entity immediately after the transaction; (d) a replacement at one time or within a one year period of more than one-half of the members of the Board of Directors which is not approved by a majority of those individuals who are members of the Board of Directors on the Original Issue Date (or by those individuals who are serving as members of the Board of Directors on any date whose nomination to the Board of Directors was approved by a majority of the members of the Board of Directors who are members on the Original Issue Date); or (e) the execution by the Corporation of an agreement to which the Corporation is a party or by which it is bound, providing for any of the events set forth in clauses (a) through (d) above.

“Closing” means the closing of the purchase and sale of the Securities pursuant to Section 4 of the Underwriting Agreement.

“Closing Date” means the Trading Day on which all of the Transaction Documents have been executed and delivered by the applicable parties thereto and all conditions precedent to (i) each underwriter’s obligations to pay the purchase price under the Underwriting Agreement, and (ii) the Corporation’s obligations to deliver the Securities have been satisfied or waived.

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the Corporation’s Class A common stock, par value \$0.0001 per share, and stock of any other class of securities into which such securities may hereafter be reclassified or changed.

“Common Stock Equivalents” means any securities of the Corporation or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Conversion Date” shall have the meaning set forth in Section 6(a).

“Conversion Price” shall have the meaning set forth in Section 6(b).

“Conversion Shares” means, collectively, the shares of Common Stock issuable upon conversion of the shares of Preferred Stock in accordance with the terms hereof.

“Dilutive Issuance” shall have the meaning set forth in Section 7(b).

“Dilutive Issuance Notice” shall have the meaning set forth in Section 7(b).

“Distribution” shall have the meaning set forth in Section 7(d).

“Dividend Payment Date” shall have the meaning set forth in Section 3(a).

“Equity Conditions” means, during the period in question: (a) the Corporation shall have duly honored all conversions scheduled to occur or occurring by virtue of one or more Notices of Conversion of the applicable Holder on or prior to the dates so requested or required, if any; (b) the Corporation shall have paid all liquidated damages and other amounts owing to the applicable Holder in respect of the Preferred Stock; (c) (i) there is an effective registration statement pursuant to which either: (A) the Corporation may issue Conversion Shares; or (B) the Holders are permitted to utilize the prospectus thereunder to resell all of the shares of Common Stock issuable pursuant to the Transaction Documents (and the Corporation believes, in good faith, that such effectiveness will continue uninterrupted for the foreseeable future); or (ii) all of the Conversion Shares issuable pursuant to the Transaction Documents may be resold pursuant to Rule 144 without volume or manner-of-sale restrictions or current public information requirements as determined by the counsel to the Corporation as set forth in a written opinion letter to such effect, addressed and acceptable to the Transfer Agent and the affected Holders; or (iii) all of the Conversion Shares may be issued to the Holder pursuant to Section 3(a) (9) of the Securities Act and immediately resold without restriction; (d) the Common Stock is trading on a Trading Market and all of the shares of Common stock issuable pursuant to the Transaction Documents are listed or quoted for trading on such Trading Market (and the Corporation believes, in good faith, that trading of the Common Stock on a Trading Market will continue uninterrupted for the foreseeable future); (e) there is a sufficient number of authorized, but unissued and otherwise unreserved, shares of Common Stock for the issuance of all of the shares then issuable pursuant to the Transaction Documents; (f) the issuance of the shares of Common Stock in question to the applicable Holder would not violate the limitations set forth in Section 6(d) herein; (g) there has been no public announcement of a pending or proposed Fundamental Transaction or Change of Control Transaction that has not been consummated; (h) the applicable Holder is not in possession of any information provided by the Corporation, any of its Subsidiaries, or any of their officers, directors, employees, agents or Affiliates, that constitutes, or may constitute, material non-public information.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Exempt Issuance” means the issuance of: (a) shares of Common Stock or options to employees, officers or directors of the Corporation pursuant to any stock or option plan duly adopted by a majority of the non-employee members of the Board of Directors of the Corporation or a majority of the members of a committee of non-employee directors established for such purpose for services rendered to the Company; (b) securities upon the exercise or exchange of or conversion of any securities issued pursuant to the Transaction Documents and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of the Purchase Agreement (including, but not limited to, issuances pursuant to the terms of the Senior Notes and the Series G Warrants to Purchase Common Stock issued in connection therewith), provided that such securities have not been amended since the date of the Purchase Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of any such securities (other than in connection with stock splits or combinations); (c) up to 250,000 shares of Common Stock issued pursuant to an exemption from registration under the Securities Act to the lender, or any successor thereto, who is a party to any revolving credit facility outstanding prior to the date of the Purchase Agreement; and (d) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Corporation, provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an asset in a business synergistic with the business of the Corporation and shall provide to the Corporation additional benefits in addition to the investment of funds, but shall not include a transaction in which the Corporation is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

“Forced Conversion Amount” means the sum of (a) 100% of the aggregate Stated Value then outstanding, (b) accrued but unpaid dividends and (c) all fees, liquidated damages and other amounts due in respect of the Preferred Stock.

“Forced Conversion Date” shall have the meaning set forth in Section 8.

“Forced Conversion Notice” shall have the meaning set forth in Section 8.

“Forced Conversion Notice Date” shall have the meaning set forth in Section 8.

“Fundamental Transaction” shall have the meaning set forth in Section 7(e).

“GAAP” means United States generally accepted accounting principles.

“Holder” shall have the meaning given such term in Section 2.

“Junior Securities” means the Common Stock and all other Common Stock Equivalents of the Corporation other than those securities which are explicitly senior or pari passu to the Preferred Stock in dividend rights or liquidation preference.

“Liquidation” shall have the meaning set forth in Section 5.

“New York Courts” shall have the meaning set forth in Section 11(d).

“Notice of Conversion” shall have the meaning set forth in Section 6(a).

“Original Issue Date” means the date of the first issuance of any shares of the Preferred Stock regardless of the number of transfers of any particular shares of Preferred Stock and regardless of the number of certificates which may be issued to evidence such Preferred Stock.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Preferred Stock” shall have the meaning set forth in Section 2.

“Purchase Right” shall have the meaning set forth in Section 7(c).

“Securities” means the Preferred Stock, the Warrants, the Warrant Shares and the Underlying Shares.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Senior Notes” means any one or more of the \$10,000,000 original face amount of the Company’s Senior Secured Convertible Notes due April 1, 2019.

“Set Price” shall have the meaning set forth in Section 6(b).

“Share Delivery Date” shall have the meaning set forth in Section 6(c).

“Stated Value” shall have the meaning set forth in Section 2, as the same may be increased pursuant to Section 3.

“Subsidiary” means any active material subsidiary of the Corporation and shall, where applicable, also include any direct or indirect active material subsidiary of the Corporation formed or acquired after the date of the Purchase Agreement.

“Successor Entity” shall have the meaning set forth in Section 7(e).

“Trading Day” means a day on which the principal Trading Market is open for business.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE MKT, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange, OTC Bulletin Board, OTCQB or OTCQX (or any successors to any of the foregoing).

“Transaction Documents” means this Certificate of Designation, the Underwriting Agreement, the Warrants, the Lock-Up Agreement, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated pursuant to the Underwriting Agreement.

“Transfer Agent” means Computershare Trust Company, N.A., the current transfer agent of the Corporation with a mailing address of 8742 Lucent Boulevard, Suite 225, Highlands Ranch, CO, 80129, and a facsimile number of 303-262-0609, and any successor transfer agent of the Corporation.

“Underlying Shares” means the shares of Common Stock issued and issuable upon conversion of the Preferred Stock, upon exercise of the Warrants and issued and issuable in lieu of the cash payment of dividends on the Preferred Stock in accordance with the terms of this Certificate of Designation.

“Underwriting Agreement” means the Underwriting Agreement, dated as of September 9, 2016, between the Corporation and Roth Capital Partners, LLC as representative of the several underwriters named on Schedule I thereto, as amended, modified or supplemented from time to time in accordance with its terms.

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in the “Pink Sheets” published by OTC Markets, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holders of a majority in interest of the Preferred Stock then outstanding and reasonably acceptable to the Corporation, the fees and expenses of which shall be paid by the Corporation.

“Warrants” means, collectively, the Series H Warrants to Purchase Common Stock delivered to the Holder at the Closing in accordance with Section 4 of the Underwriting Agreement.

“Warrant Shares” means the shares of Common Stock issuable upon exercise of the Warrants.

Section 2. Designation, Amount and Par Value. The series of preferred stock shall be designated as its Series A 12.5% Convertible Preferred Stock (the “Preferred Stock”) and the number of shares so designated shall be up to 2,940 (which shall not be subject to increase without the written consent of all of the holders of the Preferred Stock (each, a “Holder” and collectively, the “Holders”). Each share of Preferred Stock shall have a par value of \$0.0001 per share and a stated value equal to \$1,000, subject to increase set forth in Section 3 below (the “Stated Value”).

Section 3. Dividends.

a) Dividends in Cash or in Kind. Holders shall be entitled to receive, and the Corporation shall pay, cumulative dividends at the rate per share (as a percentage of the Stated Value per share) of 12.5% per annum, payable on the first Business Day of each month beginning on October 1, 2016, to Holders of record on the 15th day of the preceding month, and on each Conversion Date to the converting Holder (with respect only to Preferred Stock being converted) (each such date, a “Dividend Payment Date”) (if any Dividend Payment Date is not a Trading Day, the applicable payment shall be due on the next succeeding Trading Day) in cash; provided, however, if funds are not legally available for the payment of dividends, then such dividends shall accrete as of each Dividend Payment Date to, and increase, the outstanding Stated Value, and shall thereafter be considered fully paid and no longer accrued and unpaid dividends.

b) Dividend Calculations. Dividends on the Preferred Stock shall be calculated on the basis of a 360-day year, consisting of twelve 30 calendar day periods, and shall accrue daily commencing on the Original Issue Date, and shall be deemed to accrue from such date whether or not earned or declared and whether or not there are profits, surplus or other funds of the Corporation legally available for the payment of dividends. Dividends shall cease to accrue with respect to any Preferred Stock converted, provided that, the Corporation actually delivers the Conversion Shares within the time period required by Section 6(c)(i) herein.

c) Late Fees. Any dividends, other than with respect to dividends that accrete to, and increase, the outstanding Stated Value pursuant to Section 3(a) if funds are not legally available for the payment of dividends, that are not paid within three Trading Days following a Dividend Payment Date shall continue to accrue and shall entail a late fee, which must be paid in cash, at the rate of 18% per annum or the lesser rate permitted by applicable law which shall accrue daily from the Dividend Payment Date through and including the date of actual payment in full.

d) Other Securities. So long as any Preferred Stock shall remain outstanding, neither the Corporation nor any Subsidiary thereof shall redeem, purchase or otherwise acquire, directly or indirectly, any Junior Securities. So long as any Preferred Stock shall remain outstanding, neither the Corporation nor any Subsidiary thereof shall directly or indirectly pay or declare any dividend or make any distribution upon (other than a dividend or distribution described in Section 6 or dividends due and paid in the ordinary course on preferred stock of the Corporation at such times when the Corporation is in compliance with its payment and other obligations hereunder), nor shall any distribution be made in respect of, any Junior Securities as long as any dividends due on the Preferred Stock remain unpaid, nor shall any monies be set aside for or applied to the purchase or redemption (through a sinking fund or otherwise) of any Junior Securities or shares pari passu with the Preferred Stock.

Section 4. Voting Rights. Except as otherwise provided herein or as otherwise required by law, the Preferred Stock shall have no voting rights. However, as long as any shares of Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of a majority of the then outstanding shares of the Preferred Stock voting separately as a single class with one vote per share of Preferred Stock, in person or by proxy, either in writing without a meeting or at a meeting of such Holders: (a) alter or change adversely the powers, preferences or rights given to the Preferred Stock or alter or amend this Certificate of Designation; (b) authorize or create any class of stock ranking as to dividends, redemption or distribution of assets upon a Liquidation (as defined in Section 5) senior to, or otherwise pari passu with, the Preferred Stock; (c) amend its certificate of incorporation or other charter documents in any manner that adversely affects any rights of the Holders; (d) increase the number of authorized shares of Preferred Stock; or (e) enter into any agreement with respect to any of the foregoing.

Section 5. Liquidation. Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary (a "Liquidation"), the Holders shall be entitled to receive out of the assets, whether capital or surplus, of the Corporation an amount equal to the Stated Value, plus any accrued and unpaid dividends thereon and any other fees or liquidated damages then due and owing thereon under this Certificate of Designation, for each share of Preferred Stock before any distribution or payment shall be made to the holders of any Junior Securities, and if the assets of the Corporation shall be insufficient to pay in full such amounts, then the entire assets to be distributed to the Holders shall be ratably distributed among the Holders in accordance with the respective amounts that would be payable on such shares if all amounts payable thereon were paid in full. A Fundamental Transaction or Change of Control Transaction shall not be deemed a Liquidation. The Corporation shall mail written notice of any such Liquidation, not less than 45 days prior to the payment date stated therein, to each Holder.

Section 6. Conversion.

a) Conversions at Option of Holder. Each share of Preferred Stock shall be convertible, at any time and from time to time from and after the second Trading Day following the Original Issue Date, at the option of the Holder thereof, into that number of shares of Common Stock (subject to the limitations set forth in Section 6(d)) determined by dividing the Stated Value of such share of Preferred Stock by the Conversion Price. Holders shall effect conversions by providing the Corporation or its agent appointed to administer conversion of the Preferred Stock with: (i) with respect to certificated shares of Preferred Stock, the form of conversion notice attached hereto as Annex A; or (ii) with respect to Preferred Stock held in electronic form through a broker, bank or other nominee, an electronic notice through the Depository Trust Company (each, a "Notice of Conversion"). Each Notice of Conversion shall specify the number of shares of Preferred Stock to be converted and the date on which such conversion is to be effected, which date may not be prior to the date the applicable Notice of Conversion is delivered to the Corporation or its agent appointed to administer conversion of the Preferred Stock (such date, the "Conversion Date"). If no Conversion Date is specified in a Notice of Conversion, the Conversion Date shall be the date that such Notice of Conversion to the Corporation is deemed delivered hereunder. Upon delivery of the Notice of Conversion by a Holder, such Holder shall be deemed for all corporate purposes to have become the holder of record of the Conversion Shares with respect to which the Preferred Stock has been converted, irrespective of the date such Conversion Shares are credited to the Holder's Depository Trust Company account or the date of delivery of the certificates evidencing such Conversion Shares, as the case may be. A beneficial owner of shares of Preferred Stock held in electronic form through a broker, bank or other nominee may submit an informational Notice of Conversion to the Company via facsimile or email and upon the Company's receipt or deemed receipt of such notice, such beneficial owner shall be deemed to have become the holder of record of the Conversion Shares for purposes of Rule 200 under Commission Regulation SHO so long as such beneficial owner also causes its broker, bank or other nominee to submit a Notice of Conversion by way of an electronic notice through the Depository Trust Company within one Trading Day of delivery of the informational Notice of Conversion. No ink-original Notice of Conversion shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Conversion form be required. The calculations and entries set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error. Further, the calculations made by the Corporation or its agent appointed to administer conversion of the Preferred Stock concerning information required in a Notice of Conversion in the form attached hereto as Annex A that is not actually provided in a Notice of Conversion, shall control in the absence of manifest or mathematical error. To effect conversions of shares of Preferred Stock, a Holder shall not be required to surrender the certificate(s) representing the shares of Preferred Stock to the Corporation unless all of the shares of Preferred Stock represented thereby are so converted, in which case such Holder shall deliver the certificate representing such shares of Preferred Stock promptly following the Conversion Date at issue. With respect to Preferred Stock held in electronic form through a broker, bank or other nominee, if required by the Transfer Agent, Holder shall cause its broker, bank or nominee to return to the Corporation, in electronic form, the number of shares of Preferred Stock being converted. Shares of Preferred Stock converted into Common Stock or redeemed in accordance with the terms hereof shall be canceled and shall not be reissued.

b) Conversion Price. The conversion price for the Preferred Stock shall be equal to the lesser of: (i) \$5.50, subject to adjustment herein (the “Set Price”); and (ii) 87.5% of the lowest VWAP during the five Trading Days ending on, and including, the date that a Notice of Conversion is tendered to the Corporation (the lower of (i) and (ii), the “Conversion Price”); provided, however, the Conversion Price in connection with a forced conversion pursuant to Section 8 shall be the lesser of: (y) the then Set Price; and (z) 75% of the lowest VWAP during the five Trading Days ending on, and including, the Forced Conversion Date). Notwithstanding anything herein to the contrary, on the earlier of: (I) the redemption or repayment in full of the Senior Notes; and (II) the maturity date of the Senior Notes, the Set Price shall be reduced, and only reduced, to the lower of: (A) the then Set Price; and (B) 100% of the VWAP on such date. Further, in no event shall the Conversion Price be less than \$1.10.

c) Mechanics of Conversion

i. Delivery of Conversion Shares Upon Conversion. Not later than three Trading Days after each Conversion Date (the “Share Delivery Date”), the Corporation shall deliver, or cause to be delivered, to the converting Holder: (A) the number of Conversion Shares being acquired upon the conversion of the Preferred Stock, which Conversion Shares shall be free of restrictive legends and trading restrictions and (B) a bank check in the amount of accrued and unpaid dividends (if the Corporation is required to pay accrued dividends in cash). The Corporation shall deliver the Conversion Shares electronically through the Depository Trust Company or another established clearing corporation performing similar functions.

ii. Failure to Deliver Conversion Shares. If, in the case of any Notice of Conversion, such Conversion Shares are not delivered to or as directed by the applicable Holder by the Share Delivery Date, the Holder shall be entitled to elect by written notice to the Corporation at any time on or before its receipt of such Conversion Shares, to rescind such Conversion, in which event the Corporation shall promptly return to the Holder any original Preferred Stock certificate delivered to the Corporation (if applicable) and the Holder shall promptly return to the Corporation the Conversion Shares issued to such Holder pursuant to the rescinded Notice of Conversion.

i i i . Obligation Absolute; Partial Liquidated Damages. The Corporation's obligation to issue and deliver the Conversion Shares upon conversion of Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares; provided, however, that such delivery shall not operate as a waiver by the Corporation of any such action that the Corporation may have against such Holder. In the event a Holder shall elect to convert any or all of the Stated Value of its Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or any one associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Preferred Stock of such Holder shall have been sought and obtained, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the Stated Value of Preferred Stock which is subject to the injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, the Corporation shall issue Conversion Shares and, if applicable, cash, upon a properly noticed conversion. If the Corporation fails to deliver to a Holder such Conversion Shares pursuant to Section 6(c)(i) by the Share Delivery Date applicable to such conversion, the Corporation shall pay to such Holder, in cash, as liquidated damages and not as a penalty, for each \$5,000 of Stated Value of Preferred Stock being converted, \$50 per Trading Day (increasing to \$100 per Trading Day on the third Trading Day and increasing to \$200 per Trading Day on the sixth Trading Day after such damages begin to accrue) for each Trading Day after the Share Delivery Date until such Conversion Shares are delivered or Holder rescinds such conversion. Nothing herein shall limit a Holder's right to pursue actual damages for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

i v . Compensation for Buy-In on Failure to Timely Deliver Conversion Shares Upon Conversion. In addition to any other rights available to the Holder, if the Corporation fails for any reason to deliver to a Holder the applicable Conversion Shares by the Share Delivery Date pursuant to Section 6(c)(i), and if after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "Buy-In"), then the Corporation shall: (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount, if any, by which (x) such Holder's total purchase price (including any brokerage commissions) for the Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions); and (B) at the option of such Holder, either reissue (if surrendered) the shares of Preferred Stock equal to the number of shares of Preferred Stock submitted for conversion (in which case, such conversion shall be deemed rescinded) or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(c)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of Preferred Stock with respect to which the actual sale price of the Conversion Shares (including any brokerage commissions) giving rise to such purchase obligation was a total of \$10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder \$1,000. The Holder shall provide the Corporation written notice indicating the amounts payable to such Holder in respect of the Buy-In and, upon request of the Corporation, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver the Conversion Shares upon conversion of the shares of Preferred Stock as required pursuant to the terms hereof.

v . Reservation of Shares Issuable Upon Conversion. The Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Preferred Stock, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holder (and the other holders of the Preferred Stock), not less than such aggregate number of shares of the Common Stock as shall (subject to the terms and conditions set forth in the Purchase Agreement) be issuable (taking into account the adjustments and restrictions of Section 7) upon the conversion of the then outstanding shares of Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid and nonassessable.

v i . Fractional Shares. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of the Preferred Stock. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such conversion, the Corporation shall at its election, either pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the then Conversion Price or round up to the next whole share.

v i i . Transfer Taxes and Expenses. The issuance of Conversion Shares on conversion of this Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such Conversion Shares, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such Conversion Shares upon conversion in a name other than that of the Holders of such shares of Preferred Stock and the Corporation shall not be required to issue or deliver such Conversion Shares unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid. The Corporation shall pay all Transfer Agent fees required for same-day processing of any Notice of Conversion and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Conversion Shares.

d) Beneficial Ownership Limitation. The Corporation shall not effect any conversion of the Preferred Stock, and a Holder shall not have the right to convert any portion of the Preferred Stock, to the extent that, after giving effect to the conversion set forth on the applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any Persons acting as a group together with such Holder or any of such Holder's Affiliates (such Persons, "Attribution Parties")) would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon conversion of the Preferred Stock with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon: (i) conversion of the remaining, unconverted Stated Value of Preferred Stock beneficially owned by such Holder or any of its Affiliates or Attribution Parties; and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation subject to a limitation on conversion or exercise analogous to the limitation contained herein (including, without limitation, the Preferred Stock or the Warrants) beneficially owned by such Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 6(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. To the extent that the limitation contained in this Section 6(d) applies, the determination of whether the Preferred Stock is convertible (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and of how many shares of Preferred Stock are convertible shall be in the sole discretion of such Holder, and the submission of a Notice of Conversion shall be deemed to be such Holder's determination of whether the shares of Preferred Stock may be converted (in relation to other securities owned by such Holder together with any Affiliates and Attribution Parties) and how many shares of the Preferred Stock are convertible, in each case subject to the Beneficial Ownership Limitation. To ensure compliance with this restriction, each Holder will be deemed to represent to the Corporation each time it delivers a Notice of Conversion that such Notice of Conversion has not violated the restrictions set forth in this paragraph and the Corporation shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 6(d), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (i) the Corporation's most recent periodic or annual report filed with the Commission, as the case may be, (ii) a more recent public announcement by the Corporation or (iii) a more recent written notice by the Corporation or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Corporation shall within one Trading Day confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Corporation, including the Preferred Stock, by such Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon conversion of Preferred Stock held by the applicable Holder. A Holder, upon notice to the Corporation, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 6(d) applicable to its Preferred Stock provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon conversion of this Preferred Stock held by the Holder and the provisions of this Section 6(d) shall continue to apply. Any such increase in the Beneficial Ownership Limitation will not be effective until the 61st day after such notice is delivered to the Corporation and shall only apply to such Holder and no other Holder. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 6(d) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation contained herein or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of Preferred Stock.

Section 7. Certain Adjustments.

a) Stock Dividends and Stock Splits. If the Corporation, at any time while this Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock on shares of Common Stock or any other Common Stock Equivalents; (ii) subdivides outstanding shares of Common Stock into a larger number of shares; (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares; or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Corporation, then the Set Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) Subsequent Equity Sales. If, at any time while this Preferred Stock is outstanding, the Corporation or any Subsidiary, as applicable sells or grants any option to purchase or sells or grants any right to reprice, or otherwise disposes of or issues (or announces any sale, grant or any option to purchase or other disposition), any Common Stock or Common Stock Equivalents entitling any Person to acquire shares of Common Stock at an effective price per share that is lower than the then Set Price (such lower price, the “Base Set Price” and such issuances, collectively, a “Dilutive Issuance”) (if the holder of the Common Stock or Common Stock Equivalents so issued shall at any time, whether by operation of purchase price adjustments, reset provisions, floating conversion, exercise or exchange prices or otherwise, or due to warrants, options or rights per share which are issued in connection with such issuance, be entitled to receive shares of Common Stock at an effective price per share that is lower than the Set Price, such issuance shall be deemed to have occurred for less than the Set Price on such date of the Dilutive Issuance), then the Set Price shall be reduced to equal the Base Set Price. Such adjustment shall be made whenever such Common Stock or Common Stock Equivalents are issued. Notwithstanding the foregoing, no adjustment will be made under this Section 7(b) in respect of an Exempt Issuance. The Corporation shall notify the Holders in writing, no later than the Trading Day following the issuance of any Common Stock or Common Stock Equivalents subject to this Section 7(b), indicating therein the applicable issuance price, or applicable reset price, exchange price, conversion price and other pricing terms (such notice, the “Dilutive Issuance Notice”). For purposes of clarification, whether or not the Corporation provides a Dilutive Issuance Notice pursuant to this Section 7(b), upon the occurrence of any Dilutive Issuance, the Holders are entitled to receive a number of Conversion Shares based upon the Base Set Price on or after the date of such Dilutive Issuance, regardless of whether a Holder accurately refers to the Base Set Price in the Notice of Conversion.

c) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 7(a) above, if at any time the Corporation grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the “Purchase Rights”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of such Holder’s Preferred Stock (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Pro Rata Distributions. During such time as this Preferred Stock is outstanding, if the Corporation shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Preferred Stock, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Preferred Stock (without regard to any limitations on conversion hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

e) Fundamental Transaction. If, at any time while this Preferred Stock is outstanding, (i) the Corporation, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Corporation with or into another Person; (ii) the Corporation, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions; (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock; (iv) the Corporation, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property; or (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent conversion of this Preferred Stock, the Holder shall have the right to receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of this Preferred Stock), the number of shares of Common Stock of the successor or acquiring corporation or of the Corporation, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Preferred Stock is convertible immediately prior to such Fundamental Transaction (without regard to any limitation in Section 6(d) on the conversion of this Preferred Stock). For purposes of any such conversion, the determination of the Conversion Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Corporation shall apportion the Conversion Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of this Preferred Stock following such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new Certificate of Designation with the same terms and conditions and issue to the Holders new preferred stock consistent with the foregoing provisions and evidencing the Holders' right to convert such preferred stock into Alternate Consideration. The Corporation shall cause any successor entity in a Fundamental Transaction in which the Corporation is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents in accordance with the provisions of this Section 7(e) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the holder of this Preferred Stock, deliver to the Holder in exchange for this Preferred Stock a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Preferred Stock which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of this Preferred Stock (without regard to any limitations on the conversion of this Preferred Stock) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of this Preferred Stock immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Certificate of Designation and the other Transaction Documents referring to the "Corporation" shall refer instead to the Successor Entity), and may exercise every right and power of the Corporation and shall assume all of the obligations of the Corporation under this Certificate of Designation and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Corporation herein.

f) Calculations. All calculations under this Section 7 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 7, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Corporation) issued and outstanding.

g) Notice to the Holders.

i . Adjustment to Conversion Price. Whenever the Set Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder by facsimile or email a notice setting forth the Set Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

i i . Notice to Allow Conversion by Holder. If: (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock; (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock; (C) the Corporation shall authorize the granting to all holders of the Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights; (D) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property; or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of this Preferred Stock, and shall cause to be delivered by facsimile or email to each Holder at its last facsimile number or email address as it shall appear upon the stock books of the Corporation, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating: (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined; or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Corporation or any of the Subsidiaries, the Corporation shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to convert this Preferred Stock (or any part hereof) during the 20-day period commencing on the date of such notice through the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 8. Forced Conversion. Notwithstanding anything herein to the contrary, on September 26, 2016, the Corporation shall deliver a written notice to all Holders (a “Forced Conversion Notice” and the date such notice is delivered to all Holders, the “Forced Conversion Notice Date”) to cause each Holder to convert all or part of such Holder’s Preferred Stock (as specified in such Forced Conversion Notice) plus all accrued, but unpaid dividends thereon and all liquidated damages and other amounts due in respect of the Preferred Stock pursuant to Section 6, it being agreed that the “Conversion Date” for purposes of Section 6 shall be deemed to occur on the third Trading Day following the Forced Conversion Notice Date (such third Trading Day, the “Forced Conversion Date”). The Corporation may not deliver a Forced Conversion Notice, and any Forced Conversion Notice delivered by the Corporation shall not be effective, unless all of the Equity Conditions have been met on each Trading Day during the period beginning on the Forced Conversion Notice Date through and including the later of the Forced Conversion Date and the Trading Day after the date that the Conversion Shares issuable pursuant to such forced conversion are actually delivered to the Holders pursuant to the Forced Conversion Notice; provided, however, in the event that all of the Equity Conditions are met other than clause (f) (Beneficial Ownership Limitation) thereunder, then the dividend shall cease to accrue as of such Forced Conversion Date and Sections 3(d), 7(b) and Section 9 shall be deemed null and void and of no further force or effect. For purposes of clarification, a forced conversion shall be subject to all of the provisions of Section 6, including, without limitation, the provisions requiring payment of liquidated damages and limitations on conversions.

Section 9. Negative Covenants. As long as any shares of Preferred Stock are outstanding, unless the Holders of at least 51% in Stated Value of the then outstanding shares of Preferred Stock shall have otherwise given prior written consent, the Corporation shall not, and shall not permit any of the Subsidiaries to, directly or indirectly:

- a) amend its charter documents, including, without limitation, its certificate of incorporation and bylaws, in any manner that materially and adversely affects any rights of the Holder;
- b) repay, repurchase or offer to repay, repurchase or otherwise acquire more than a de minimis number of shares of its Common Stock, Common Stock Equivalents or Junior Securities, other than as to (i) the Conversion Shares or Warrant Shares as permitted or required under the Transaction Documents and (ii) repurchases of Common Stock or Common Stock Equivalents of departing officers and directors of the Corporation, provided that such repurchases shall not exceed an aggregate of \$100,000 for all officers and directors for so long as the Preferred Stock is outstanding;

- c) pay cash dividends or distributions on Junior Securities of the Corporation;
- d) enter into any transaction with any Affiliate of the Corporation which would be required to be disclosed in any public filing with the Commission, unless such transaction is made on an arm's-length basis and expressly approved by a majority of the disinterested directors of the Corporation (even if less than a quorum otherwise required for board approval); or
- e) enter into any agreement with respect to any of the foregoing.

Section 10. [RESERVED]

Section 11. Miscellaneous.

a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion (other than a Notice of Conversion required to be submitted electronically through the Depository Trust Company), shall be in writing and delivered personally, by facsimile, or sent by a nationally recognized overnight courier service, addressed to the Corporation, at 833 W. South Boulder Road, Louisville, CO 80027-2452, Attention: Dennis J. Lacey, Chief Executive Officer, facsimile number 303-845-9905, or by email to "conversion@rgsenergy.com," or such other facsimile number, email address or address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section 11. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile, by email or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number, email address or address of such Holder appearing on the books of the Corporation. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of: (i) the date of transmission, (A) if such notice or communication is delivered via facsimile at the facsimile number or via email at the email address set forth in this Section prior to 5:00 p.m. (New York City time) on any date, or (B) if such notice or communication is a Notice of Conversion required to be submitted electronically through the Depository Trust Company pursuant to Section 6(a) and submitted prior to 5:00 p.m. (New York City time) on any date; (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or by email at the email address set forth in this Section on a day that is not a Trading Day or later than 5:00 p.m. (New York City time) on any Trading Day; (iii) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service; or (iv) upon actual receipt by the party to whom such notice is required to be given.

b) Absolute Obligation. Except as expressly provided herein, no provision of this Certificate of Designation shall alter or impair the obligation of the Corporation, which is absolute and unconditional, to pay liquidated damages, accrued dividends and accrued interest, as applicable, on the shares of Preferred Stock at the time, place, and rate, and in the coin or currency, herein prescribed.

c) Lost or Mutilated Preferred Stock Certificate. If a Holder's Preferred Stock certificate shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership hereof reasonably satisfactory to the Corporation.

d) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Certificate of Designation shall be governed by and construed and enforced in accordance with the internal laws of the State of Colorado, without regard to the principles of conflict of laws thereof. Each party agrees that all legal proceedings concerning the interpretation, enforcement and defense of the transactions contemplated by any of the Transaction Documents (whether brought against a party hereto or its respective Affiliates, directors, officers, shareholders, employees or agents) shall be commenced in the state and federal courts sitting in the City of New York, Borough of Manhattan (the "New York Courts"). Each party hereto hereby irrevocably submits to the exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of such New York Courts, or such New York Courts are improper or inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Certificate of Designation and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by applicable law. Each party hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Certificate of Designation or the transactions contemplated hereby. If any party shall commence an action or proceeding to enforce any provisions of this Certificate of Designation, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys' fees and other costs and expenses incurred in the investigation, preparation and prosecution of such action or proceeding.

e) Waiver. Any waiver by the Corporation or a Holder of a breach of any provision of this Certificate of Designation shall not operate as or be construed to be a waiver of any other breach of such provision or of any breach of any other provision of this Certificate of Designation or a waiver by any other Holders. The failure of the Corporation or a Holder to insist upon strict adherence to any term of this Certificate of Designation on one or more occasions shall not be considered a waiver or deprive that party (or any other Holder) of the right thereafter to insist upon strict adherence to that term or any other term of this Certificate of Designation on any other occasion. Any waiver by the Corporation or a Holder must be in writing.

f) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

g) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

h) Headings. The headings contained herein are for convenience only, do not constitute a part of this Certificate of Designation and shall not be deemed to limit or affect any of the provisions hereof.

i) Status of Converted or Redeemed Preferred Stock. Shares of Preferred Stock may only be issued pursuant to the Underwriting Agreement. If any shares of Preferred Stock shall be converted, redeemed or reacquired by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series A 12.5% Mandatorily Convertible Preferred Stock.

RESOLVED, FURTHER, that the Chairman, the president or any vice-president, and the secretary or any assistant secretary, of the Corporation be and they hereby are authorized and directed to prepare and file this Certificate of Designation of Preferences, Rights and Limitations in accordance with the foregoing resolution and the provisions of Colorado law.

IN WITNESS WHEREOF, the undersigned have executed this Certificate this 9th day of September, 2016.

/s/ Dennis Lacey

Name: Dennis Lacey
Title: Chief Executive Officer

/s/ Michael McCloskey

Name: Michael McCloskey
Title: Secretary

ANNEX A

NOTICE OF CONVERSION

(TO BE EXECUTED BY THE REGISTERED HOLDER IN ORDER TO CONVERT SHARES OF PREFERRED STOCK)

The undersigned hereby elects to convert the number of shares of Series A 12.5% Mandatorily Convertible Preferred Stock indicated below into shares of common stock, par value \$0.0001 per share (the "Common Stock"), of Real Goods Solar, Inc., a Colorado corporation (the "Corporation"), according to the conditions hereof, as of the date written below. If shares of Common Stock are to be issued in the name of a Person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto and is delivering herewith such certificates and opinions as may be required by the Corporation in accordance with the Underwriting Agreement. No fee will be charged to the Holders for any conversion, except for any such transfer taxes.

Conversion calculations:

Date to Effect Conversion: _____

Number of shares of Preferred Stock owned prior to Conversion: _____

Number of shares of Preferred Stock to be Converted: _____

Stated Value of shares of Preferred Stock to be Converted: _____

Number of shares of Common Stock to be Issued: _____

Applicable Conversion Price: _____

Number of shares of Preferred Stock subsequent to Conversion: _____

Address for Delivery: _____

or

DWAC Instructions:

Broker no: _____

Account no: _____

HOLDER

By: _____
Name:
Title:

CERTIFICATION

I, Dennis Lacey, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Real Goods Solar, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2016

/s/ Dennis Lacey

Dennis Lacey
Chief Executive Officer
(principal executive officer)

CERTIFICATION

I, Alan Fine, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Real Goods Solar, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2016

/s/ Alan Fine

Alan Fine

Principal Financial Officer and Treasurer

**CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Real Goods Solar, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2016, as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), I, Dennis Lacey, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- (1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 8, 2016

/s/ Dennis Lacey

Dennis Lacey
Chief Executive Officer
(principal executive officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the U.S. Securities and Exchange Commission or its staff upon request.

CERTIFICATIONS PURSUANT TO 18 U.S.C. SECTION 1350

In connection with the Quarterly Report of Real Goods Solar, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2016, as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), I, Alan Fine, Principal Financial Officer and Treasurer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 8, 2016

/s/ Alan Fine

Alan Fine

Principal Financial Officer and Treasurer

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the U.S. Securities and Exchange Commission or its staff upon request.
