

PROSPECTUS SUPPLEMENT
(To Prospectus dated July 21, 2017)



REAL GOODS SOLAR, INC.

Up to 1,600,000 Shares of Class A Common Stock and Series P Warrants to Purchase Up to 1,600,000 Shares of Class A Common Stock

We are offering up to 1,600,000 shares of our Class A common stock, par value \$0.0001, or “Common Stock” (issued at closing or underlying Prepaid Series P Warrants to Purchase Common Stock, or “Series P Warrants,” as described below), pursuant to this prospectus supplement and the accompanying prospectus. We are also offering to those purchasers, if any, whose purchase of shares of Common Stock in this offering would otherwise result in such purchaser, together with certain other “attribution parties,” beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock immediately following the consummation of this offering, or to those purchasers that elect to purchase such securities in their sole discretion, the opportunity, in lieu of purchasing shares of Common Stock, to purchase Series P Warrants exercisable for up to 1,600,000 shares of Common Stock. The aggregate number of shares of Common Stock offered by this prospectus supplement and the accompanying prospectus to be issued at closing or underlying Series P Warrants is 1,600,000. We are also offering the shares of Common Stock that are issuable from time to time upon exercise of the Series P Warrants being offered by this prospectus supplement.

The purchase price for one share of Common Stock is \$1.15. The Series P Warrants are exercisable upon issuance and will remain exercisable until the fifth anniversary of the date of issuance. The exercise price of the Series P Warrants is \$1.15 per share, of which \$1.14 per share will be paid at the closing with \$0.01 per share payable upon exercise of the Series P Warrants.

In a concurrent private placement, we are selling to the investors of shares of our Common Stock and Series P Warrants in this offering, Series O Warrants to purchase an aggregate of 1,600,000 shares of our Common Stock. The Series O Warrants and the shares of our Common Stock issuable upon the exercise of the Series O Warrants are not being registered under the Securities Act of 1933, as amended, at this time, are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder.

We will enter into a securities purchase agreement with each of the investors participating in the offering, which provides such investors with certain representations, warranties and covenants from us. Each purchaser under such securities purchase agreement shall deliver its subscription amount for the offering to an escrow agent, to be released upon satisfaction of certain terms and conditions pursuant to an escrow agreement, or as agreed by such purchaser and either us or the placement agent for the offering.

Our Common Stock is listed for trading on The Nasdaq Capital Market under the symbol “RGSE.” On December 29, 2017, the last reported sale price of our Common Stock was \$1.47 per share. There is no established public trading market for the Series P Warrants and we do not expect a market to develop. In addition, we do not intend to list the Series P Warrants on The Nasdaq Capital Market, or any other national securities exchange, or other trading system.

The aggregate market value of our Common Stock held by non-affiliates pursuant to General Instruction I.B.6 of Form S-3 is \$14,889,511, which was calculated based on 8,136,345 shares of outstanding Common Stock held by non-affiliates as of January 2, 2018 and a price of \$1.83 per share, the closing price of our Common Stock on November 17, 2017. As a result, we are currently eligible to offer and sell up to an aggregate of \$4,963,170 of shares of our Common stock pursuant to General Instruction I.B.6 of Form S-3. We have not offered or sold any securities in reliance on General Instruction I.B.6 of Form S-3 during 12 calendar months immediately before and including the date hereof.

Investing in our securities involves a high degree of risk. Please read “Risk Factors” beginning on page S-5 of this prospectus supplement, on page 4 of the accompanying prospectus, and in the documents incorporated by reference herein and therein.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved the securities or passed upon the adequacy or accuracy of the prospectus or this prospectus supplement. Any representation to the contrary is a criminal offense.

We have engaged WestPark Capital, Inc., “WestPark” or the “placement agent,” as our exclusive placement agent in connection with this offering. The placement agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of securities, but will use its best efforts to sell the securities offered. We have agreed to pay the placement agent the fees set forth in the table below, which assumes that we sell all of the securities we are offering. See “Plan of Distribution” beginning on page S-14 of this prospectus supplement for more information regarding these arrangements.

	Per Share (1)	Total
Public offering price	\$ 1.15	\$ 1,840,000
Placement agent fees (2)	\$ 0.0805	\$ 128,800
Proceeds, before expenses, to us (3)	\$ 1,0695	\$ 1,711,200

(1) Assumes that no Series P Warrants are issued. For each share of Common Stock issuable upon exercise of any Series P Warrant issued in this offering, the public offering price is reduced by \$0.01.

(2) In addition, we have agreed to reimburse the placement agent for certain out-of-pocket expenses and issue to the placement agent a warrant to purchase Common Stock equal to 8% of the shares of Common Stock issued under this prospectus supplement and issuable upon exercise of the Series P Warrants. See “Plan of Distribution” beginning on page S-14 of this prospectus supplement.

(3) The amount of the offering proceeds to us presented in this table does not give effect to any proceeds we receive (i) upon the exercise of Series P Warrants,

(ii) in the concurrent private placement or (iii) upon the exercise of Series O Warrants.

We estimate the total expenses of this offering, including placement agent fees and expenses, will be approximately \$330,000. Delivery of the Common Stock and the warrants is expected to be made on or about January 4, 2017 subject to customary closing conditions.

WestPark Capital, Inc.

The date of this prospectus supplement is January 2, 2018.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering and also adds to, or updates, the information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, which provides more general information about our Common Stock and other securities that do not pertain to this offering. This prospectus supplement and the accompanying prospectus are part of a “shelf” registration statement on Form S-3 (File No. 333-215985) that we filed with the Securities and Exchange Commission, or the “SEC,” and that was declared effective by the SEC on July 21, 2017. To the extent that the information contained in this prospectus supplement differs from, or is inconsistent with, any information in the accompanying prospectus or any document incorporated by reference herein or therein, the statements made in the accompanying prospectus and the information incorporated by reference herein and therein are deemed modified or superseded by the statements made in this prospectus supplement.

You should read this entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, and any free writing prospectus that we have authorized for use in connection with this offering, carefully before deciding whether to invest in the securities. You also should read and consider the information in the documents we have referred you to under the headings “Incorporation of Certain Documents by Reference” and “Where You Can Find More Information.”

You should rely only on the information contained in or incorporated by reference into this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use relating to this offering. Neither we nor the placement agent have authorized any other person to provide you with different or additional information. You should not rely on any unauthorized information or representations.

We are not making an offer to sell or soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus supplement, the accompanying prospectus, the documents and information incorporated by reference into this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering, are accurate only as of their respective dates, regardless of time of delivery of this prospectus supplement or of any sale of the securities. We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus supplement to “Real Goods Solar,” “we,” “our,” “us” or similar references mean Real Goods Solar, Inc. and its subsidiaries.

This prospectus supplement, the accompanying prospectus and the information incorporated herein and therein by reference include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus supplement or the accompanying prospectus are the property of their respective owners.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary does not contain all the information you should consider before investing in our securities. You should read and consider carefully the more detailed information in this prospectus supplement and the accompanying prospectus, including the factors described under the heading "Risk Factors" in this prospectus supplement on page S-5 and on page 4 of the accompanying prospectus, and the financial and other information incorporated by reference in this prospectus supplement and the accompanying prospectus, as well as the information included in any free writing prospectus that we have authorized for use in connection with this offering, before making an investment decision.

Overview

We are a residential and small business commercial solar energy engineering, procurement and construction firm. 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 reliance upon fossil fuel energy sources. As of September 29, 2017, we are the exclusive domestic and international licensee of POWERHOUSE™ in-roof solar shingle, an innovative and aesthetically pleasing solar shingle system developed by Dow.

We, including our predecessors, have more than 39 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 energy systems since our founding.

During 2014, we discontinued our entire former Commercial segment and sold the assets associated with our catalog business (a portion of the Other segment). As of September 30, 2017, we created a new segment for our POWERHOUSE™ business. As a result, we now operate as four reportable segments: (1) Residential – the installation of solar energy systems for homeowners, including lease financing thereof, and small business commercial in the continental United States; (2) Sunetric – the installation of solar energy systems for both homeowners and business owners (commercial) in Hawaii; (3) POWERHOUSE™ – the manufacturing and sales of solar shingles; and (4) Other – corporate operations. We believe this structure enables us to more effectively manage our operations and resources.

Our principal executive offices are located at 110 16th Street, 3rd Floor, Denver, CO 80202. Our telephone number is (303) 222-8300. Our website is www.rgsenergy.com. The information on our website is not intended to be a part of this prospectus or the accompanying prospectus, and you should not rely on any of the information provided there in making your decision to invest in our securities. Our website address referenced above is intended to be an inactive textual reference only and not an active hyperlink to our website.

Recent Developments

Updated Cash Projection

We project reporting cash and working capital, exclusive of the proceeds of this offering, of approximately \$1 million and \$4 million, respectively, as of December 31, 2017. Working capital includes inventory we have purchased that we expect to use to generate cash as our backlog is installed. We anticipate incurring a lesser amount of expense for legal matters during 2018, and we expect an increased cash flow from conversion of our backlog to revenue. Our current projection remains to achieve break-even operating results, exclusive of our POWERHOUSE™ segment, by June 30, 2018 at which time we project cash and working capital of approximately \$1.5 million and \$3 million, respectively, apart from our POWERHOUSE™ activities.

Update Regarding our 2017 Annual Meeting

As previously disclosed, on July 24, 2017, a group of our shareholders (or beneficial owners) filed a definitive proxy statement with the SEC relating to the solicitation of proxies and seeking, among other things, to withhold all votes for director candidates nominated for election to our board of directors at our 2017 annual meeting of shareholders.

We have reached an agreement in principle with this group pursuant to which they would agree, among other things, to (i) immediately terminate, and cease any and all solicitation and other efforts with respect to, the solicitation of proxies in opposition to our proposals for the 2017 annual meeting of shareholders, (ii) withdraw (and not resubmit) their proxy statement in opposition to our proposals for the 2017 annual meeting of shareholders, and (iii) promptly notify the SEC's staff in writing that they are terminating the solicitation of proxies in opposition to our proposals for the 2017 annual meeting of shareholders.

If implemented, we would enter into an agreement with this group containing customary provisions for such agreements, including, without limitation, (i) an obligation for the group to attend and vote the shares of Common Stock they beneficially owned at our shareholders meetings for a specified time, and (ii) standstill provisions with respect to actions with regard to our company and our Common Stock during a "standstill period."

We have agreed in principle to issue and deliver an aggregate of 600,000 unregistered and restricted shares of our Common Stock to this group as reimbursement for expenses incurred in connection with our 2017 annual meeting of shareholders and the negotiation, execution and effectuation of the described agreement.

We have not yet entered into an agreement with this group and there can be no assurance that we will be successful in doing so.

We convened and subsequently adjourned the 2017 annual meeting of shareholders on each of August 23, 2017, October 5, 2017 and December 14, 2017 due to a quorum not being present. We adjourned the 2017 annual meeting of shareholders until January 18, 2018. Nasdaq Listing Rule 5620(a) requires us to hold our 2017 annual meeting of shareholders no later than December 31, 2017. As a result, we are in violation of Nasdaq Listing Rule 5620(a) as of January 1, 2018.

The Offering

Issuer	Real Goods Solar, Inc.
Common Stock offered by us	1,600,000 shares (some of which may be issued pursuant to the Series P Warrants) at a purchase price of \$1.15 per share
Series P Warrants offered by us	<p>We are offering to those purchasers, if any, whose purchase of shares of Common Stock in this offering would otherwise result in such purchaser, together with certain other "attribution parties," beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock immediately following the consummation of this offering, or to those purchasers that elect to purchase such securities in their sole discretion, the opportunity, in lieu of purchasing shares of Common Stock, to purchase Series P Warrants exercisable for up to 1,600,000 shares of Common Stock.</p> <p>The Series P Warrants will be immediately exercisable at an exercise and will remain exercisable until the fifth anniversary of the date of issuance. The exercise price of the Series P Warrants is \$1.15 per share, of which \$1.14 per share will be paid at the closing with \$0.01 per share payable upon exercise of the Series P Warrants. The Series P Warrants will be issued in certificated form. For more information, see the section entitled "Description of Securities We Are Offering – Description of Series P Warrants."</p> <p>This prospectus supplement also related to the offering of the shares of Common Stock issuable upon exercise of the Series P Warrants.</p>
Securities Purchase Agreement	Each of the investors participating in the offering will enter into a securities purchase agreement with us.

Common Stock outstanding immediately before this offering	8,151,545 shares as of December 29, 2017.
Common Stock to be outstanding immediately after this offering	9,751,545 shares (assumes that no Series P Warrants are issued).
Use of proceeds	We expect proceeds from offering to be used (1) in connection with the commercialization of the POWERHOUSE™ product and (2) for general corporate purposes. See “Use of Proceeds” on S-12.
Nasdaq Capital Market listing for our Common Stock	Our Common Stock is listed on The Nasdaq Capital Market under the symbol “RGSE.”
Transfer agent and registrar	Computershare Trust Company
Risk Factors	Investing in our securities involves a high degree of risk. See “Risk Factors” beginning on page S-5 of this prospectus supplement, page 4 of the accompanying prospectus and under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus supplement, together with the other information included in or incorporated by reference into this prospectus supplement and the accompanying prospectus before deciding whether to invest in our securities.

The number of shares of Common Stock to be outstanding after this offering is based on 8,151,545 shares issued and outstanding as December 29, 2017. Except as otherwise indicated, the number of shares of Common Stock to be outstanding after this offering excludes:

- Approximately 4,000 shares of our Common Stock issuable upon conversion of the remaining balance under the Senior Secured Convertible Notes due April 1, 2019, or “Convertible Notes;”
- 200 shares of our Common Stock issuable upon the exercise of options outstanding under our 2008 Long-Term Incentive Plan;
- Approximately 1,750 shares of our Common Stock available for future issuance under our 2008 Long-Term Incentive Plan;
- Approximately 5,855,000 shares of our Common Stock issuable upon exercise of outstanding warrants at a weighted average exercise price of \$28.69 per share;
- 26 shares of our Common Stock currently issuable to the sellers from the Company’s purchase of Sunetric in May 2014;
- shares of our Common Stock issuable upon exercise of the Series P Warrants; and
- 1,600,000 shares of our Common Stock issuable upon exercise of the Series O Warrants being sold in a concurrent private placement transaction.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before making an investment decision you should carefully read and consider the risks described below, together with all of the other information included or incorporated by reference in this prospectus, including, without limitation, the risk factors in the section entitled “Risk Factors” in our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are on file with the SEC. If any of the risks listed in our most recent Annual Report on Form 10-K or Quarterly Reports on Form 10-Q or any of the following risks actually occur, our business, financial condition, and/or results of operations could suffer. In that case, the market price of our Common Stock could decline, and you may lose all or part of your investment. You should read the section entitled “Special Note Regarding Forward-Looking Statements” below for a discussion of what types of statements are forward-looking statements, as well as the significance of such statements in the context of this prospectus. Additional risks and uncertainties that we do not presently know or that we currently deem immaterial may also have a material adverse effect on our business.

Risks Related to this Offering

Management will have broad discretion as to the use of the net proceeds from this offering, and we may not use the proceeds effectively.

Our management will have broad discretion as to the application of the net proceeds from this offering. Investors in this offering and our shareholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our profitability or market value.

Investors in this offering will experience immediate and substantial dilution.

The public offering price of the Common Stock offered pursuant to this prospectus supplement and the accompanying prospectus is substantially higher than the net tangible book value per share of Common Stock. Therefore, if you purchase Common Stock in this offering, you will incur immediate and substantial dilution in the net tangible book value per share of Common Stock from the price per shares of Common Stock that you pay for the securities. Based on the sale of 1,600,000 shares of Common Stock at an offering price of \$1.15 per share in this offering (assuming that no Series P Warrants are issued), you will suffer immediate dilution of approximately \$(0.26) per share in the net tangible book value of the Common Stock. Moreover, as described under “Prospectus Supplement Summary — The Offering,” we have a substantial number of stock options and warrants to purchase Common Stock outstanding, including the Series O Warrants sold concurrently in a private placement. If the holders of outstanding options or warrants exercise those options and warrants at prices below the offering price, you will incur further dilution.

The offering price determined for this offering is not an indication of our value.

The offering price of our Common Stock and the Series P Warrants offered by this prospectus supplement and the accompanying prospectus may not necessarily bear any relationship to the book value of our assets, past operations, cash flows, losses, financial condition or any other established criteria for value. You should not consider the offering price as an indication of the value of the Common Stock. After the date of this prospectus supplement, the Common Stock may trade at prices above or below such prices.

The public trading market for the Common Stock may be limited in the future.

The Common Stock is currently traded on The Nasdaq Capital Market under the trading symbol “RGSE.” The Common Stock has a recent history of significant trading volume. However, the trading volume fluctuates and, in the past, there have been time periods during which the Common Stock trading volume has been limited. Management can make no assurances that trading volume will not be similarly limited in the future. Without an active trading market, there can be no assurance of any liquidity or resale value of the Common Stock, and shareholders may be required to hold shares of the Common Stock for an indefinite period of time.

Risks Related to the Series P Warrants

There is no public market for the Series P Warrants offered by this prospectus supplement and the accompanying prospectus in this offering.

There is no established public trading market for the Series P Warrants offered by this prospectus and we do not expect a market to develop. In addition, we do not intend to apply to list the Series P Warrants on any national securities exchange or other trading system, including The Nasdaq Capital Market. Without an active market, the liquidity of the Series P Warrants offered by this prospectus will be very limited.

As a holder of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus you have no voting rights.

You will have no voting rights as a holder of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus. Our Common Stock is currently the only class of our securities that carries full voting rights.

If our Common Stock is delisted, your ability to transfer or sell the Series P Warrants offered by this prospectus supplement and the accompanying prospectus may be limited and the market value, if any, of the Series P Warrants will likely be materially adversely affected.

We expect that the value of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus, to some extent, is tied to the perceived value of its exercise features. If our Common Stock is delisted from The Nasdaq Capital Market, your ability to transfer or sell the Series P Warrants offered by this prospectus supplement and the accompanying prospectus may be limited and the market value, if any, of the Series P Warrants will likely be materially adversely affected.

We expect that the market value, if any, of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus will be significantly affected by changes in the market price of our Common Stock, which could change substantially at any time.

We expect that the market value, if any, of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus will depend on a variety of factors, including, without limitation, the market price of our Common Stock. Each of these factors may be volatile, and may or may not be within our control. For example, we expect the market value, if any, of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus will increase with increases in the market price of our Common Stock. As described in another risk factor, the market price of the Common Stock has been volatile in the past and could fluctuate widely in response to various factors.

We may issue additional shares of our Common Stock or instruments convertible or exercisable into our Common Stock, including in connection with exercise of issued and outstanding warrants, and thereby materially and adversely affect the market price of our Common Stock, and, in turn, the market value of the Series P Warrants.

Subject to certain contractual limitations we are under, we may offer and sell additional shares of our Common Stock or other securities convertible into or exercisable for our Common Stock during the time you hold the shares of Common Stock or the Series P Warrants offered by this prospectus supplement and the accompanying prospectus. We cannot predict the size of future issuances or the effect, if any, that they may have on the market price for our Common Stock. If we issue additional shares of our Common Stock or instruments convertible or exercisable into our Common Stock, it may materially and adversely affect the price of our Common Stock and, in turn, the market value, if any, of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus. Furthermore, the conversion or exercise of some or all of our outstanding derivative securities, including the Series P Warrants offered by this prospectus supplement and the accompanying prospectus and the Series O Warrants being sold in a concurrent private placement transaction, will dilute the ownership interests of existing shareholders, and any sales in the public market of shares of our Common Stock issuable upon any such conversion or exercise could adversely affect prevailing market prices of our Common Stock or the market value, if any, of the Series P Warrants. In addition, the existence of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus and the Series O Warrants being sold in a concurrent private placement transaction may encourage short selling by market participants because the exercise of these warrants could depress the price of our Common Stock.

Holders of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus will be entitled to only limited rights with respect to our Common Stock, and will be subject to all changes made with respect to our Common Stock to the extent holders receive shares of Common Stock pursuant to the terms of the Series P Warrants.

Holders of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus will be entitled to only limited rights with respect to our Common Stock until the time at which they become holders of our Common Stock pursuant to the terms of such warrants, but will be subject to all changes affecting our Common Stock before that time. For example, if an amendment is proposed to our articles of incorporation requiring shareholder approval and the record date for determining the shareholders of record entitled to vote on the amendment occurs before the date you are deemed to be a record holder of our Common Stock, you generally will not be entitled to vote on the amendment, although you will nevertheless be subject to any changes affecting our Common Stock.

The exercise prices of the Series P Warrants offered by this prospectus will not be adjusted for certain dilutive events.

The exercise prices of the Series P Warrants are not subject to adjustment upon a future issuances of securities, including, without limitation, capital stock, options and convertible securities. Such issuances, transactions or occurrences may adversely affect the market price of our Common Stock or the market value, if any, of the Series P Warrants without resulting in an adjustment of the exercise prices of the Series P Warrants.

You may receive less valuable consideration than expected because the value of our Common Stock may decline after you exercise the Series P Warrants issued in this offering but before we settle our obligation thereunder.

An exercising holder will be exposed to fluctuations in the value of our Common Stock during the period from the date such holder surrenders Series P Warrants for exercise until the date we settle our exercise obligation. Upon exercise of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus, we will be required to deliver the shares of our Common Stock on the second business day following the relevant exercise date. Accordingly, if the price of our Common Stock decreases during this period, the value of the shares that you receive will be adversely affected and would be less than the value on the exercise date.

Risk Factors Related to our Business and Industry

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 increase our revenue, that we began executing in 2017 and we intend to further implement during 2018. Our plans include, among other tactics, increasing the size of our sales organization to pursue sales of solar systems to residential homeowners and commercial customers. Generally, commercial solar systems are larger size systems than residential homeowner systems, generating more revenue per sale and, accordingly, we recently increased our focus on developing a pipeline of commercial opportunities with businesses, non-profit and government organizations. We are also the exclusive licensee of POWERHOUSE™, an in-roof solar shingle that we expect to generate future revenue from after first obtaining UL approval for the latest generation of the product; we currently anticipate receiving UL approval during the second quarter of 2018. 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.

Our sales and revenue are impacted by actions of local utilities and many other factors that can prevent us from completing installations and recording revenue.

During the fourth quarter of 2017, changes in state and utility sponsored renewable programs in the states of Rhode Island and Hawaii resulted in (i) cancellations by customers, which will reduce our net sales for the fourth quarter and (ii) deferrals of required permitting, which impacts the periods during which we recognize revenue from solar systems installation. Circumstances of this nature may also arise in subsequent quarters.

Other factors that may prevent us from completing installations in the time frame we anticipate include:

- shortages of materials;
- shortages of skilled labor;
- unforeseen installation scheduling, engineering, excavation, environmental or geological problems;
- job site issues that were not apparent during site inspection;
- natural disasters, hurricanes, weather interference, fires, earthquakes or other casualty losses or delays;
- delays in obtaining or inability to obtain or maintain necessary licenses or permits;
- changes to plans or specifications;
- performance by and disputes with subcontractors; and
- unanticipated cost increases in materials, labor or other elements of our projects beyond budgets and allowances for contingencies.

We need to continue to grow our backlog or we will be unable to increase revenue.

Our backlog and sales headcount each increased during 2017. To grow our backlog, we have hired and trained new salespersons, and bid upon new customer sales which were ultimately awarded. However, we are at risk for subsequent customer cancellations of these contracts. While we continue to implement our revenue growth strategy, and until we build a larger backlog, our net sales and installation revenue will fluctuate by quarter. If we are unsuccessful in building a larger backlog, we will be unable to increase revenue and we will not achieve our goal of operating at break-even and achieving profitability thereafter.

Our sales and installations are subject to seasonality of customer demand and weather conditions which are outside of our control.

Our sales are subject to the seasonality of when customers buy solar energy systems. We experience spikes in orders during the spring and summer months which, due to lead time, result in installations and revenue increasing during the summer and fall. Tax incentives can generate additional backlog prior to the end of the year, depending upon the incentives available and whether customers are looking to take advantage of such incentives before the end of the year.

Our ability to construct solar energy systems outdoors may be impacted by inclement weather, which can be most prominent in our geographic installation regions during the first and fourth quarters of the year. As a result of these factors, our first quarter is generally our slowest quarter of the year. If unexpected natural events occur and we are unable to manage our cash flow through these seasonal factors, there could be a negative impact on our financial position, liquidity, results of operations and cash flow.

We have not in the past operated with positive cash from operations and our cash outflow recently has increased due to material expenses we have incurred related to disputes and legal matters.

We plan to incur cash outflows from operations until we are successful growing our sales, backlog and revenue for break-even results. We are also incurring material cash-paid expenses for legal fees and consultants related to certain lawsuits, disputes, and proxy solicitation matters. If we are not successful with our plans to grow revenue, our projected cash and working capital, exclusive of our POWERHOUSE™ segment, will be less which would have a material adverse impact on our operations.

Risk Factors Related to Our Securities

We must meet The Nasdaq Capital Market continued listing requirements or we risk delisting, which may decrease the per share price of our Class A common stock 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. These requirements include our common stock trading above \$1.00 per share, having stockholders' equity in excess of \$2.5 million and holding an annual shareholders' meeting.

Despite continued efforts by us to achieve a quorum of shareholders to hold a shareholders' meeting, we have not yet been able to hold a meeting for 2017. We have adjourned the 2017 annual meeting of shareholders until January 18, 2018. Nasdaq Listing Rule 5620(a) requires us to hold our 2017 annual meeting of shareholders no later than December 31, 2017. As a result, we are in violation of Nasdaq Listing Rule 5620(a) as of January 1, 2018.

Further, failure to obtain a quorum at our shareholders' meeting would result in our not being able to obtain shareholder approval of matters we are required to submit to our shareholders for approval, such as amendments to our equity incentive plan, which could have a negative impact on our operations. Uncertainty about our ability to obtain shareholder approval when required could negatively impact the market price and volatility of our common stock.

We are subject to, through January 15, 2018, a committee of Nasdaq reviewing the adequacy of our stockholders' equity.

If our Class A common stock is delisted from the Nasdaq Capital Market, 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.

In addition to the foregoing, if our Class A common stock is delisted from Nasdaq and it trades on the over-the-counter market, the application of the "penny stock" rules could adversely affect the market price of our Class A common stock and increase the transaction costs to sell those shares. The Securities and Exchange Commission has adopted regulations which generally define a "penny stock" as an equity security that has a market price of less than \$5.00 per share, subject to specific exemptions. The last reported trade of our Company Stock on The Nasdaq Capital Market was at a price below \$5.00 per share. If our Class A common stock is delisted from Nasdaq and it trades on the over-the-counter market at a price of less than \$5.00 per share, our Class A common stock would be considered a penny stock. The Securities and Exchange Commission's penny stock rules require a broker-dealer, before a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document that provides information about penny stocks and the risks in the penny stock market. The broker-dealer must also provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and the salesperson in the transaction, and monthly account statements showing the market value of each penny stock held in the customer's account. In addition, the penny stock rules generally require that before a transaction in a penny stock occurs, the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's agreement to the transaction. If applicable in the future, these rules may restrict the ability of brokers-dealers to sell our Class A common stock and may affect the ability of investors to sell their shares, until our Class A common stock no longer is considered a penny stock.

We will require additional capital in excess of this offering to commercialize the POWERHOUSE™ product.

To commercialize the POWERHOUSE™ in-roof solar shingle, we will require additional financing that we plan to meet from available cash on hand, the proceeds from this offering, a possible asset based lending facility we will endeavor to arrange in the future, possible future conversions of common stock warrants outstanding, and a future offering of our equity securities. The amount of financing needed to commercialize POWERHOUSE™ will be affected by the timing of our receiving anticipated UL approval, the degree of customer acceptance for the product and associated investment in working capital for sales to customers, the timing and amount of which cannot presently be determined with certainty. However, if we achieve our anticipated timing for UL certification and our anticipated-customer receptivity and associated sales, we will require funding in excess of this offering for the manufacturing and sales of POWERHOUSE™ and we expect to undertake another equity offering or a transaction involving the future conversions of outstanding common stock warrants, or a combination of the two, during the first or second quarter of 2018 to raise additional capital. Additional capital realized from any future conversions of common stock warrants outstanding or any future offering of our equity securities will be dilutive.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein may contain forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties, including statements regarding the Company's results of operations and financial positions, and the Company's business and financial strategies. 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," "strategy," "likely," "seek," "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 implement our revenue growth strategy; our history of operating losses; our ability to achieve profitability; our ability to generate breakeven cash flow to fund our operations; our success in implementing our plans to increase future sales, installations and revenue; the ability to successfully and timely commercialize POWERHOUSE™ 3.0 to homeowners and new home builders; the ability to obtain requisite certification of POWERHOUSE™ 3.0; the adequacy of, and access to, necessary capital to commercialize POWERHOUSE™ 3.0; the satisfaction of other conditions to the POWERHOUSE™ 3.0 license agreement; our ability to manage supply chain in order to allow production levels and pricing of the POWERHOUSE™ 3.0 shingles to be competitive; our ability to successfully expand our operations and employees and realize profitable revenue growth from the sale and installation of POWERHOUSE™ 3.0, and to the extent, anticipated; the potential impact of the announcement of our expansion into the POWERHOUSE™ 3.0 business with employees, suppliers, customers and competitors; our ability to successfully and timely expand our POWERHOUSE™ 3.0 business outside of the United States; foreign exchange risks associated with the POWERHOUSE™ 3.0 business; restrictions on certain transactions and potential premiums and penalties under our outstanding warrants; 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; changes in general economic, business and political conditions, including tariffs on imported solar cells and changes in the financial markets; delays or cancellations for system installations where revenue is recognized on a percentage-of-completion basis; the potential impact on backlog and timing of revenue from the Rhode Island National Grid delay of approvals; 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; our ability to successfully complete the customer portal software development project on a timely basis and integrate the resulting software with our existing software and business; customer acceptance of, experience with and satisfaction with the customer portal software; 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 to which we may be subject from time to time; our failure to accurately predict future warranty claims; the outcome of a dispute with a customer of our former Commercial segment related to remedial work; the possibility that our insurance carrier seeks reimbursement of legal expenses up to \$1.5 million in connection with a now closed U.S. Securities and Exchange Commission investigation related to our July 2014 private placement; 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; increases in interest rates and tightening credit markets; our ability to meet customer expectations; risks and liabilities associated with placing employees and technicians in our customers' homes and businesses; product liability claims; future data security breaches, or our inability to protect personally identifiable information or other information about our customers; failure to comply with the director independence standards of the U.S. Securities and Exchange Commission and the Nasdaq Capital Market; our inability to maintain effective disclosure controls and procedures and internal control over financial reporting; volatile market price of our 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 Common Stock for the foreseeable future; compliance with public reporting requirements; anti-takeover provisions in our organizational documents; the terms of our outstanding warrants to purchase Common Stock and securities purchase agreements in connection with past offerings which limit our ability to enter into certain transactions or obtain financing, and which could result in our paying premiums or penalties to the holders of outstanding warrants; an increase in our cost of materials that could arise if the United States imposes trade remedies on imported crystalline silicon photovoltaic cells and modules; proxy contests threatened or commenced against us by activist shareholders; 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, 2016 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 Report on Form 10-Q for the period ended September 30, 2017.

Any forward-looking statement made by us in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein 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.

USE OF PROCEEDS

The net proceeds from this offering are estimated to be approximately \$1.5 million (excluding the proceeds, if any, from the future exercise of the Series P Warrants offered by this prospectus supplement and the accompanying prospectus and the sale and future exercise of the Series O Warrants offered by us in a concurrent private placement), based on an assumed sale of 1,600,000 shares of Common Stock at an aggregate offering price of \$1.8 million (assuming that no Series P Warrants are issued) and after deducting placement agent fees and expenses and other estimated expenses of the offering.

We intend to use the net proceeds from this offering(1) in connection with the commercialization of the POWERHOUSETM product, and (2) for general corporate purposes, including, without limitation, for working capital purposes, to increase sales and operational capabilities, but not for the redemption or repurchase of any of our or our subsidiaries' equity securities. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds we will have upon completion of the offering or the order of priority in which we may use such proceeds. Accordingly, we will retain broad discretion over the use of these proceeds.

DILUTION

Dilution is the amount by which the purchase price paid by the purchasers for the securities offered in this offering will exceed the as-adjusted net tangible book value (deficit) per share of our Common Stock after the offering.

Net tangible book value (deficit) per share of our Common Stock as of a particular date represents the amount of our total tangible assets less our total liabilities, divided by the number of shares of Common Stock outstanding as of such date. As of September 30, 2017, our net tangible book value was approximately \$7.1 million, or \$0.95 per share of Common Stock. Purchasers of Common Stock in this offering will experience substantial and immediate dilution in net tangible book value per share of our Common Stock for financial accounting purposes immediately following the closing. The calculations below are based on there being 8,151,545 shares of our Common Stock outstanding as of December 29, 2017.

The following table illustrates this dilution based solely on the number of shares of Common Stock issued at closing assuming that no Series P Warrants are issued in the offering.

	Actual (without pro forma adjustments)
Assumed initial public offering price per share	\$ 1.15
Net tangible book value per share as of September 30, 2017	\$ 0.95
Increase (decrease) in pro forma net tangible book value per share attributable to new investors	\$ (0.06)
Pro forma, as-adjusted, net tangible book value per share after this offering	\$ 0.89
Dilution per share to investors in this offering	\$ (0.26)

The tables above do not take into account any shares of Common Stock issuable in the future upon the exercise or conversion of currently outstanding derivative securities, including 1,600,000 shares of Common Stock issuable upon exercise of the Series O Warrants sold to the investors concurrently in a private placement. We may in the future sell substantial additional amounts of Common Stock or securities convertible into or exercisable for Common Stock. We may also choose to raise additional capital due to market conditions or other strategic considerations even if we believe we have sufficient funds for our current or future operating plans. The issuance of these securities could result in further dilution to our shareholders.

PRIVATE PLACEMENT TRANSACTION

In a concurrent private placement, we are selling to purchasers of our Common Stock in this offering Series O Warrants to purchase an aggregate of 1,600,000 shares of our Common Stock.

The Series O Warrants and the shares of our Common Stock issuable upon the exercise of the Series O Warrants are not being registered under the Securities Act, are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. Accordingly, purchasers may only sell shares of Common Stock issued upon exercise of the Series O Warrants pursuant to an effective registration statement under the Securities Act covering the resale of those shares, an exemption under Rule 144 under the Securities Act or another applicable exemption under the Securities Act.

Description of Series O Warrants

The following is a brief summary of certain terms and conditions of the Series O Warrant:

Exercisability. The Series O Warrants will be exercisable at any time starting six months after their issuance and up to the date that is five years after the date on which they become exercisable. The Series O Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice and, at any time a registration statement registering the resale of the shares of Common Stock underlying the Series O Warrants under the Securities Act is effective and available for the issuance of such shares, by payment in full in immediately available funds for the number of shares of Common Stock purchased upon such exercise. No fractional shares of Common Stock will be issued in connection with the exercise of a Series O Warrant, but rather the number of shares of Common Stock to be issued shall be rounded up to the nearest whole number.

Cashless Exercise. If the resale of the shares of Common Stock issuable upon exercise of a Series O Warrant is not covered by a registration statement under the Securities Act, the holder may, in its sole discretion, elect to exercise a Series O Warrant through a cashless exercise, in which case the holder would receive upon such exercise the “net number” of shares of Common Stock determined according to the formula set forth in the Series O Warrant.

Registration of Series O Warrants Shares. The issuance of shares of Common Stock upon exercise of the Series O Warrants is not registered on the registration statement of which this prospectus supplement is a part. If a registration statement under the Securities Act covering the exercise of the Series O Warrants is not available in the future, then the Series O Warrants will be exercisable on a cashless basis.

Limitations on Exercise and Issuance. A holder may not exercise a Series O Warrant and we may not issue shares of Common Stock under a Series O Warrant if, after giving effect to the exercise or issuance, the holder together with its affiliates would beneficially own in excess of a set percentage of the outstanding shares of our Common Stock. The cap will be set on the date of issuance at a percentage not in excess of 9.99%, at each holder’s election. If no election is made, the initial cap will be set at 9.99%. At each holder’s option, the cap may be increased or decreased to any other percentage not in excess of 9.99%, except that any increase will not be effective until the 61st day after notice to us.

Exercise Price. The exercise price per share of Common Stock purchasable upon exercise of the Series O Warrants is \$1.47. The exercise price of the Series O Warrants is subject to adjustments for stock splits or similar events.

Transferability. The Series O Warrants constitute unregistered, “restricted securities” under applicable securities laws and purchasers may only sell Series O Warrants pursuant to an effective registration statement under the Securities Act covering the resale of the Series O Warrants, an exemption under Rule 144 under the Securities Act or another applicable exemption under the Securities Act. Subject to applicable laws, the Series O Warrants may be offered for sale, sold, transferred or assigned without our consent. However, there is no established public trading market for the Series O Warrants and we do not expect one to develop.

Purchase Rights. The holders of the Series O Warrants are entitled to acquire options, convertible securities or rights to purchase our securities or property granted, issued or sold pro rata to the holders of our Common Stock on an “as if exercised for Common Stock” basis.

Rights Upon Distribution. The holders of Series O Warrants are entitled to receive any dividend or other distribution of our assets (or rights to acquire its assets), at any time after the issuance of the Series O Warrants, on an “as if exercised for Common Stock” basis.

Fundamental Transactions. The Series O Warrants prohibit us from entering into transactions constituting a “fundamental transaction” (as defined in the Series O Warrants) unless the successor entity assumes all of our obligations under the Series O Warrants and the other transaction documents in a written agreement approved by the “required holders” of the Series O Warrants. The definition of “fundamental transactions” includes, but is not limited to, a merger, a sale of all or substantially all our assets, certain tender offers, and other transactions that result in a change of control.

Rights as a Shareholder. Except as otherwise provided in the Series O Warrants or by virtue of such holder’s ownership of shares of Common Stock, the holder of a Series O Warrants does not have the rights or privileges of a holder of Common Stock, including any voting rights, until the holder exercises the Series O Warrants.

Amendment and Waiver. The provisions of a Series O Warrants may be amended or waived and we may take action prohibited by the Series O Warrants, or omit to perform any act required by the Series O Warrant, only if we have obtained the written consent of the holders.

Market and Exchange Listing. The Series O Warrants are a new issue of securities and currently there is no market for the securities. We do not intend to list or qualify for quotation the Series O Warrants on any securities exchange or market.

Securities Purchase Agreement

We will issue the Series O Warrants pursuant to the securities purchase agreement we will enter into with each of the investors participating in this offering. The material terms of the securities purchase agreement are described under the caption “Plan of Distribution.”

PLAN OF DISTRIBUTION

WestPark has agreed to act as the exclusive placement agent in connection with this offering, subject to the terms and conditions of an engagement agreement dated December 13, 2017. The placement agent is not purchasing or selling any shares of Common Stock or Series P Warrants offered by this prospectus supplement and the accompanying prospectus, nor is the placement agent required to arrange the purchase or sale of any specific number or shares, or dollar amount, of the Common Stock or Series P Warrants. The placement agent has agreed to use reasonable best efforts to arrange for the sale of all of shares of Common Stock and the Series P Warrants offered pursuant to this prospectus supplement and the accompanying prospectus. Therefore, we may not sell all shares of Common Stock or any Series P Warrants offered pursuant to this prospectus supplement and the accompanying prospectus. The placement agent may engage one or more sub-agents or selected dealers in connection with this offering. The engagement agreement terminates on the earlier of (a) the date on which a party receives written notice from the other party of termination, or (b) the date immediately following the closing of a transaction contemplated by the engagement agreement.

The purchase price for the Common Stock and Series P Warrants has been determined based upon arm’s-length negotiations between the placement agent, the investors and us.

We currently anticipate that the sale of the Common Stock and Series P Warrants will be completed on or before January 4, 2018. We estimate the total offering expenses of this offering that will be payable by us, will be approximately \$330,000, which includes all registration and filing fees, Nasdaq fees, fees and expenses of our counsel and our accountants, and various other fees.

To comply with the Nasdaq Listing Rules, we will not issue any shares of Common Stock at the closing of this offering to an investor if such issuance would cause the investor with such investor's "attribution parties" to hold in excess of 19.99% of the outstanding shares of our Common Stock.

Securities Purchase Agreement

We will enter into a securities purchase agreement directly with each investor purchasing shares of Common Stock and Series P Warrants in this offering. A form of securities purchase agreement is attached hereto as Annex A, which provides such investors with certain representations, warranties and covenants, including indemnifications, from us. Our obligation to issue and sell Common Stock and Series P Warrants to the investors who are parties to the securities purchase agreement is subject to the closing conditions set forth in the securities purchase agreement, including the absence of any material adverse change in our business and certain opinions, letters and certificates from us or our counsel, which may be waived by the respective parties.

The terms of the securities purchase agreement limit our ability to issue securities in the future:

- From the date we enter into the securities purchase agreement until 20 Trading Days (as defined in the securities purchase agreement) after the closing of this offering, we may not issue, enter into any agreement to issue or announce the issuance or proposed issuance of any shares of Common Stock, or any security which would entitle the holder to acquire at any time shares of Common Stock.
- From the date we enter into the securities purchase agreement until 12 months after the closing of this offering, we may not effect or enter into an agreement to effect any issuance of shares of Common Stock or any security which would entitle the holder to acquire at any time shares of Common Stock involving a "variable rate transaction" (as defined in the securities purchase agreement). The term "variable rate transaction" generally means a transaction in which we (a) issue or sell any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive, additional shares of Common Stock either (i) at a conversion price, exercise price or exchange rate or other price that is based upon, and/or varies with, the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such debt or equity securities or (ii) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to our business or the market for the Common Stock, or (b) enter into, or effect a transaction under, any agreement, including, but not limited to, an equity line of credit, whereby we may issue securities at a future determined price.

The securities purchase agreement also provides that, for a period of 12 months after the execution of the securities purchase agreement, each investor in this offering have the right to participate in any future "subsequent financing" (as defined in the securities purchase agreement) for cash consideration in an amount equal to up to 45% of such subsequent financing (the aggregate participation right of all investors shall not exceed 45% of such subsequent financing), on the same terms, conditions and price provided for in such subsequent financing.

However, the limitations on securities issuances and participation right described above do not apply to "exempt issuances" (as defined in the securities purchase agreement) (with respect to the limitation on securities issuances, so long as such exempt issuance is not a "variable rate transaction"). The term "exempt issuance" generally means the issuance of: (a) shares of Common Stock or options to our employees, officers or directors pursuant to any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of our board of directors or a majority of the members of a committee of non-employee directors established for such purpose for services rendered to us; (b) the warrant we expect to issue to WestPark in connection with this offering; (c) securities upon the exercise, exchange or conversion of the securities sold in this offering, the Series O Warrants, the warrant we expect to issue to WestPark in connection with this offering and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date we enter into the securities purchase agreement, subject to certain limitations; (d) up to 250,000 shares of Common Stock issued pursuant to an exemption from registration to the lender, or any successor thereto, who is a party to any revolving or other credit facility that is outstanding prior to the date of the securities purchase agreement or to which we become a party thereafter; (e) securities issued pursuant to acquisitions or strategic transactions approved by a majority of our disinterested directors, subject to certain limitations; (f) securities issued in a transaction in which we are not issuing securities primarily for the purpose of raising capital from retail investors or one or more entities whose primary business is investing in securities, subject to certain limitations; or (g) securities issued in connection with the settlement of any dispute or disagreement with, or litigation claim against, us, subject to certain limitations.

Subject to limitation, the terms of the securities purchase agreement may be waived, modified, supplemented or amended in writing signed, in the case of any amendment, by the Company and purchasers that purchased at least 50.1% in interest of the shares of Common Stock issuable under the securities purchase agreement and upon exercise of the Series P Warrants, or, in the case of a waiver, by the party against which enforcement of any such waived provision is sought. Such amendments will be binding on all parties to the securities purchase agreement.

Escrow Agreement

We and the placement agent will enter into an escrow agreement with a New York state chartered bank, as escrow agent, pursuant to which the investors in this offering will wire their respective subscription amounts into escrow and the funds will be released upon satisfaction of the closing conditions to the securities purchase agreement.

Commissions and Expenses

We have agreed to pay the placement agent an aggregate cash placement fee equal to 7% of the gross proceeds received at the closing from the sale of the shares of our Common Stock in the offering and shares of Common Stock issuable upon exercise of the Series P Warrants.

The following table shows per-share and total cash placement agent's fee we will pay to the placement agent in connection with the sale of the Common Stock offered pursuant to this prospectus supplement and the accompanying prospectus, assuming the purchase of all of the shares offered hereby:

	Per Share (1)	Total
Public offering price	\$ 1.15	\$ 1,840,000
Placement agent fees	\$ 0.0805	\$ 128,800
Total	\$ 1,0695	\$ 1,711,200

(1) Assumes that no Series P Warrants are issued. For each share of Common Stock issuable upon exercise of any Series P Warrant issued in this offering, the public offering price is reduced by \$0.01.

Because there is no minimum offering amount required as a condition to closing in this offering, the actual aggregate cash placement fee, if any, is not presently determinable and may be substantially less than the maximum amount set forth above. In addition, subject to FINRA Rule 5110(f)(2)(d)(i), we have agreed to reimburse the placement agent for reasonable and documented out-of-pocket legal expenses up to a maximum of \$75,000 and reasonable and documented out-of-pocket accountable expenses up to a maximum of \$5,000.

In addition to the cash fees set forth above, WestPark, as placement agent, has a right to purchase for the sum of \$100 a warrant to purchase up to an aggregate of 8% of the aggregate number of shares of Common Stock sold in this offering and issuable upon exercise of the Series P Warrants. The placement agent warrant will have similar terms as the Series O Warrants, other than (i) it will expire five years after the effective date of this offering; (ii) it will be exercisable through a cashless exercise regardless of whether the shares of Common Stock issuable upon exercise of the placement agent warrant are covered by a registration statement under the Securities Act; and (iii) pursuant to FINRA Rule 5110(g), the placement agent warrant and the underlying securities will not be transferable for 6 months from the date of issuance, except the transfer of any security:

- by operation of law or by reason of reorganization of our company;
- to any FINRA member firm participating in the offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period;

- if the aggregate amount of securities of our company held by the holder of the placement agent warrant or related persons do not exceed 1% of the securities being offered;
- that is beneficially owned on a pro-rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund, and participating members in the aggregate do not own more than 10% of the equity in the fund; or
- the exercise or conversion of any security, if all securities received remain subject to the lock-up restriction set forth above for the remainder of the time period.

The placement agent warrant and the shares of Common Stock issuable upon exercise of the placement agent warrant are not being registered on the registration statement of which this prospectus supplement is a part.

In addition, if we raise at least \$5 million in gross proceeds in this offering, we have granted the placement agent the right to serve as the underwriter or placement agent if we decide to raise funds by means of a public offering or a private placement of equity or debt securities using an underwriter or placement agent within six months following the consummation of this offering.

Indemnification

We have agreed to indemnify the placement agent against liabilities under the Securities Act. We have also agreed to contribute to payments the placement agent may be required to make in respect of such liabilities.

Electronic Distribution

This prospectus supplement and the accompanying prospectus may be made available in electronic format on websites or through other online services maintained by the placement agent, or by an affiliate. Other than this prospectus supplement and the accompanying prospectus in electronic format, the information on the placement agent's website and any information contained in any other website maintained by the placement agent or by an affiliates is not part of this prospectus supplement, the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus are a part, has not been approved and/or endorsed by us or the placement agent, and should not be relied upon by investors.

The foregoing does not purport to be a complete statement of the terms and conditions of the Placement Agent engagement agreement or the securities purchase agreement, copies of which are incorporated by reference into the registration statement of which this prospectus supplement is a part. See "Where You Can Find More Information."

Regulation M Restrictions

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of any shares of Common Stock or the warrants sold by it while acting as a principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the requirements of the Securities Act and the Securities Exchange Act of 1934, as amended, or the "Exchange Act," including Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M promulgated under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares offered hereby by any placement agent acting as a principal. Under these rules and regulations, a placement agent:

- must not engage in any stabilization activity in connection with our securities; and
- must not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

Other

From time to time, the placement agent and its affiliates may in the future provide various investment banking, financial advisory and other services to us and our affiliates for which services they may receive customary fees, but we have no present arrangements to do so. Subject to Regulation M and other applicable statutes and regulations, in the course of its businesses, the placement agent and its affiliates may trade our securities or loans for their own account or for the accounts of customers, and, accordingly, the placement agent and its may at any time hold long or short positions in such securities or loans.

Listing

Our Common Stock is listed on The Nasdaq Capital Market under the symbol "RGSE."

DESCRIPTION OF SECURITIES WE ARE OFFERING

We are offering up to 1,600,000 shares of Common Stock (issued at closing or underlying Series P Warrants), pursuant to this prospectus supplement and the accompanying prospectus. We are also offering to those purchasers, if any, whose purchase of shares of Common Stock in this offering would otherwise result in such purchaser, together with certain other "attribution parties," beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock immediately following the consummation of this offering, or to those purchasers that elect to purchase such securities in their sole discretion, the opportunity, in lieu of purchasing shares of Common Stock, to purchase Series P Warrants exercisable for up to 1,600,000 shares of Common Stock. The aggregate number of shares of Common Stock offered by this prospectus supplement and the accompanying prospectus to be issued at closing or underlying Series P Warrants is 1,600,000. We are also offering the shares of Common Stock that are issuable from time to time upon exercise of the Series P Warrants being offered by this prospectus supplement.

Description of Common Stock

The material terms and provisions of our Common Stock are described under the caption "Description of Common Stock" starting on page 7 of the accompanying prospectus.

Description of Series P Warrants

The following is a brief summary of certain terms and conditions of the Series P Warrant offered by this prospectus supplement and is subject in all respects to the provisions contained in the Series P Warrant, a form of which is attached to this prospectus supplement as Annex B. You should review a copy of the attached form of Series P Warrant for a complete description of the terms and conditions applicable to the Series P Warrant offered by this prospectus supplement and the accompanying prospectus:

Form. The Series P Warrants will be issued as individual warrant agreements to the investors substantially in the form attached hereto as Annex B.

Amount of Series P Warrant Shares. We are offering to those purchasers, if any, whose purchase of shares of Common Stock in this offering would otherwise result in such purchaser, together with certain other "attribution parties," beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding Common Stock immediately following the consummation of this offering, or to those purchasers that elect to purchase such securities in their sole discretion, the opportunity, in lieu of purchasing shares of Common Stock, to purchase Series P Warrants exercisable for up to 1,600,000 shares of Common Stock.

Exercisability. The Series P Warrants will be exercisable at any time after their issuance and up to the date that is five years after their issuance. The Series P Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the shares of Common Stock underlying the Series P Warrants under the Securities Act is effective and available for the issuance of such shares, by payment in full in immediately available funds for the number of shares of Common Stock purchased upon such exercise. No fractional shares of Common Stock will be issued in connection with the exercise of a Series P Warrant, but rather the number of shares of Common Stock to be issued shall be rounded up to the nearest whole number.

Registration of Series P Warrant Shares. The issuance of shares of Common Stock upon exercise of the Series P Warrants is registered on the registration statement of which this prospectus is a part. If a registration statement under the Securities Act covering the exercise of the Series P Warrants is not available in the future, then we expect that the Series P Warrants will be exercisable on a cashless basis.

Cashless Exercise. If the issuance of the shares of Common Stock issuable upon exercise of a Series P Warrant is not covered by a registration statement under the Securities Act, the holder may, in its sole discretion, elect to exercise a Series P Warrant through a cashless exercise, in which case the holder would receive upon such exercise the “net number” of shares of Common Stock determined according to the formula set forth in the Series P Warrant.

Limitations on Exercise and Issuance. A holder may not exercise a Series P Warrant and we may not issue shares of Common Stock under a Series P Warrant if, after giving effect to the exercise or issuance, the holder together with its affiliates would beneficially own in excess of a set percentage of the outstanding shares of our Common Stock. The cap will be set on the date of issuance at a percentage not in excess of 9.99%, at each holder’s election. If no election is made, the initial cap will be set at 9.99%. At each holder’s option, the cap may be increased or decreased to any other percentage not in excess of 9.99%, except that any increase will not be effective until the 61st day after notice to us.

Exercise Price. The exercise price of the Series P Warrants is \$1.15 per share, of which \$1.14 per share will be paid at the closing with \$0.01 per share payable upon exercise of the Series P Warrants. The exercise price of the Series P Warrants is subject to adjustments for stock splits or similar events.

Transferability. Subject to applicable laws, the Series P Warrants may be offered for sale, sold, transferred or assigned without our consent. However, there is no established public trading market for the Series P Warrants and we do not expect one to develop.

Purchase Rights. The holders of the Series P Warrants are entitled to acquire options, convertible securities or rights to purchase our securities or property granted, issued or sold pro rata to the holders of our Common Stock on an “as if exercised for Common Stock” basis.

Rights Upon Distribution. The holders of Series P Warrants are entitled to receive any dividend or other distribution of our assets (or rights to acquire its assets), at any time after the issuance of the Series P Warrants, on an “as if exercised for Common Stock” basis.

Fundamental Transactions. The Series P Warrants prohibit us from entering into transactions constituting a “fundamental transaction” (as defined in the Series P Warrants) unless the successor entity assumes all of our obligations under the Series P Warrants and the other transaction documents in a written agreement approved by the “required holders” of the Series P Warrants. The definition of “fundamental transactions” includes, but is not limited to, a merger, a sale of all or substantially all our assets, certain tender offers, and other transactions that result in a change of control.

Rights as a Shareholder. Except as otherwise provided in the Series P Warrants, or by virtue of such holder’s ownership of shares of Common Stock, the holder of a Series P Warrants does not have the rights or privileges of a holder of Common Stock, including any voting rights, until the holder exercises the Series P Warrants.

Amendment and Waiver. The provisions of a Series P Warrants may be amended or waived and we may take action prohibited by the Series P Warrants, or omit to perform any act required by the Series P Warrant, only if we have obtained the written consent of the holders.

Market and Exchange Listing. The Series P Warrants are a new issue of securities and currently there is no market for the securities. We do not intend to list or qualify for quotation the Series P Warrants on any securities exchange or market.

LEGAL MATTERS

The validity of the shares of Common Stock, the Series P Warrants and the shares of Common Stock issuable upon exercise of the Series P Warrant will be passed upon for us by Brownstein Hyatt Farber Schreck, LLP, Denver, Colorado.

EXPERTS

The consolidated financial statements of Real Goods Solar, Inc. and its subsidiaries, as of and for the years ended December 31, 2015 and December 31, 2016, are incorporated in this prospectus supplement and the accompanying prospectus by reference from the Real Goods Solar, Inc. Annual Report on Form 10-K for the year ended December 31, 2016, have been audited by Hein & Associates LLP, an independent registered public accounting firm, as stated in their report incorporated herein by reference, and have been incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy and information statements and other information with the SEC. You may read and copy any materials we file with the SEC at the SEC's Public Reference Room in Washington, D.C. at 100 F Street, N.E., Washington, D.C. 20549.

You may obtain information about the operation of the Public Reference Room by calling the SEC at 1(800) SEC-0330. The SEC also maintains a website that contains information we file electronically with the SEC, which you can access over the Internet at <http://www.sec.gov>. We maintain a website at <http://www.rgsenergy.com> with information about our company. Information contained on our website or any other website is not incorporated into this prospectus supplement and the accompanying prospectus and does not constitute a part of this prospectus supplement and the accompanying prospectus. Our website address referenced above is intended to be an inactive textual reference only and not an active hyperlink to our website.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus supplement and the accompanying prospectus the information we file with the SEC, which means that we can disclose important information to you by referring you to other documents filed separately with the SEC. The information incorporated by reference is considered part of this prospectus supplement and the accompanying prospectus, and any information that we file with the SEC subsequent to this prospectus supplement and the accompanying prospectus and prior to the termination of the offering referred to in this prospectus supplement and the accompanying prospectus will automatically be deemed to update and supersede this information. We incorporate by reference into this prospectus supplement and the accompanying prospectus the documents listed below (excluding any portions of such documents that have been "furnished" but not "filed" for purposes of the Exchange Act unless specifically incorporated by reference herein or therein):

- Our Annual Report on Form 10-K for the year ended December 31, 2016, filed March 10, 2017, as amended by Amendment No. 1 to Annual Report on Form 10-K/A, filed April 11, 2017;
- Our Quarterly Reports on Form 10-Q for the three months ended March 31, 2017, filed May 10, 2017, the three months ended June 30, 2017, filed August 9, 2017, as amended by Amendment No. 1 to Quarterly Report on Form 10-Q/A filed August 14, 2017, and the three months ended September 30, 2017, filed November 9, 2017;

- Our Current Reports on Form 8-K (including amendments thereto) filed January 9, 2017, January 24, 2017, January 26, 2017 (other than information furnished pursuant to Item 2.02 and Item 7.01 of Form 8-K), January 30, 2017, January 31, 2017, February 1, 2017 (other than information furnished pursuant to Item 7.01 of Form 8-K), February 2, 2017, February 6, 2017 (other than information furnished pursuant to Item 7.01 of Form 8-K), February 8, 2017 (other than information furnished pursuant to Item 7.01 of Form 8-K), February 9, 2017 (other than information furnished pursuant to Item 7.01 of Form 8-K), February 10, 2017, February 15, 2017 (other than information furnished pursuant to Item 7.01 of Form 8-K), May 24, 2017, June 5, 2017, June 15, 2017, June 23, 2017, August 21, 2017, August 23, 2017, August 24, 2017, September 12, 2017, September 13, 2017, October 4, 2017 (other than information furnished pursuant to Item 7.01 of Form 8-K), October 5, 2017, October 19, 2017 (other than information furnished pursuant to Item 2.02 of Form 8-K), November 3, 2017, November 17, 2017, and December 14, 2017; and
- The description of our Common Stock contained in our registration statement on Form 8-A filed May 5, 2008, including any other amendments or reports filed for the purpose of updating such description (other than any portion of such filings that are furnished under applicable SEC rules rather than filed).

We also incorporate by reference all documents we subsequently file with the SEC (other than information furnished pursuant to Item 2.02 or Item 7.01 of Form 8-K, or as otherwise permitted by SEC rules) pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the initial filing of the registration statement of which this prospectus supplement is a part (including prior to the effectiveness of the registration statement) and prior to the termination of the offering. Any documents that we subsequently file with the SEC will automatically update and supersede the information previously filed with the SEC and will be considered to be a part of this prospectus supplement and the accompanying prospectus from the date those documents are filed. Thus, for example, in the case of a conflict or inconsistency between information set forth in this prospectus supplement or the accompanying prospectus and information incorporated by reference into this prospectus supplement and the accompanying prospectus, you should rely on the information contained in the document that was filed later.

This prospectus supplement is part of a registration statement on Form S-3 that we have filed with the SEC relating to the securities. As permitted by SEC rules, this prospectus supplement does not contain all of the information included in the registration statement and the accompanying exhibits and schedules we file with the SEC. We have filed certain legal documents that control the terms of the Common Stock offered by this prospectus supplement as exhibits to the registration statement. We may file certain other legal documents that control the terms of the Common Stock offered by this prospectus supplement as exhibits to reports we file with the SEC. You may refer to the registration statement and the exhibits and schedules for more information about us and our securities. The registration statement and exhibits and schedules are also available at the SEC's Public Reference Room or through its website.

We will provide, without charge and upon oral or written request, to each person, including any beneficial owner, to whom a copies of this prospectus supplement and the accompanying prospectus have been delivered, a copy of any of the documents referred to above as being incorporated by reference into this prospectus supplement or the accompanying prospectus but not delivered with them. You may obtain a copy of these filings, at no cost, by writing or calling us at Real Goods Solar, Inc., 110 16th Street, 3rd Floor, Denver, CO 80202, (303) 222-8300. Exhibits to these filings will not be provided unless those exhibits have been specifically incorporated by reference in this prospectus supplement.

Annex A

FORM OF SECURITIES PURCHASE AGREEMENT

SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (this "Agreement") is dated as of January __, 2018, between, Real Goods Solar, Inc., a Colorado corporation (the "Company"), and each purchaser identified on the signature pages hereto (each, including its successors and assigns, a "Purchaser" and collectively, the "Purchasers").

WHEREAS, subject to the terms and conditions set forth in this Agreement and pursuant to (i) an effective registration statement under the Securities Act of 1933, as amended (the "Securities Act") as to the Shares (as defined below), the Series P Warrants (as defined below) and the Series P Warrant Shares (as defined below), and (ii) an exemption from the registration requirements of Section 5 of the Securities Act (as defined below) contained in Section 4(a)(2) thereof and/or Regulation D thereunder as to the Series O Warrants (as defined below), the Company desires to issue and sell to each Purchaser, and each Purchaser, severally and not jointly, desires to purchase from the Company, securities of the Company as more fully described in this Agreement.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and each Purchaser agree as follows:

**ARTICLE I.
DEFINITIONS**

1.1 Definitions. In addition to the terms defined elsewhere in this Agreement the following terms have the meanings set forth in this Section 1.1:

"Acquiring Person" shall have the meaning ascribed to such term in Section 4.6.

"Action" shall have the meaning ascribed to such term in Section 3.1(j).

"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 under the Securities Act.

"Board of Directors" means the board of directors of the Company.

"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.

"Closing" means the closing of the purchase and sale of the Securities pursuant to Section 2.1.

“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) the Purchasers’ obligations to pay the Subscription Amount and (ii) the Company’s obligations to deliver the Securities, in each case, have been satisfied or waived, but in no event later than the second Trading Day following the date hereof.

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

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

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant 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.

“Company Counsel” means Brownstein Hyatt Farber Schreck, with offices located at 410 Seventeenth Street, Suite 2200, Denver, CO 80202.

“Disclosure 8-K” means a Current Report on Form 8-K containing the portions of the information set forth in the Prospectus Supplement under the caption “PROSPECTUS SUPPLEMENT SUMMARY – Recent Developments” (and the same information if included in the Disclosure Schedules) that constitute material non-public information; provided that the Company may elect to include in the Disclosure 8-K any additional information it deems appropriate and desirable, including the information required to be disclosed pursuant to clause (b) of the first sentence of Section 4.5.

“Disclosure Schedules” means the Disclosure Schedules of the Company delivered concurrently herewith.

“Disqualification Event” shall have the meaning ascribed to such term in Section 3.1(o).

“EGS” means Ellenoff Grossman & Schole LLP, with offices located at 1345 Avenue of the Americas, New York, New York 10105-0302.

“Escrow Agent” means Signature Bank, a New York State chartered bank, with offices at 261 Madison Avenue, New York, New York 10016.

“Escrow Agreement” means the escrow agreement entered into prior to the date hereof, by and among the Company, the Escrow Agent and WestPark Capital, Inc. pursuant to which the Purchasers shall deposit Subscription Amounts with the Escrow Agent to be applied to the transactions contemplated hereunder.

“Evaluation Date” shall have the meaning ascribed to such term in Section 3.1(s).

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

“Exempt Issuance” means the issuance of: (i) shares of Common Stock or options to employees, officers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose for services rendered to the Company; (ii) the Placement Agent Warrant; (iii) securities upon the exercise, exchange or conversion of the Securities, the Warrant Shares, the Placement Agent Warrant and/or Common Stock Equivalents issued and outstanding on the date of this Agreement; provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities or to extend the term of such securities (for the avoidance of doubt, the Company’s voluntary reduction of the exercise price of warrants issued and outstanding on the date of this Agreement as permitted pursuant to the terms of such warrants as of the date of this Agreement shall not constitute such a prohibited amendment); (iv) up to 250,000 shares of Common Stock (subject to adjustment for reverse and forward stock splits, recapitalizations and similar transactions following the date hereof) issued pursuant to an exemption from registration under the Securities Act (which carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.12(a) herein) to a lender, or any successor thereto, who is a party to any revolving or other credit facility that is outstanding prior to the date of this Agreement or to which the Company becomes a party following the date of this Agreement; (v) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company; provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.12(a) herein; and provided further 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 owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities; (vi) securities issued in a transaction in which the Company is not issuing securities primarily for the purpose of raising capital from retail investors or one or more entities whose primary business is investing in securities; provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.12(a) herein, including, without limitation, securities issued to vendors or consultants for services rendered to the Company, or (vii) securities issued in connection with the settlement of any dispute or disagreement with, or litigation claim against, the Company; provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.12(a) herein.

“FCPA” means the Foreign Corrupt Practices Act of 1977, as amended.

“GAAP” shall have the meaning ascribed to such term in Section 3.1(h).

“Indebtedness” shall have the meaning ascribed to such term in Section 3.1(aa).

“Intellectual Property Rights” shall have the meaning ascribed to such term in Section 3.1(p).

“Issuer Covered Person” shall have the meaning ascribed to such term in Section 3.1(oo).

“Legend Removal Date” shall have the meaning ascribed to such term in Section 4.1(c).

“Liens” means a lien, charge, pledge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

“Material Adverse Effect” shall have the meaning assigned to such term in Section 3.1(b).

“Material Permits” shall have the meaning ascribed to such term in Section 3.1(n).

“OFAC” shall have the meaning ascribed to such term in Section 3.1(ii).

“Notice Termination Time” shall have the meaning ascribed to such term in Section 4.11(c).

“Participation Maximum” shall have the meaning ascribed to such term in Section 4.11(a).

“Per Share Purchase Price” means \$1.15.

“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.

“Placement Agent” means WestPark Capital, Inc.

“Placement Agent Warrant” means the warrant to purchase Common Stock to be issued by the Company to the Placement Agent in connection with the transactions herein.

“Pro Rata Portion” shall have the meaning ascribed to such term in Section 4.11(e).

“Proceeding” means an action, claim, suit, investigation or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or threatened.

“Prospectus” means the final base prospectus filed for the Registration Statement.

“Prospectus Supplement” means the supplement to the Prospectus complying with Rule 424(b) of the Securities Act that is filed with the Commission and delivered by the Company to each Purchaser at the Closing.

“Purchaser Party” shall have the meaning ascribed to such term in Section 4.9.

“Registration Statement” means the effective registration statement with the Commission file No. 333-215985 which registers the sale of the Shares, the Series P Warrants and the Series P Warrant Shares to the Purchasers.

“Required Approvals” shall have the meaning ascribed to such term in Section 3.1(e).

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Rule 424” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“SEC Reports” shall have the meaning ascribed to such term in Section 3.1(h).

“Securities” means the Shares and the Warrants.

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

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

“Series O Warrants” means the Series O Warrants to Purchase Common delivered to the Purchasers at the Closing in accordance with Section 2.2(a) hereof, which shall be exercisable six months following the date of issuance and have a term of exercise equal to five years from the date of initial exercisability, in the form of Exhibit A attached hereto.

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

“Series P Warrants” means the Prepaid Series P Common Stock purchase warrants delivered to the Purchasers at the Closing in accordance with Section 2.2(a) hereof, which shall be exercisable immediately and have a term of exercise equal to five years, in the form of Exhibit A-2 attached hereto. The purchase price per Series P Warrant shall be the Per Share Purchase Price minus \$0.01.

“Shares” means the shares of Common Stock issued to each Purchaser pursuant to this Agreement at the Closing.

“Short Sales” means all “short sales” as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include locating and/or borrowing shares of Common Stock).

“Subscription Amount” means, as to each Purchaser, the aggregate amount to be paid for the Shares and Warrants purchased hereunder as specified below such Purchaser’s name on the signature page of this Agreement and next to the heading “Subscription Amount,” in United States dollars and in immediately available funds.

“Subsequent Financing” shall have the meaning ascribed to such term in Section 4.11(a).

“Subsequent Financing Notice” shall have the meaning ascribed to such term in Section 4.11(b).

“Subsidiary” means any subsidiary of the Company as set forth on Schedule 3.1(a) and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

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

“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 American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange, the OTC Bulletin Board, the OTCQB or OTCQX (or any successors to any of the foregoing).

“Transaction Documents” means this Agreement, the Warrants, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated hereunder.

“Transfer Agent” means Computershare Trust Company, N.A., the current transfer agent of the Company, with a mailing address of 8742 Lucent Boulevard, Suite 225, Highlands Ranch, CO 80129 and a facsimile number of 303-226-0609, and any successor transfer agent of the Company.

“Variable Rate Transaction” shall have the meaning ascribed to such term in Section 4.12(b).

“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 Group, 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 Purchasers of a majority in interest of the Shares then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

“Warrants” means, collectively, the Series O Warrants and the Series P Warrants delivered to the Purchasers at the Closing in accordance with Section 2.2(a) hereof.

“Warrant Shares” means, collectively, the Series O Warrant Shares and the Series P Warrant Shares.

**ARTICLE II.
PURCHASE AND SALE**

2.1 Closing. On the Closing Date, upon the terms and subject to the conditions set forth herein, the Company agrees to sell, and the Purchasers, severally and not jointly, agree to purchase, up to an aggregate of \$_____ of (i) Shares for each Purchaser equal to such Purchaser's Subscription Amount for Shares as set forth on the signature page hereto executed by such Purchaser divided by the Per Share Purchase Price, and (ii) Series O Warrants and Series P Warrants, if applicable, as determined pursuant to Section 2.2(a). Each Purchaser's Subscription Amount as set forth on the signature page hereto executed by such Purchaser shall be delivered to the Escrow Agent or as agreed by such Purchaser and either the Company or the Placement Agent. The Company shall deliver to each Purchaser its respective Shares, and a Series O Warrant and, if applicable, a Series N Warrant as determined pursuant to Section 2.2(a), and the Company and each Purchaser shall deliver the other items set forth in Section 2.2 deliverable at the Closing. Upon satisfaction of the covenants and conditions set forth in Section 2.3, the Closing shall occur at the offices of EGS or such other location as the parties shall mutually agree. The Company covenants that, if the Purchaser delivers an Exercise Notice (as defined in the Series P Warrants) to exercise Series P Warrants between the date hereof and the Closing Date, the Company shall deliver Series P Warrant Shares to the Purchaser on the Closing Date in connection with such Exercise Notice, provided that the Company shall be obligated to deliver Series P Warrant Shares on the Closing Date only in connection with Exercise Notice(s) that are delivered to the Company at or prior to 4:00 p.m. (New York City time) on the Trading Day immediately prior to Closing Date.

2.2 Deliveries.

- (a) On or prior to the Closing Date, the Company shall deliver or cause to be delivered to each Purchaser the following:
- (i) this Agreement duly executed by the Company;
 - (ii) a legal opinion of Company Counsel, substantially in the form delivered to the Placement Agent and reasonably acceptable to the Purchasers;
 - (iii) a copy of the irrevocable instructions to the Transfer Agent instructing the Transfer Agent to deliver on an expedited basis via The Depository Trust Company Deposit or Withdrawal at Custodian system Shares equal to such Purchaser's Subscription Amount divided by the Per Share Purchase Price, registered in the name of such Purchaser;
 - (iv) a Series O Warrant registered in the name of such Purchaser to purchase up to a number of shares of Common Stock equal to 100% of such Purchaser's Shares plus the number of shares of Common Stock issuable upon exercise of such Purchaser's Series P Warrants, if applicable, with an exercise price equal to \$1.47, subject to adjustment therein;
 - (v) for those Purchasers purchasing Series P Warrants, Series P Warrants to purchase the number of shares of Common Stock set forth on the Purchaser's signature page hereto, registered in the name of such Purchaser; and
 - (vi) the Prospectus and Prospectus Supplement (which may be delivered in accordance with Rule 172 under the Securities Act).
- (b) On or prior to the Closing Date, each Purchaser shall deliver or cause to be delivered to the Company or the Escrow Agent, as applicable, the following:

(i) to the Company, this Agreement duly executed by such Purchaser; and

(ii) to the Escrow Agent, such Purchaser's Subscription Amount to the account set forth in the Escrow Agreement (unless other payment arrangements are made between such Purchaser and either the Company or the Placement Agent).

2.3 Closing Conditions.

(a) The obligations of the Company hereunder in connection with the Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) on the Closing Date of the representations and warranties of the Purchasers contained herein (unless as of a specific date therein in which case they shall be accurate as of such date);

(ii) all obligations, covenants and agreements of each Purchaser required to be performed at or prior to the Closing Date shall have been performed; and

(iii) the delivery by each Purchaser of the items set forth in Section 2.2(b) of this Agreement.

(b) The respective obligations of the Purchasers hereunder in connection with the Closing are subject to the following conditions being met:

(i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and on the Closing Date of the representations and warranties of the Company contained herein (unless as of a specific date therein in which case they shall be accurate as of such date);

(ii) all obligations, covenants and agreements of the Company required to be performed at or prior to the Closing Date shall have been performed;

(iii) the delivery by the Company of the items set forth in Section 2.2(a) of this Agreement;

(iv) there shall have been no Material Adverse Effect with respect to the Company since the date hereof; and

(v) from the date hereof to the Closing Date, trading in the Common Stock shall not have been suspended by the Commission or the Company's principal Trading Market, and, at any time prior to the Closing Date, trading in securities generally as reported by Bloomberg L.P. shall not have been suspended or limited, or minimum prices shall not have been established on securities whose trades are reported by such service, or on any Trading Market, nor shall a banking moratorium have been declared either by the United States or New York State authorities nor shall there have occurred any material outbreak or escalation of hostilities or other national or international calamity of such magnitude in its effect on, or any material adverse change in, any financial market which, in each case, in the reasonable judgment of such Purchaser, makes it impracticable or inadvisable to purchase the Securities at the Closing.

ARTICLE III. REPRESENTATIONS AND WARRANTIES

3 . 1 Representations and Warranties of the Company. Except as set forth in the Disclosure Schedules, which Disclosure Schedules shall be deemed a part hereof and shall qualify any representation made herein to the extent of the disclosure contained in the corresponding section of the Disclosure Schedules, the Company hereby makes the following representations and warranties to each Purchaser:

(a) Subsidiaries. All of the direct and indirect subsidiaries of the Company are set forth on Schedule 3.1(a). Except as set forth on Schedule 3.1(a), the Company owns, directly or indirectly, all of the capital stock or other equity interests of each Subsidiary free and clear of any Liens, and all of the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. If the Company has no subsidiaries, all other references to the Subsidiaries or any of them in the Transaction Documents shall be disregarded.

(b) Organization and Qualification. The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any Subsidiary is in violation nor default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a "Material Adverse Effect") and no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(c) Authorization: Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors or the Company's shareholders in connection herewith or therewith other than in connection with the Required Approvals. This Agreement and each other Transaction Document to which it is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(d) No Conflicts. The execution, delivery and performance by the Company of this Agreement and the other Transaction Documents to which it is a party, the issuance and sale of the Securities and the issuance and sale of the Warrant Shares in accordance with the terms of the Warrants and the consummation by it of the transactions contemplated hereby and thereby do not and will not: (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, (ii) after obtaining the Required Approvals, conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than: (i) the filings required pursuant to Section 4.5 of this Agreement, (ii) the filing with the Commission of the Prospectus Supplement, (iii) the notice and/or application(s) to each applicable Trading Market for the issuance and sale of the Securities and the Warrant Shares and the listing of the Shares and the Warrant Shares for trading thereon in the time and manner required thereby, (iv) any such consent, waiver, authorization or order of, notice to, or filing or registration with the Financial Industry Regulatory Authority, Inc., or under state securities or Blue Sky laws, and (v) the filing of a Form D with the Commission and such filings as are required to be made under applicable state securities laws (collectively, the “Required Approvals”).

(f) Issuance of the Securities; Registration. The Securities are duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Warrant Shares, when issued in accordance with the terms of the Warrants, will be validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Company has reserved from its duly authorized capital stock a number of shares of Common Stock issuable pursuant to this Agreement and the maximum number of shares of Common Stock issuable upon exercise of the Warrants. The Company has prepared and filed the Registration Statement in conformity with the requirements of the Securities Act, which became effective on July 21, 2017, including the Prospectus, and such amendments and supplements thereto as may have been required to the date of this Agreement. The Registration Statement is effective under the Securities Act and no stop order preventing or suspending the effectiveness of the Registration Statement or suspending or preventing the use of the Prospectus has been issued by the Commission and no proceedings for that purpose have been instituted or, to the knowledge of the Company, are threatened by the Commission. The Company, if required by the rules and regulations of the Commission, shall file the Prospectus Supplement with the Commission pursuant to Rule 424(b). At the time the Registration Statement and any amendments thereto became effective, at the date of this Agreement and at the Closing Date, the Registration Statement and any amendments thereto conformed and will conform in all material respects to the requirements of the Securities Act and did not and will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading; and the Prospectus and any amendments or supplements thereto, at the time the Prospectus or any amendment or supplement thereto was issued and at the Closing Date, conformed and will conform in all material respects to the requirements of the Securities Act and did not and will not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company was at the time of the filing of the Registration Statement eligible to use Form S-3. The Company is eligible to use Form S-3 under the Securities Act and it meets the transaction requirements with respect to the aggregate market value of the Shares and Series P Warrants being sold pursuant to this offering and during the 12 months prior to this offering, as set forth in General Instruction I.B.6 of Form S-3.

(g) Capitalization. The capitalization of the Company is as set forth on Schedule 3.1(g). The Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee stock options under the Company's stock option plans, the issuance of shares of Common Stock to employees pursuant to the Company's employee stock purchase plans and pursuant to the conversion and/or exercise of Common Stock Equivalents outstanding as of the date of the most recently filed periodic report under the Exchange Act. No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents that has not been validly waived or satisfied. Except as set forth on Schedule 3.1(g) and as a result of the purchase and sale of the Securities, there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire any shares of Common Stock or the capital stock of any Subsidiary, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents or capital stock of any Subsidiary. Except as set forth on Schedule 3.1(g), the issuance and sale of the Securities and the Warrant Shares will not obligate the Company or any Subsidiary to issue shares of Common Stock or other securities to any Person (other than the Purchasers) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under any of such securities. Except as set forth on Schedule 3.1(g), there are no outstanding securities or instruments of the Company or any Subsidiary that contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to redeem a security of the Company or such Subsidiary. Except as set forth on Schedule 3.1(g), the Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement. All of the outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. Except for the Required Approvals, no further approval or authorization of any shareholder, the Board of Directors or others is required for the issuance and sale of the Securities and the Warrant Shares. Except as set forth on Schedule 3.1(g), there are no shareholders' agreements, voting agreements or other similar agreements with respect to the Company's capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company's shareholders.

(h) SEC Reports; Financial Statements. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, together with the Prospectus and the Prospectus Supplement, being collectively referred to herein as the “SEC Reports”) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company has never been an issuer subject to Rule 144(i) under the Securities Act. The financial statements of the Company included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“GAAP”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(i) Material Changes; Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the SEC Reports, except as set forth on Schedule 3.1(i): (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company’s financial statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its shareholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to existing Company stock option plans. The Company does not have pending before the Commission any request for confidential treatment of information. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents and as set forth on Schedule 3.1(i), no event, liability, fact, circumstance, occurrence or development has occurred or exists or is reasonably expected to occur or exist with respect to the Company or its Subsidiaries or their respective businesses, prospects, properties, operations, assets or financial condition, that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed at least 1 Trading Day prior to the date that this representation is made.

(j) Litigation. Except as set forth on Schedule 3.1(j), there is no action, suit, inquiry, notice of violation, proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an "Action") which (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents, the Securities or the Warrant Shares or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Except as set forth on Schedule 3.1(j), neither the Company nor any Subsidiary, nor any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. Except as set forth on Schedule 3.1(j), there has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Securities Act.

(k) Labor Relations. No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company's or its Subsidiaries' employees is a member of a union that relates to such employee's relationship with the Company or such Subsidiary, and neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement, and the Company and its Subsidiaries believe that their relationships with their employees are good. To the knowledge of the Company, no executive officer of the Company or any Subsidiary, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(l) Compliance. Except as set forth on Schedule 3.1(l), neither the Company nor any Subsidiary: (i) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company or any Subsidiary under), nor has the Company or any Subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any judgment, decree or order of any court, arbitrator or other governmental authority or (iii) is or has been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, environmental protection, occupational health and safety, product quality and safety and employment and labor matters, except in each case as could not have or reasonably be expected to result in a Material Adverse Effect.

(m) Environmental Laws. The Company and its Subsidiaries (i) are in compliance with all federal, state, local and foreign laws relating to pollution or protection of human health or the environment (including ambient air, surface water, groundwater, land surface or subsurface strata), including laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "Hazardous Materials") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands, or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations, issued, entered, promulgated or approved thereunder ("Environmental Laws"); (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (iii) are in compliance with all terms and conditions of any such permit, license or approval other than with respect to, in each case of clause (i), (ii) and (iii), the failure to so comply or receive permits, licenses or other approvals could not have or reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(n) Regulatory Permits. The Company and the Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct their respective businesses as described in the SEC Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect ("Material Permits"), and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any Material Permit.

(o) Title to Assets. The Company and the Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made therefor in accordance with GAAP and, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and the Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and the Subsidiaries are in compliance other than with respect to such non-compliance that could not be reasonably expected to have a Material Adverse Effect.

(p) Intellectual Property. The Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights as necessary or required for use in connection with their respective businesses as described in the SEC Reports and which the failure to so have could have a Material Adverse Effect (collectively, the “Intellectual Property Rights”). None of, and neither the Company nor any Subsidiary has received a notice (written or otherwise) that any of, the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two years from the date of this Agreement. Neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Intellectual Property Rights violate or infringe upon the rights of any Person, except as could not have or could not reasonably be expected to have a Material Adverse Effect. To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(q) Insurance. The Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company and the Subsidiaries are engaged, including, but not limited to, directors and officers insurance coverage at least equal to the aggregate Subscription Amount. Neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

(r) Transactions With Affiliates and Employees. None of the officers or directors of the Company or any Subsidiary and, to the knowledge of the Company, none of the employees of the Company or any Subsidiary, is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, shareholder, member or partner, in each case in excess of \$120,000 other than for: (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(s) Sarbanes-Oxley: Internal Accounting Controls. The Company and the Subsidiaries are in compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof and as of the Closing Date. The Company and the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company and the Subsidiaries have established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and the Subsidiaries and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company and the Subsidiaries as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the "Evaluation Date"). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no changes in the internal control over financial reporting (as such term is defined in the Exchange Act) of the Company and its Subsidiaries that have materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of the Company and its Subsidiaries.

(t) Certain Fees. Except as set forth in the Prospectus Supplement, no brokerage or finder's fees or commissions are or will be payable by the Company or any Subsidiary to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. The Purchasers shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by the Transaction Documents.

(u) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Securities, will not be or be an Affiliate of, an “investment company” within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an “investment company” subject to registration under the Investment Company Act of 1940, as amended.

(v) Registration Rights. Except as set forth on Schedule 3.1(v), no Person has any right to cause the Company or any Subsidiary to effect the registration under the Securities Act of any securities of the Company or any Subsidiary.

(w) Listing and Maintenance Requirements. The Common Stock is registered pursuant to Section 12(b) or 12(g) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. Except as set forth on Schedule 3.1(w), the Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. Except as set forth on Schedule 3.1(w), the Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements. The Common Stock is currently eligible for electronic transfer through the Depository Trust Company or another established clearing corporation and the Company is current in payment of the fees to the Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer.

(x) Application of Takeover Protections. The Company and the Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company’s certificate of incorporation (or similar charter documents) or the laws of its state of incorporation that is or could become applicable to the Purchasers as a result of the Purchasers and the Company fulfilling their obligations or exercising their rights under the Transaction Documents, including without limitation as a result of the Company’s issuance of the Securities and the Warrant Shares and the Purchasers’ ownership of the Securities and the Warrant Shares.

(y) Disclosure. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, which such material terms and conditions will have been disclosed after the filing of the press release pursuant to Section 4.5, and the information set forth in the Prospectus Supplement under the caption “PROSPECTUS SUPPLEMENT SUMMARY – Recent Developments” (and the same information if included in the Disclosure Schedules), which information will have been disclosed after the filing of the Disclosure 8-K pursuant to Section 4.5, the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Purchasers or their agents or counsel with any information that it believes constitutes or might constitute material, non-public information. The Company understands and confirms that the Purchasers will rely on the foregoing representation in effecting transactions in securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Purchasers regarding the Company and its Subsidiaries, their respective businesses and the transactions contemplated hereby, including the Disclosure Schedules to this Agreement, is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. The press releases disseminated by the Company during the 12 months preceding the date of this Agreement taken as a whole do not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made and when made, not misleading. The Company acknowledges and agrees that no Purchaser makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3.2 hereof.

(z) No Integrated Offering. Assuming the accuracy of the Purchasers’ representations and warranties set forth in Section 3.2, neither the Company, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this offering of the Securities to be integrated with prior offerings by the Company for purposes of (i) the Securities Act which would require the registration of the Series O Warrants or the Series O Warrant Shares under the Securities Act, or (ii) any applicable shareholder approval provisions of any Trading Market on which any of the securities of the Company are listed or designated.

(aa) Solvency. Based on the consolidated financial condition of the Company as of the Closing Date, after giving effect to the receipt by the Company of the proceeds from the sale of the Securities hereunder: (i) the fair saleable value of the Company's assets exceeds the amount that will be required to be paid on or in respect of the Company's existing debts and other liabilities (including known contingent liabilities) as they mature, (ii) the Company's assets do not constitute unreasonably small capital to carry on its business as now conducted and as proposed to be conducted including its capital needs taking into account the particular capital requirements of the business conducted by the Company, consolidated and projected capital requirements and capital availability thereof, and (iii) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its liabilities when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). The Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction within one year from the Closing Date. Schedule 3.1(aa) sets forth as of the date hereof all outstanding secured and unsecured Indebtedness of the Company or any Subsidiary, or for which the Company or any Subsidiary has commitments. For the purposes of this Agreement, "Indebtedness" means (x) any liabilities for borrowed money or amounts owed in excess of \$50,000 (other than trade accounts payable incurred in the ordinary course of business), (y) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Company's consolidated balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (z) the present value of any lease payments in excess of \$50,000 due under leases required to be capitalized in accordance with GAAP. Neither the Company nor any Subsidiary is in default with respect to any Indebtedness.

(b b) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company and its Subsidiaries each (i) has made or filed all United States federal, state and local income and all foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company or of any Subsidiary know of no basis for any such claim.

(cc) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has: (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law or (iv) violated in any material respect any provision of FCPA.

(dd) Accountants. The Company's accounting firm is set forth on Schedule 3.1(dd). To the knowledge and belief of the Company, such accounting firm: (i) is a registered public accounting firm as required by the Exchange Act and (ii) shall express its opinion with respect to the financial statements to be included in the Company's Annual Report for the fiscal year ending December 31, 2017.

(ee) Acknowledgment Regarding Purchasers' Purchase of Securities and Warrant Shares. The Company acknowledges and agrees that each of the Purchasers is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated thereby. The Company further acknowledges that no Purchaser is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated thereby and any advice given by any Purchaser or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated thereby is merely incidental to the Purchasers' purchase of the Securities and the Warrant Shares. The Company further represents to each Purchaser that the Company's decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

(f f) Acknowledgment Regarding Purchaser's Trading Activity. Anything in this Agreement or elsewhere herein to the contrary notwithstanding, it is understood and acknowledged by the Company that: (i) none of the Purchasers has been asked by the Company to agree, nor has any Purchaser agreed, to desist from purchasing or selling, long and/or short, securities of the Company, or "derivative" securities based on securities issued by the Company or to hold the Securities or Warrant Shares for any specified term, (ii) past or future open market or other transactions by any Purchaser, specifically including, without limitation, Short Sales or "derivative" transactions, before or after the closing of this or future securities offering transactions, may negatively impact the market price of the Company's publicly-traded securities, (iii) any Purchaser, and counter-parties in "derivative" transactions to which any such Purchaser is a party, directly or indirectly, may presently have a "short" position in the Common Stock and (iv) each Purchaser shall not be deemed to have any affiliation with or control over any arm's length counter-party in any "derivative" transaction. The Company further understands and acknowledges that (y) one or more Purchasers may engage in hedging activities at various times during the period that the Securities and the Warrant Shares are outstanding, and (z) such hedging activities (if any) could reduce the value of the existing shareholders' equity interests in the Company at and after the time that the hedging activities are being conducted. The Company acknowledges that such aforementioned hedging activities do not constitute a breach of any of the Transaction Documents.

(g g) Regulation M Compliance. The Company has not, and to its knowledge no one acting on its behalf has (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities and the Warrant Shares, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities or Warrant Shares, or (iii) within the restricted period required by Regulation M, paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company, other than, in the case of clauses (ii) and, (iii) compensation paid to the Placement Agent in connection with the placement of the Securities.

(h h) Stock Option Plans. Each stock option granted by the Company under the Company's stock option plan was granted (i) in accordance with the terms of the Company's stock option plan and (ii) with an exercise price at least equal to the fair market value of the Common Stock on the date such stock option would be considered granted under GAAP and applicable law. No stock option granted under the Company's stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no Company policy or practice to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its Subsidiaries or their financial results or prospects.

(ii) Office of Foreign Assets Control. Neither the Company nor any Subsidiary nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC").

(jj) U.S. Real Property Holding Corporation. The Company is not and has never been a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company shall so certify upon Purchaser's request.

(k k) Bank Holding Company Act. Neither the Company nor any of its Subsidiaries or Affiliates is subject to the Bank Holding Company Act of 1956, as amended (the "BHCA") and to regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). Neither the Company nor any of its Subsidiaries or Affiliates owns or controls, directly or indirectly, 5% or more of the outstanding shares of any class of voting securities or 25% or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Subsidiaries or Affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(11) Money Laundering. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (collectively, the "Money Laundering Laws"), and no Action or Proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any Subsidiary with respect to the Money Laundering Laws is pending or, to the knowledge of the Company or any Subsidiary, threatened.

(mm) Private Placement. Assuming the accuracy of the Purchasers' representations and warranties set forth in Section 3.2, no registration under the Securities Act is required for the offer and sale of the Series O Warrants or the Series O Warrant Shares by the Company to the Purchasers as contemplated hereby.

(n n) No General Solicitation. Neither the Company nor any Person acting on behalf of the Company has offered or sold any of the Series O Warrants or the Series O Warrant Shares by any form of general solicitation or general advertising. The Company has offered the Series O Warrants and the Series O Warrant Shares for sale only to the Purchasers and certain other "accredited investors" within the meaning of Rule 501 under the Securities Act.

(oo) No Disqualification Events. With respect to the Series O Warrants and the Series O Warrant Shares to be offered and sold hereunder in reliance on Rule 506 under the Securities Act, none of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering hereunder, any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the Securities Act) connected with the Company in any capacity at the time of sale (each, an "Issuer Covered Person") is subject to any of the "Bad Actor" disqualifications described in Rule 506(d)(1)(i) to (viii) under the Securities Act (a "Disqualification Event"), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3). The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event. The Company has complied, to the extent applicable, with its disclosure obligations under Rule 506(e), and has furnished to the Purchasers a copy of any disclosures provided thereunder.

(pp) Other Covered Persons. Other than the Placement Agent, the Company is not aware of any person (other than any Issuer Covered Person) that has been or will be paid (directly or indirectly) remuneration for solicitation of purchasers in connection with the sale of the Securities.

(q q) Notice of Disqualification Events. The Company will notify the Purchasers in writing, prior to the Closing Date of (i) any Disqualification Event relating to any Issuer Covered Person and (ii) any event that would, with the passage of time, reasonably be expected to become a Disqualification Event relating to any Issuer Covered Person, in each case of which it is aware.

3.2 Representations and Warranties of the Purchasers. Each Purchaser, for itself and for no other Purchaser, hereby represents and warrants as of the date hereof and as of the Closing Date to the Company as follows (unless as of a specific date therein, in which case they shall be accurate as of such date):

(a) Organization; Authority. Such Purchaser is either an individual or an entity duly incorporated or formed, validly existing and in good standing under the laws of the jurisdiction of its incorporation or formation with full right, corporate, partnership, limited liability company or similar power and authority to enter into and to consummate the transactions contemplated by the Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of the Transaction Documents and performance by such Purchaser of the transactions contemplated by the Transaction Documents have been duly authorized by all necessary corporate, partnership, limited liability company or similar action, as applicable, on the part of such Purchaser. Each Transaction Document to which it is a party has been duly executed by such Purchaser, and when delivered by such Purchaser in accordance with the terms hereof, will constitute the valid and legally binding obligation of such Purchaser, enforceable against it in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(b) Understandings or Arrangements. Such Purchaser is acquiring the Securities as principal for its own account and has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of such Securities (this representation and warranty not limiting such Purchaser's right to sell the Securities pursuant to the Registration Statement or otherwise in compliance with applicable federal and state securities laws). Such Purchaser is acquiring the Securities hereunder and the Warrant Shares under the Warrants in the ordinary course of its business. Such Purchaser understands that the Series O Warrants and the Series O Warrant Shares are "restricted securities" and have not been registered under the Securities Act or any applicable state securities law and is acquiring such Series O Warrants and Series O Warrant Shares as principal for his, her or its own account and not with a view to or for distributing or reselling such Series O Warrants or Series O Warrant Shares or any part thereof in violation of the Securities Act or any applicable state securities law, has no present intention of distributing any of such Series O Warrants or Series O Warrant Shares in violation of the Securities Act or any applicable state securities law and has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of such Series O Warrants and Series O Warrant Shares in violation of the Securities Act or any applicable state securities law (this representation and warranty not limiting such Purchaser's right to sell such Series O Warrants and Series O Warrant Shares pursuant to a registration statement or otherwise in compliance with applicable federal and state securities laws).

(c) Purchaser Status. At the time such Purchaser was offered the Securities, it was, and as of the date hereof it is, and on each date on which it exercises any Warrants it will be either: (i) an “accredited investor” as defined in Rule 501(a)(1), (a)(2), (a)(3), (a)(7) or (a)(8) under the Securities Act or (ii) a “qualified institutional buyer” as defined in Rule 144A(a) under the Securities Act. Each Purchaser is a resident of the jurisdiction specified on such Purchaser’s signature page as the Address for Notice to Purchaser.

(d) Experience of Such Purchaser. Such Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities and the Warrant Shares, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in the Securities and the Warrant Shares and, at the present time, is able to afford a complete loss of such investment.

(e) Access to Information. Such Purchaser acknowledges that it has had the opportunity to review the Transaction Documents (including all exhibits and schedules thereto) and the SEC Reports and has been afforded, (i) the opportunity to ask such questions as it has deemed necessary of, and to receive answers from, representatives of the Company concerning the terms and conditions of the offering of the Securities and the Warrant Shares and the merits and risks of investing in the Securities and the Warrant Shares; (ii) access to information about the Company and its financial condition, results of operations, business, properties, management and prospects sufficient to enable it to evaluate its investment; and (iii) the opportunity to obtain such additional information that the Company possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment. Such Purchaser acknowledges and agrees that neither the Placement Agent nor any Affiliate of the Placement Agent has provided such Purchaser with any information or advice with respect to the Securities or the Warrant Shares nor is such information or advice necessary or desired. Neither the Placement Agent nor any Affiliate has made or makes any representation as to the Company or the quality of the Securities or the Warrant Shares and the Placement Agent and any Affiliate may have acquired non-public information with respect to the Company which such Purchaser agrees need not be provided to it. In connection with the issuance of the Securities and the Warrant Shares to such Purchaser, neither the Placement Agent nor any of its Affiliates has acted as a financial advisor or fiduciary to such Purchaser.

(f) General Solicitation. Such Purchaser is not purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or, to the knowledge of such Purchaser, any other general solicitation or general advertisement.

(g) Acknowledgement. Such Purchaser understands that the Series O Warrants are being, and the Series O Warrant Shares will be, offered and sold to it in reliance on specific exemptions from the registration requirements of U.S. federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Purchaser's compliance with, the representations, warranties, agreements, acknowledgments and understandings of such Purchaser set forth in this Agreement in order to determine the availability of such exemptions and the eligibility of such Purchaser to acquire the Series O Warrants and the Series O Warrant Shares.

The Company acknowledges and agrees that the representations contained in this Section 3.2 shall not modify, amend or affect such Purchaser's right to rely on the Company's representations and warranties contained in this Agreement or any representations and warranties contained in any other Transaction Document or any other document or instrument executed and/or delivered in connection with this Agreement or the consummation of the transactions contemplated hereby. Notwithstanding the foregoing, for the avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions, with respect to locating or borrowing shares in order to effect Short Sales or similar transactions in the future.

**ARTICLE IV.
OTHER AGREEMENTS OF THE PARTIES**

4.1 Removal of Legends.

(a) The Series O Warrants and Series O Warrant Shares may only be disposed of in compliance with state and federal securities laws. In connection with any transfer of Series O Warrants or Series O Warrant Shares other than pursuant to an effective registration statement or Rule 144, to the Company or to an Affiliate of a Purchaser or in connection with a pledge as contemplated in Section 4.1(b), the Company may require the transferor thereof to provide to the Company an opinion of counsel selected by the transferor and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Series O Warrant or Series O Warrant Shares under the Securities Act.

(b) The Purchasers agree to the imprinting, so long as is required by this Section 4.1, of a legend on any of the Series O Warrants or Series O Warrant Shares in the following form:

NEITHER THIS SECURITY NOR THE SECURITIES INTO WHICH THIS SECURITY IS EXERCISABLE HAS BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS. THIS SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT WITH A REGISTERED BROKER-DEALER OR OTHER LOAN WITH A FINANCIAL INSTITUTION THAT IS AN "ACCREDITED INVESTOR" AS DEFINED IN RULE 501(a) UNDER THE SECURITIES ACT OR OTHER LOAN SECURED BY SUCH SECURITIES.

The Company acknowledges and agrees that a Purchaser may from time to time pledge pursuant to a bona fide margin agreement with a registered broker-dealer or grant a security interest in some or all of the Series O Warrants or Series O Warrant Shares to a financial institution that is an "accredited investor" as defined in Rule 501(a) under the Securities Act and, if required under the terms of such arrangement, such Purchaser may transfer pledged or secured Series O Warrants or Series O Warrant Shares to the pledgees or secured parties. Such a pledge or transfer would not be subject to approval of the Company and no legal opinion of legal counsel of the pledgee, secured party or pledgor shall be required in connection therewith. Further, no notice shall be required of such pledge. At the appropriate Purchaser's expense, the Company will execute and deliver such reasonable documentation as a pledgee or secured party of Series O Warrants and Series O Warrant Shares may reasonably request in connection with a pledge or transfer of the Series O Warrants or Series O Warrant Shares.

(c) Certificates evidencing the Series O Warrant Shares shall not contain any legend (including the legend set forth in Section 4.1(b) hereof): (i) while a registration statement covering the resale of such Series O Warrant Shares is effective under the Securities Act, or (ii) following any sale of such Series O Warrant Shares in compliance with Rule 144 (assuming cashless exercise of the Series O Warrants), or (iii) if such Series O Warrant Shares are eligible for sale under Rule 144 (assuming cashless exercise of the Series O Warrants) without restriction or limitation, including without the requirement to be in compliance with Rule 144(c)(1), or (iv) if such legend is not required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the staff of the Commission). The Company shall cause its counsel to issue a legal opinion to the Transfer Agent or the Purchaser promptly if required by the Transfer Agent to effect the removal of the legend hereunder, or if requested by a Purchaser, respectively. The Company agrees that following such time as such legend is no longer required under this Section 4.1(c), the Company will, no later than the earlier of (i) two Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined below) following the delivery by a Purchaser to the Company or the Transfer Agent of a certificate representing Series O Warrant Shares, as applicable, issued with a restrictive legend (such date, the "Legend Removal Date"), deliver or cause to be delivered to such Purchaser a certificate representing such shares that is free from all restrictive and other legends. The Company may not make any notation on its records or give instructions to the Transfer Agent that enlarge the restrictions on transfer set forth in this Section 4. Series O Warrant Shares subject to legend removal hereunder shall be transmitted by the Transfer Agent to the Purchaser by crediting the account of the Purchaser's prime broker with the Depository Trust Company System as directed by such Purchaser. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of a certificate representing Series O Warrant Shares issued with a restrictive legend. Each Purchaser acknowledges and agrees that the Series O Warrant Shares remain "restricted securities" as such term is defined in Rule 144 notwithstanding removal of the legend set forth above until such Series O Warrant Shares are sold or transferred under an effective registration statement under the 1933 Act or under Rule 144.

(d) In addition to such Purchaser's other available remedies, the Company shall pay to a Purchaser, in cash, (i) as partial liquidated damages and not as a penalty, for each \$1,000 of Series O Warrant Shares (based on the VWAP of the Common Stock on the date such Series O Warrant Shares are submitted to the Transfer Agent) delivered for removal of the restrictive legend and subject to Section 4.1(c), \$10 per Trading Day (increasing to \$20 per Trading Day five Trading Days after such damages have begun to accrue) for each Trading Day after the Legend Removal Date until such certificate is delivered without a legend and (ii) if the Company fails to (a) issue and deliver (or cause to be delivered) to a Purchaser by the Legend Removal Date a certificate representing the Series O Warrant Shares so delivered to the Company by such Purchaser that is free from all restrictive and other legends and (b) if after the Legend Removal Date such Purchaser purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by such Purchaser of all or any portion of the number of Warrant Shares, that such Purchaser anticipated receiving from the Company without any restrictive legend in compliance with Section 4.1(c), then an amount equal to the excess of such Purchaser's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (including brokerage commissions and other out-of-pocket expenses, if any) (the "Buy-In Price") over the product of (A) such number of shares of Common Stock so purchased in lieu of Series O Warrant Shares that the Company was required to deliver to such Purchaser by the Legend Removal Date multiplied by (B) the lowest closing sale price of the Common Stock on any Trading Day during the period commencing on the date of the delivery by such Purchaser to the Company of the applicable Series O Warrant Shares (as the case may be) and ending on the date of such delivery and payment under this Section 4.1(d) and the Company shall deliver to the Purchaser the number of Series O Warrant Shares delivered for removal of the restrictive legend and subject to Section 4.1(c).

(e) The Shares, the Series P Warrants and the Series P Warrant Shares shall be issued free of legends.

4.2 Furnishing of Information; Public Information.

(a) Until the earliest of the time that (i) no Purchaser owns Securities or (ii) the Warrants have expired, the Company covenants to maintain the registration of the Common Stock under Section 12(b) or 12(g) of the Exchange Act and to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act even if the Company is not then subject to the reporting requirements of the Exchange Act.

(b) At any time during the period commencing from the six month anniversary of the date hereof and ending at such time that all of the Warrant Shares (assuming cashless exercise) may be sold without the requirement for the Company to be in compliance with Rule 144(c)(1) and otherwise without restriction or limitation pursuant to Rule 144, if the Company (i) shall fail for any reason to satisfy the current public information requirement under Rule 144(c) or (ii) has ever been an issuer described in Rule 144(i)(1)(i) or becomes an issuer in the future, and the Company shall fail to satisfy any condition set forth in Rule 144(i)(2) (a "Public Information Failure") then, in addition to such Purchaser's other available remedies, the Company shall pay to a Purchaser, in cash, as partial liquidated damages and not as a penalty, by reason of any such delay in or reduction of its ability to sell the Warrant Shares, an amount in cash equal to 2.0% of the aggregate Exercise Price of such Purchaser's Warrants on the day of a Public Information Failure and on every 30th day (pro rated for periods totaling less than 30 days) thereafter until the earlier of (a) the date such Public Information Failure is cured and (b) such time that such public information is no longer required for the Purchasers to transfer the Warrant Shares pursuant to Rule 144. The payments to which a Purchaser shall be entitled pursuant to this Section 4.2(b) are referred to herein as "Public Information Failure Payments." Public Information Failure Payments shall be paid on the earlier of (i) the last day of the calendar month during which such Public Information Failure Payments are incurred and (ii) the third (3rd) Business Day after the event or failure giving rise to the Public Information Failure Payments is cured. In the event the Company fails to make Public Information Failure Payments in a timely manner, such Public Information Failure Payments shall bear interest at the rate of 1.5% per month (prorated for partial months) until paid in full. Nothing herein shall limit such Purchaser's right to pursue actual damages for the Public Information Failure, and such Purchaser shall have the right to pursue all remedies available to it at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief.

4.3 Integration. The Company shall not sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the Securities Act) that would be integrated with the offer or sale of the Securities in a manner that would require the registration under the Securities Act of the sale of the Series O Warrants or Series O Warrant Shares or that would be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any Trading Market such that it would require shareholder approval prior to the closing of such other transaction unless shareholder approval is obtained before the closing of such subsequent transaction.

4 . 4 Exercise Procedures. The Warrants set forth the totality of the procedures required of the Purchasers in order to exercise the Warrants. Without limiting the preceding sentences, no ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise form be required in order to exercise the Warrants. No additional legal opinion, other information or instructions shall be required of the Purchasers to exercise their Warrants. The Company shall honor exercises of the Warrants and shall deliver Warrant Shares in accordance with the terms, conditions and time periods set forth in the Transaction Documents.

4 . 5 Securities Laws Disclosure; Publicity. The Company shall: (a) by 9:00 a.m. (New York City time) on the first Trading Day following the date hereof, issue a press release disclosing the material terms of the transactions contemplated hereby and file the Disclosure 8-K; and (b) file a Current Report on Form 8-K, including the Transaction Documents as exhibits thereto, with the Commission within the time required by the Exchange Act. From and after the issuance of such press release, the Company represents to the Purchasers that it shall have publicly disclosed all material, non-public information delivered to any of the Purchasers by the Company or any of its Subsidiaries, or any of their respective officers, directors, employees or agents. In addition, effective upon the issuance of such press release, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, agents, employees or Affiliates on the one hand, and any of the Purchasers or any of their Affiliates on the other hand, shall terminate. The Company and each Purchaser shall consult with each other in issuing any other press releases with respect to the transactions contemplated hereby, and neither the Company nor any Purchaser shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, with respect to any press release of any Purchaser, or without the prior consent of each Purchaser, with respect to any press release of the Company, which consent shall not unreasonably be withheld or delayed, except if such disclosure is required by law, in which case the disclosing party shall promptly provide the other party with prior notice of such public statement or communication. Notwithstanding the foregoing, the Company shall not publicly disclose the name of any Purchaser, or include the name of any Purchaser in any filing with the Commission or any regulatory agency or Trading Market, without the prior written consent of such Purchaser, except: (a) as required by federal securities law in connection with the filing of final Transaction Documents with the Commission; and (b) to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Purchasers with prior notice of such disclosure permitted under this clause (b).

4 . 6 Shareholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that any Purchaser is an "Acquiring Person" under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that any Purchaser could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities or Warrant Shares under the Transaction Documents or under any other agreement between the Company and the Purchasers.

4 . 7 Non-Public Information. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents and the information required to be included in the Disclosure 8-K, which shall be disclosed pursuant to Section 4.5, the Company covenants and agrees that neither it, nor any other Person acting on its behalf will provide any Purchaser or its agents or counsel with any information that constitutes, or the Company reasonably believes constitutes, material non-public information, unless prior thereto such Purchaser shall have consented to the receipt of such information and agreed with the Company to keep such information confidential. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company. To the extent that the Company delivers any material, non-public information to a Purchaser without such Purchaser's consent, the Company hereby covenants and agrees that such Purchaser shall not have any duty of confidentiality to the Company, any of its Subsidiaries, or any of their respective officers, directors, agents, employees or Affiliates, or a duty to the Company, or any of its Subsidiaries or any of their respective officers, directors, agents, employees or Affiliates not to trade on the basis of, such material, non-public information, provided that the Purchaser shall remain subject to applicable law. To the extent that any notice provided pursuant to any Transaction Document constitutes, or contains, material, non-public information regarding the Company or any Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company.

4 . 8 Use of Proceeds. The Company shall use the net proceeds from the sale of the Securities hereunder (a) in connection with the commercialization of the POWERHOUSE™ product, and (b) for working capital purposes, and shall not use such proceeds: (i) for the satisfaction of any portion of the Company's debt (other than payment of trade payables in the ordinary course of the Company's business and prior practices), (ii) for the redemption of any Common Stock or Common Stock Equivalents, (iii) for the settlement of any outstanding litigation or (iv) in violation of FCPA or OFAC regulations.

4.9 Indemnification of Purchasers. Subject to the provisions of this Section 4.9, the Company will indemnify and hold each Purchaser and its directors, officers, shareholders, members, partners, employees and agents (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title), each Person who controls such Purchaser (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, shareholders, agents, members, partners or employees (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, a “Purchaser Party”) harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys’ fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of or relating to (a) any breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or in the other Transaction Documents or (b) any action instituted against the Purchaser Parties in any capacity, or any of them or their respective Affiliates, by any shareholder of the Company who is not an Affiliate of such Purchaser Party, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is based upon a breach of such Purchaser Party’s representations, warranties or covenants under the Transaction Documents or any agreements or understandings such Purchaser Party may have with any such shareholder or any violations by such Purchaser Party of state or federal securities laws or any conduct by such Purchaser Party which is finally judicially determined to constitute fraud, gross negligence, willful misconduct or malfeasance) or (c) in connection with any registration statement of the Company providing for the resale by the Purchasers of the Warrant Shares issued and issuable upon exercise of the Warrants, (i) any untrue or alleged untrue statement of a material fact contained in such registration statement, any prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or supplement thereto, in the light of the circumstances under which they were made) not misleading, except to the extent, but only to the extent, that such untrue statements or omissions are based solely upon information regarding such Purchaser Party furnished in writing to the Company by such Purchaser Party expressly for use therein, or (ii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act or any state securities law, or any rule or regulation thereunder in connection therewith. If any action shall be brought against any Purchaser Party in respect of which indemnity may be sought pursuant to this Agreement, such Purchaser Party shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Purchaser Party. Any Purchaser Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Purchaser Party except to the extent that (x) the employment thereof has been specifically authorized by the Company in writing, (y) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (z) in such action there is, in the reasonable opinion of counsel, a material conflict on any material issue between the position of the Company and the position of such Purchaser Party, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Purchaser Party under this Agreement (1) for any settlement by a Purchaser Party effected without the Company’s prior written consent, which shall not be unreasonably withheld or delayed; or (2) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Purchaser Party’s breach of any of the representations, warranties, covenants or agreements made by such Purchaser Party in this Agreement or in the other Transaction Documents. The indemnification required by this Section 4.9 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or are incurred. The indemnity agreements contained herein shall be in addition to any cause of action or similar right of any Purchaser Party against the Company or others and any liabilities the Company may be subject to pursuant to law.

4.10 Reservation and Listing of Securities.

(a) The Company shall maintain a reserve from its duly authorized shares of Common Stock for issuance pursuant to the Transaction Documents in such amount as may then be required to fulfill its obligations in full under the Transaction Documents.

(b) The Company shall, if applicable: (i) in the time and manner required by the principal Trading Market, prepare and file with such Trading Market an additional shares listing application covering a number of shares of Common Stock at least equal to the Shares and Warrant Shares on the date of such application, (ii) take all steps necessary to cause such shares of Common Stock to be approved for listing or quotation on such Trading Market as soon as possible thereafter, (iii) provide to the Purchasers evidence of such listing or quotation and (iv) maintain the listing or quotation of such Common Stock on such Trading Market or another Trading Market. The Company agrees to maintain the eligibility of the Common Stock for electronic transfer through the Depository Trust Company or another established clearing corporation, including, without limitation, by timely payment of fees to the Depository Trust Company or such other established clearing corporation in connection with such electronic transfer.

4.11 Participation in Future Financing.

(a) From the date hereof until the first anniversary of the Closing Date, upon any issuance by the Company or any of its Subsidiaries of Common Stock or Common Stock Equivalents for cash consideration (a "Subsequent Financing"), each Purchaser shall have the right to participate in such Subsequent Financing in an amount equal to up to 45% of the Subsequent Financing, provided that the aggregate participation right of all Purchasers shall not exceed 45% of such Subsequent Financing (the "Participation Maximum"), on the same terms, conditions and price provided for in the Subsequent Financing.

(b) Between the time period of 4:00 pm (New York City time) and 6:00 pm (New York City time) on the Trading Day immediately prior to the Trading Day of the expected announcement of the Subsequent Financing (or, if the Trading Day of the expected announcement of the Subsequent Financing is the first Trading Day following a holiday or a weekend (including a holiday weekend), between the time period of 4:00 pm (New York City time) on the Trading Day immediately prior to such holiday or weekend and 2:00 pm (New York City time) on the day immediately prior to the Trading Day of the expected announcement of the Subsequent Financing), the Company shall deliver to each Purchaser a written notice of the Company's intention to effect a Subsequent Financing (a "Subsequent Financing Notice"), which notice shall describe in reasonable detail the proposed terms of such Subsequent Financing, the amount of proceeds intended to be raised thereunder and the Person or Persons through or with whom such Subsequent Financing is proposed to be effected and shall include a term sheet and transaction documents relating thereto as an attachment.

(c) Any Purchaser desiring to participate in such Subsequent Financing must provide written notice to the Company by 6:30 am (New York City time) on the Trading Day following the date on which the Subsequent Financing Notice is delivered to such Purchaser (the “Notice Termination Time”) that such Purchaser is willing to participate in the Subsequent Financing, the amount of such Purchaser’s participation, and representing and warranting that such Purchaser has such funds ready, willing, and available for investment on the terms set forth in the Subsequent Financing Notice. If the Company receives no such notice from a Purchaser as of such Notice Termination Time, such Purchaser shall be deemed to have notified the Company that it does not elect to participate in such Subsequent Financing.

(d) If, by the Notice Termination Time, notifications by the Purchasers of their willingness to participate in the Subsequent Financing (or to cause their designees to participate) is, in the aggregate, less than the total amount of the Participation Maximum, then the Company may effect the remaining portion of such Participation Maximum on the terms and with the Persons set forth in the Subsequent Financing Notice.

(e) If, by the Notice Termination Time, the Company receives responses to a Subsequent Financing Notice from Purchasers seeking to purchase more than the aggregate amount of the Participation Maximum, each such Purchaser shall have the right to purchase its Pro Rata Portion (as defined below) of the Participation Maximum. “Pro Rata Portion” means the ratio of (x) the Subscription Amount of a Purchaser participating under this Section 4.11 and (y) the sum of the aggregate Subscription Amounts of all Purchasers participating under this Section 4.11.

(f) The Company must provide the Purchasers with a second Subsequent Financing Notice, and the Purchasers will again have the right of participation set forth above in this Section 4.11, if the definitive agreement related to the initial Subsequent Financing Notice is not entered into for any reason on the terms set forth in such Subsequent Financing Notice by 9:30 am (New York City time) on the second Trading Days following the date of delivery of the initial Subsequent Financing Notice.

(g) The Company and each Purchaser agree that, in connection with a Subsequent Financing, the transaction documents related to the Subsequent Financing shall include a requirement for the Company to issue a widely disseminated press release by 9:30 am (New York City time) on the Trading Day of execution of the transaction documents in such Subsequent Financing (or, if the date of execution is not a Trading Day, on the immediately following Trading Day) that discloses the material terms of the transactions contemplated by the transaction documents in such Subsequent Financing.

(h) Notwithstanding anything to the contrary in this Section 4.11 and unless otherwise agreed to by such Purchaser, the Company shall either confirm in writing to such Purchaser that the transaction with respect to the Subsequent Financing has been abandoned or shall publicly disclose its intention to issue the securities in the Subsequent Financing, in either case in such a manner such that such Purchaser will not be in possession of any material, non-public information, by 9:30 am (New York City time) on the third Trading Day following date of delivery of the Subsequent Financing Notice. If by 9:30 am (New York City time) on such third Trading Day, no public disclosure regarding a transaction with respect to the Subsequent Financing has been made, and no notice regarding the abandonment of such transaction has been received by such Purchaser, such transaction shall be deemed to have been abandoned and such Purchaser shall not be deemed to be in possession of any material, non-public information with respect to the Company or any of its Subsidiaries.

(i) Notwithstanding the foregoing, this Section 4.11 shall not apply in respect of an Exempt Issuance.

4.12 Subsequent Equity Sales.

(a) From the date hereof until 20 Trading Days following the Closing Date, neither the Company nor any Subsidiary shall issue, enter into any agreement to issue or announce the issuance or proposed issuance of any shares of Common Stock or Common Stock Equivalents.

(b) From the date hereof until 12 months following the Closing Date, the Company shall be prohibited from effecting or entering into an agreement to effect any issuance by the Company or any of its Subsidiaries of Common Stock or Common Stock Equivalents (or a combination of units thereof) involving a Variable Rate Transaction. “Variable Rate Transaction” means a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive, additional shares of Common Stock either (A) at a conversion price, exercise price or exchange rate or other price that is based upon, and/or varies with, the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such debt or equity securities or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock or (ii) enters into, or effects a transaction under, any agreement, including, but not limited to, an equity line of credit, whereby the Company may issue securities at a future determined price; provided, that, for the avoidance of doubt, the Company’s voluntary reduction of the exercise price of warrants issued and outstanding on the date of this Agreement as permitted pursuant to the terms of such warrants as of the date of this Agreement shall not constitute a Variable Rate Transaction. Any Purchaser shall be entitled to obtain injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages.

(c) Notwithstanding the foregoing, this Section 4.12 shall not apply in respect of an Exempt Issuance, except that no Variable Rate Transaction shall be an Exempt Issuance.

4.13 Equal Treatment of Purchasers. No consideration (including any modification of any Transaction Document) shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of the Transaction Documents unless the same consideration is also offered to all of the parties to such Transaction Documents. For clarification purposes, this provision constitutes a separate right granted to each Purchaser by the Company and negotiated separately by each Purchaser, and is intended for the Company to treat the Purchasers as a class and shall not in any way be construed as the Purchasers acting in concert or as a group with respect to the purchase, disposition or voting of the Securities or Warrant Shares or otherwise. For the avoidance of doubt, participation in an offering of the Company's securities alone shall not be considered "consideration" for purposes of this Section 4.13 with respect to a Person who has agreed to amend or consent to a waiver or modification of any provision of the Transaction Documents.

4.14 Form D; Blue Sky Filings. The Company agrees to timely file a Form D with respect to the Series O Warrant and Series O Warrant Shares as required under Regulation D and to provide a copy thereof, promptly upon request of any Purchaser. The Company shall take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for, or to qualify the Series O Warrant and Series O Warrant Shares for, sale to the Purchasers at the Closing under applicable securities or "Blue Sky" laws of the states of the United States, and shall provide evidence of such actions promptly upon request of any Purchaser.

ARTICLE V. MISCELLANEOUS

5 . 1 Termination. This Agreement may be terminated by any Purchaser, as to such Purchaser's obligations hereunder only and without any effect whatsoever on the obligations between the Company and the other Purchasers, by written notice to the other parties, if the Closing has not been consummated on or before January __, 2018; provided, however, that such termination will not affect the right of any party to sue for any breach by any other party (or parties).

5 . 2 Fees and Expenses. Except as expressly set forth in the Transaction Documents to the contrary, each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement. The Company shall pay all Transfer Agent fees (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company and any conversion or exercise notice delivered by a Purchaser), stamp taxes and other taxes and duties levied in connection with the delivery of any Securities or Warrant Shares to the Purchasers.

5 . 3 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto, the Prospectus and the Prospectus Supplement, contain the entire understanding of the parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules.

5.4 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via facsimile or email attachment at the facsimile number or email address as set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or email attachment at the facsimile number or email address as set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. The address, facsimile number and email address for such notices and communications shall be as set forth on the signature pages attached hereto. To the extent that any notice provided pursuant to any Transaction Document constitutes, or contains, material, non-public information regarding the Company or any Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K.

5.5 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of any amendment, by the Company and Purchasers which purchased at least 50.1% in interest of the Shares and the Series P Warrant Shares based on the initial Subscription Amounts hereunder, or, in the case of a waiver, by the party against which enforcement of any such waived provision is sought. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right. Any proposed waiver, modification, supplement or amendment that disproportionately, materially and adversely affects the rights and obligations of any Purchaser relative to the comparable rights and obligations of the other Purchasers shall require the prior written consent of such adversely affected Purchaser. Any waiver, modification, supplement or amendment effected in accordance with this Section 5.5 shall be binding upon each Purchaser and subsequent holder of Securities or Warrant Shares and the Company.

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

5.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of each Purchaser (other than by merger). Any Purchaser may assign any or all of its rights under this Agreement to any Person to whom such Purchaser assigns or transfers any Securities or Warrant Shares, provided that such transferee agrees in writing to be bound, with respect to the transferred Securities or Warrant Shares, by the provisions of the Transaction Documents that apply to the "Purchasers."

5.8 No Third-Party Beneficiaries. The Placement Agent shall be the third party beneficiary of the representations and warranties of the Company in Section 3.1 and the representations and warranties of the Purchasers in Section 3.2. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in Section 4.9 and this Section 5.8.

5.9 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal Proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan 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 Action or Proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such Action or Proceeding is improper or is an inconvenient venue for such Proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such 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 Agreement 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 law. If any party shall commence an Action or Proceeding to enforce any provisions of the Transaction Documents, then, in addition to the obligations of the Company under Section 4.9, the prevailing party in such Action or Proceeding shall be reimbursed by the non-prevailing party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such Action or Proceeding.

5.10 Survival. The representations and warranties contained herein shall survive the Closing and the delivery of the Securities.

5.11 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to each other party, it being understood that the parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature page were an original thereof.

5.12 Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

5.13 Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) any of the other Transaction Documents, whenever any Purchaser exercises a right, election, demand or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then such Purchaser may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights; provided, however, that in the case of a rescission of an exercise of a Warrant, the applicable Purchaser shall be required to return any shares of Common Stock subject to any such rescinded exercise notice concurrently with the return to such Purchaser of the aggregate exercise price paid to the Company for such shares and the restoration of such Purchaser's right to acquire such shares pursuant to such Purchaser's Warrant (including, issuance of a replacement warrant certificate evidencing such restored right).

5.14 Replacement of Securities and Warrant Shares. If any certificate or instrument evidencing any Securities or Warrant Shares is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof (in the case of mutilation), or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction. The applicant for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs (including customary indemnity) associated with the issuance of such replacement Securities or Warrant Shares.

5.15 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, each of the Purchasers and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agree to waive and not to assert in any Action for specific performance of any such obligation the defense that a remedy at law would be adequate.

5.16 Payment Set Aside. To the extent that the Company makes a payment or payments to any Purchaser pursuant to any Transaction Document or a Purchaser enforces or exercises its rights thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

5.17 Independent Nature of Purchasers' Obligations and Rights. The obligations of each Purchaser under any Transaction Document are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance or non-performance of the obligations of any other Purchaser under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Purchaser pursuant hereto or thereto, shall be deemed to constitute the Purchasers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Purchaser shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other Purchaser to be joined as an additional party in any Proceeding for such purpose. Each Purchaser has been represented by its own separate legal counsel in its review and negotiation of the Transaction Documents. For reasons of administrative convenience only, each Purchaser and its respective counsel have chosen to communicate with the Company through EGS. EGS does not represent any of the Purchasers and only represents the Placement Agent. The Company has elected to provide all Purchasers with the same terms and Transaction Documents for the convenience of the Company and not because it was required or requested to do so by any of the Purchasers. It is expressly understood and agreed that each provision contained in this Agreement and in each other Transaction Document is between the Company and a Purchaser, solely, and not between the Company and the Purchasers collectively and not between and among the Purchasers.

5.18 Liquidated Damages. The Company's obligations to pay any partial liquidated damages or other amounts owing under the Transaction Documents is a continuing obligation of the Company and shall not terminate until all unpaid partial liquidated damages and other amounts have been paid notwithstanding the fact that the instrument or security pursuant to which such partial liquidated damages or other amounts are due and payable shall have been canceled.

5.19 Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

5.20 Construction. The parties agree that each of them and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto. In addition, each and every reference to share prices and shares of Common Stock in any Transaction Document shall be subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

5.21 **WAIVER OF JURY TRIAL.** IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVES FOREVER TRIAL BY JURY.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

REAL GOODS SOLAR, INC.

Address for Notice:

RGS Energy
110 16th Street, Suite 300
Denver, CO 80202
Attn: Tyler Clarke
Fax: (303) 223-9206
Email: investorrelations@rgsenergy.com

By:

Name:
Title:

With a copy to (which shall not constitute notice):

Rikard Lundberg
Brownstein Hyatt Farber Schreck, LLP
410 Seventeenth Street, Suite 2200
Denver, CO 80202
Fax: (303) 223-8032
Email: RLundberg@BHFS.com

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SIGNATURE PAGE FOR PURCHASER FOLLOWS]

[PURCHASER SIGNATURE PAGES TO RGSE SECURITIES PURCHASE AGREEMENT]

IN WITNESS WHEREOF, the undersigned have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

Name of Purchaser: _____

Signature of Authorized Signatory of Purchaser: _____

Name of Authorized Signatory: _____

Title of Authorized Signatory: _____

Email Address of Authorized Signatory: _____

Facsimile Number of Authorized Signatory: _____

Address for Notice to Purchaser:

Address for Delivery of Warrants to Purchaser (if not same as address for notice):

DWAC for Shares: _____

Subscription Amount for Shares: \$ _____ Number of Shares: _____

Subscription Amount for Series P Warrants: \$ _____ Number of Series P Warrants: _____

Series O Warrant Shares: _____

I elect for my Warrants to have a ____ 4.99% or ____ 9.99% initial beneficial ownership blocker (if you do not make an election your Warrants will have a 9.99% blocker)

EIN Number: _____

Notwithstanding anything contained in this Agreement to the contrary, by checking this box (i) the obligations of the above-signed to purchase the securities set forth in this Agreement to be purchased from the Company by the above-signed, and the obligations of the Company to sell such securities to the above-signed, shall be unconditional and all conditions to Closing shall be disregarded, (ii) the Closing shall occur on the second (2nd) Trading Day following the date of this Agreement and (iii) any condition to Closing contemplated by this Agreement (but prior to being disregarded by clause (i) above) that required delivery by the Company or the above-signed of any agreement, instrument, certificate or the like or purchase price (as applicable) shall no longer be a condition and shall instead be an unconditional obligation of the Company or the above-signed (as applicable) to deliver such agreement, instrument, certificate or the like or purchase price (as applicable) to such other party on the Closing Date.

[SIGNATURE PAGES CONTINUE]

**Disclosure Schedule to Securities Purchase Agreement
Dated January __, 2018**

Schedule 3.1(a) Subsidiaries

Entity Name	State or country of Incorporation or Registration	
Alteris Renewables, Inc.	Delaware	1
Elemental Energy LLC	Hawaii	1
Real Goods Energy Tech, Inc.	Colorado	1
Real Goods Solar, Inc.	Colorado	
RGS Financing, Inc.	Colorado	1
Mercury Energy, Inc.	Delaware	1
Real Goods Solar, Inc. – Mercury Solar	New York	2
Other entities without material assets		
Alteris RPS, LLC	Delaware	3
Real Goods Syndicated, Inc.	Delaware	1
Richmond Peck Solar Farm, LLC	Delaware	3
Sunetric Management LLC	Delaware	4
Mercury Commercial Solar Fund I, LLC	New York	2
Mercury Solar Birch, LLC	Delaware	2
Mercury Solar Cedar, LLC	Delaware	2
Mercury Solar Pine, LLC	Delaware	2
Mercury Residential Solar Fund I, LLC	New York	2
RGS Energy, LLC	Puerto Rico	2
RGS Energy Asset Management, LLC	Delaware	1
RGS Capital, Inc.	Delaware	1
1. Subsidiary of Real Goods Solar, Inc.		
2. Subsidiary of Mercury Energy, Inc.		
3. Subsidiary of Alteris Renewables, Inc.		
4. Subsidiary of Elemental Energy, LLC		

Schedule 3.1(g) Capitalization

Capitalization schedule – Authorized and outstanding as of December 22, 2017

Class/Category	Authorized/ Reserved	Outstanding
Total authorized shares	250,000,000	-
Preferred Stock	50,000,000	-
Class A Common Stock	150,000,000	8,151,845
Warrants (for Class A Common Stock)	-	5,857,953
Stock Options	52,536	200
		14,009,998

Outstanding options, warrants

Outstanding Options, Warrants	Current Exercise Price	Outstanding	
Stock options	\$ 1,428 - \$ 46,560	176	Options outstanding under the Company's 2008 Long-Term Incentive Plan
June 2013 Warrants			Formula anti-dilution (shares and exercise price); purchase rights for pro-rata issuances; redemption for fundamental transactions and going private
	\$ 274.50	42,465	
November 2013 warrants			Adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 40,920.00	418	issuances; redemption for fundamental transactions and going private
June, 2014 Warrants			Adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 38,280	76	issuances; redemption for fundamental transactions and going private
Feb 2015 A & C Warrants			Full ratchet anti-dilution (exercise price); purchase rights for pro-rata
	\$ 6,000	9	issuances; adjustment of shares and exercise price for splits;
Feb 2015 Westpark warrants			redemption in certain circumstances in fundamental transactions
	\$ 6,000	47	Adjustment of shares and exercise price for splits; purchase rights for pro-rata
SVB Warrants			issuances; redemption in certain circumstances in fundamental transactions.
	\$ 9,720 - \$ 28,320	42	Ratchet for 12 months (expired); adjustment of shares and exercise price for splits
June 2015 Series F warrants			One time adjustment of exercise price on July 9, 2015; adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 744.00	868	issuances
June 2015 Westpark warrants			Adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 744.00	183	issuances; adjustment of exercise price for splits; purchase rights for pro-rata
April 2016 Series G Warrants			issuances
	\$ 1.36	3,323	One time adjustment of exercise price on April 1, 2017; adjustment of shares and exercise price for splits; purchase rights for pro-rata
April 2016 Roth Warrants			issuances
	\$ 496.80	1,411	One time adjustment of exercise price on date all Convertible Notes (as defined below) are paid-off; adjustment of shares and exercise price for splits; purchase rights for pro-rata
September 2016 Series H Warrants			issuances
	\$ 165.00	7,455	Includes 90,177 Class A Common shares, and 25,454 Series H Warrants (see Series H Warrants above)
September 2016 Underwriter Warrants			One time adjustment of exercise price on April 1, 2017; adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 30,000	5	issuances
December 2016 Series I Warrants			Adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 1.27	141,676	issuances
December 2016 Roth Warrants			Adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 10.50	30,834	issuances
February 6, 2017 Series K Warrants			Adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 3.10	3,710,000	issuances
February 6, 2017 Roth Warrants			Adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 3.88	185,500	issuances
February 9, 2017 Series M Warrants			Adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 2.40	1,609,974	issuances
February 9, Roth Warrants			Adjustment of shares and exercise price for splits; purchase rights for pro-rata
	\$ 3.13	120,000	issuances

In June 2013, the Company issued warrants originally exercisable to purchase 1,683,488 shares (pre-reverse stock splits) of Common Stock (the “June 2013 Warrants”), which contain a “formula” anti-dilution provision as well as a provision adjusting the shares and conversion price for stock splits, reverse stock splits and the like. There is currently a total of 17,300 shares of Common Stock issuable upon the exercise of the June 2013 Warrants at an exercise price of \$215.00 per share, after adjusting for the applicable reverse stock splits and subsequent issuances of securities but prior to giving effect to the securities issuable under this Agreement.

In addition, there are warrants to purchase 9 shares of Common Stock issued in February 2015 currently outstanding with the right to have their exercise price adjusted to the price of the securities issued under this Agreement.

As disclosed in the Prospectus Supplement, which disclosure is incorporated herein by reference, the Company has agreed in principle to issue and deliver an aggregate of 600,000 unregistered and restricted shares of Common Stock to a group of shareholders (or beneficial owners) who filed a definitive proxy statement with the SEC relating to the solicitation of proxies and seeking, among other things, to withhold all votes for director candidates nominated for election to the Board of Directors at the Company's 2017 annual meeting of shareholders, as reimbursement for expenses incurred in connection with the 2017 annual meeting of shareholders and the negotiation, execution and effectuation of an agreement to end the withhold proxy solicitation. The Company has not yet executed a binding agreement to do so and is not currently obligated or bound to issue such shares.

Convertible Notes

Outstanding Convertible Notes	Current Conversion Price	Convertible Notes Payable	
April 2016 Senior Secured Convertible Notes	see below	\$ 1,000.00	Redemption features

As previously disclosed, on April 1, 2016, the Company issued an aggregate of \$10,000,000 principal amount of Senior Secured Convertible Notes due April 1, 2019 (the "Convertible Notes"). The Convertible Notes are convertible at any time, at the option of the holders, into shares of Common Stock at the lower of a fixed and floating conversion price. The fixed conversion price is currently \$482.10 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 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 Convertible Notes, (ii) 85% of the volume-weighted average price of the 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 Common Stock on the trading day of the delivery of the applicable conversion notice by such holder of Convertible Notes. The terms of the Convertible Notes permit the Company's board of directors, with the prior consent of the "required holders" (as defined in the Convertible Notes), to reduce the then current conversion price to any amount and for any period of time deemed appropriate by the Company's board of directors. In no event may the conversion price be less than \$0.25 per share.

In accordance with the terms of the Convertible Notes, the Company has reduced the conversion price under the Convertible Notes for certain time periods at different prices. Most recently, the Company reduced the conversion price to \$7.50 for November 22, 2016, November 25, 2016, and November 28 through November 30, 2016.

As of December 22, 2017, the holders of the Convertible Notes have converted an aggregate of \$10.5 million of principal and interest under the Convertible Notes, and the Company has issued 659,095 shares of Common Stock at conversion prices between \$2.82 and \$52.21 per share. As of December 22, 2017, there remains outstanding Convertible Notes with an aggregate principal amount of \$1,000.

The Convertible Notes contain certain redemption rights upon, among other things, the occurrence of an event or default or a “fundamental transaction” (as defined in the Convertible Notes).

Stock Appreciation Rights

Under the 2008 Long-Term Incentive Plan (amended and restated November 16, 2016) the Company may grant Stock Appreciation Rights either alone, or in conjunction with other awards, either at the time of grant or by amendment thereafter.

Shareholder Agreement

Shareholders Agreement, dated as of December 19, 2011, between the Company and Riverside Renewable Energy Investments, LLC.

Schedule 3.1(i) Material Changes; Undisclosed Events, Liabilities or Developments

The disclosure about the Regrid Power, Inc. warranty claim and Final Acceptance Payment and Performance Bond, and the potential claim for reimbursement from an insurance carrier related to the July 2014 PIPE Offering (as defined in Schedule 3.1(j) set forth under Schedule 3.1(j) below is incorporated by reference herein.

The disclosure about the Company’s 2017 annual meeting of shareholders and Nasdaq Listing Rule 5620(a) set forth under Schedule 3.1(w) below is incorporated by reference herein.

The disclosure under the heading “PROSPECTUS SUPPLEMENT SUMMARY - Recent Developments” in the Prospectus Supplement is incorporated by reference herein.”

Schedule 3.1(j) Litigation

On July 9, 2014, the Company completed a private offering of approximately \$7.0 million of its Common Stock and warrants (the “July 2014 PIPE Offering”). Five of the investors that participated in the offering (out of approximately 20 total investors that participated in the offering) asserted claims against the Company in three separate lawsuits alleging certain misrepresentations and omissions in the offering. The Company subsequently reached settlements with all five investors. The Company recorded a charge to operations of \$0.5 million as of June 30, 2015, in recognition of the loss contingency for the July 2014 PIPE offering. That charge was equal to the retention under the Company’s 2014-15 Officers and Directors liability insurance policy as the Company expects the insurance policy will cover any future claims in excess of the retention limit.

The Company received a subpoena from the U.S. Securities and Exchange Commission (“SEC”) requesting certain information pertaining to the Company’s 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.

The Company incurred \$1.5 million of associated legal expenses related to the subpoena and the July 2014 PIPE Offering. In March 2016, the insurance carrier agreed to pay amounts it believed to constitute defense costs, while reserving all rights, including the right to recoup all amounts paid. The Company has recorded a long-term liability for amounts advanced by the insurance carrier of \$1.5 million as of December 31, 2016. The related disclosure under Schedule 3.1(aa) below is incorporated by reference herein.

On November 22, 2016, the Company provided the remaining cash collateral to Argonaut Insurance Company to fully secure the full amount of the \$624,000 Final Acceptance Payment and Performance Bond for a large commercial photovoltaic project the Company’s subsidiary Regrid Power, Inc. completed in 2012. As previously disclosed, the customer has raised warranty claims pertaining to the project and the Company currently maintains a specific warranty liability for the project of approximately \$200,000. On November 30, 2016, the Company received a letter from the customer in which the customer alleged that the Company has not completed agreed-upon remedial work to remedy alleged deficiencies and notified the Company that the customer intends to perform such remedial work at the Company’s expense using a third-party contractor. The customer also requested that the owner of the project demand the full amount of the performance bond. In addition, the customer demanded an aggregate of approximately \$400,000 as liquidated damages under the terms of the project contract. The Company denies these assertions and disputes that the customer is entitled to liquidate damages. The Company plans to avail itself of all defenses and remedies available. The Company estimates that the range of loss related to this warranty claim is from approximately \$200,000 to a maximum of approximately \$1 million. The Company has recorded a liability for the minimum amount of the range of loss.

On February 16, 2017, Alpha Capital Anstalt (“Alpha”), an investor in the Company’s February 6, 2017 public offering of common stock and warrants, filed a lawsuit against Roth Capital Partners, LLC, the Company’s investment banking firm in the offering, and the Company in U.S. District Court for the Southern District of New York. Alpha’s lawsuit alleges that the registration statement for the February 7, 2017 offering contained material misstatements or omissions and that the Company had breached contractual obligations owed to Alpha. Alpha seeks unspecified monetary damages, rescission and other unspecified relief in the lawsuit. The Company disputes Alpha’s allegations and intends to vigorously defend itself in the lawsuit. Under local court rules, the Company filed a letter motion seeking permission to file a motion to dismiss the claims related to the alleged misstatements and omissions in the complaint. On May 12, 2017, Alpha filed an amended complaint removing the fraud-related claims and leaving only breach of contract claims against the Company.

Schedule 3.1(l) Compliance

The disclosure about the Regrid Power, Inc. warranty claim and Final Acceptance Payment and Performance Bond set forth under Schedule 3.1(j) above is incorporated by reference herein.

The disclosure about the Company's 2017 annual meeting of shareholders and Nasdaq Listing Rule 5620(a) set forth under Schedule 3.1(w) below is incorporated by reference herein.

Schedule 3.1(v) Registration Rights

The Company has granted registration rights under the following:

The Amended and Restated Registration Rights Agreement, dated as of December 19, 2011, by and among the Company, Gaiam, Inc., and Riverside Renewable Energy Investments, LLC. [Note: On November 5, 2013, Gaiam ceased to be a party to the Amended and Restated Registration Rights Agreement pursuant to the terms of an Agreement, dated November 5, 2013, among the parties.]

The Registration Rights Agreement, dated as of June 3, 2013, by and among the Company and the investors party thereto.

The Warrants to purchase the Company's Common Stock, issued November 20, 2013.

The Registration Rights Agreement, dated as of July 9, 2014, by and among the Company and the investors party thereto.

The Conversion Agreement dated as of June 24, 2015 by and between the Company and Riverside Fund III, L.P.

Registration right granted to the Roth Capital Partners, LLC.

Pursuant to Section 4.1 of the Securities Purchase Agreement, dated as of December 8, 2016, by and among the Company and the investors party thereto, the Company has agreed to use its best efforts to keep a registration statement effective registering the issuance or resale of the shares of Common Stock issuable upon exercise of the Company's Series I Warrants, during the term of the Series I Warrants.

Pursuant to Section 4.1 of the Securities Purchase Agreement, dated as of February 1, 2017, by and among the Company and the investors party thereto, the Company has agreed to use its best efforts to keep a registration statement effective registering the issuance or resale of the shares of Common Stock issuable upon exercise of the Company's Series K Warrants, during the term of the Series K Warrants.

Pursuant to Section 4.1 of the Securities Purchase Agreement, dated as of February 7, 2017, by and among the Company and the investors party thereto, the Company has agreed to use its best efforts to keep a registration statement effective registering the issuance or resale of the shares of Common Stock issuable upon exercise of the Company's Series M Warrants, during the term of the Series M Warrants.

Schedule 3.1(w) Listing and Maintenance Requirements

The Company received written notice from Nasdaq on April 14, 2016, indicating that, based on the stockholders' equity reported in the Company's Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the SEC on April 1, 2016, the Company was not in compliance with the minimum stockholders' equity requirement for continued listing on the Nasdaq Capital Market. As set forth in Nasdaq Listing Rule 5550(b)(1) (the "Minimum Stockholders' Equity Requirement"), listed companies are required to maintain stockholders' equity of at least \$2,500,000.

On December 15, 2016, members of the Company's management attended a hearing before the NASDAQ Listing Qualifications Panel (the "Panel"). On January 26, 2017, the Company received a determination letter from the Panel, dated January 25, 2017, providing notice that it had regained compliance with Nasdaq's minimum shareholders' equity requirement and as such are eligible for continued listing on Nasdaq.

The Company will remain subject to a "Panel Monitor" as that term is defined under Nasdaq Listing Rule 5815(d)(4)(A), through January 15, 2018. Under the terms of the Panel Monitor, in the event the Company's shareholders' equity falls below the \$2,500,000 threshold (or any other requirement that would ordinarily require the Company to submit a compliance plan to the Nasdaq Staff) during the monitor period and the Company does not qualify for continued listing under an alternative to the shareholders' equity requirement, the Panel will promptly conduct a hearing with respect to the shareholders' equity deficiency.

On December 20, 2016, the Company received a letter from Nasdaq notifying it that for the prior 30 consecutive business days, the bid price of the Company's Common Stock had closed below the minimum \$1.00 per-share requirement for continued inclusion on Nasdaq based on Listing Rule 5550(a)(2), and describing a timetable for bringing the Company into compliance with that rule. On February 9, 2017, the Company received a letter from Nasdaq notifying the Company that Nasdaq Staff has determined that for the last 10 consecutive business days, from January 26, 2017 through February 8, 2017, the closing bid price of the Company's Class A common stock has been at \$1.00 per share or greater. Accordingly, the Company has regained compliance with Nasdaq Listing Rule 5550(a)(2).

On August 18, 2017, the Company received a letter from Nasdaq notifying the Company that for the last 30 consecutive business days, the bid price of the Company's Class A common stock had closed below the minimum \$1.00 per share requirement for continued inclusion on Nasdaq based on Listing Rule 5550(a)(2), and describing a timetable for bringing the Company into compliance with that rule. On October 18, 2017, the Company received a letter from Nasdaq notifying the Company that Nasdaq Staff has determined that for the last 10 consecutive business days, from October 4 through October 17, 2017, the closing bid price of the Company's Class A common stock has been at \$1.00 per share or greater. Accordingly, the Company has regained compliance with Nasdaq Listing Rule 5550(a)(2).

As of the date of the Agreement, the Company has not yet held its 2017 annual meeting of shareholders. As previously disclosed, the Company convened and subsequently adjourned the 2017 annual meeting of shareholders on each of August 23, 2017, October 5, 2017 and December 14, 2017 due to a quorum not being present. The Company adjourned the 2017 annual meeting of shareholders until January 18, 2018. Nasdaq Listing Rule 5620(a) requires the Company to hold its 2017 annual meeting of shareholders no later than December 31, 2017. The Company is in violation of Nasdaq Listing Rule 5620(a) as of January 1, 2018.

Schedule 3.1(aa) Solvency

Outstanding secured and unsecured Indebtedness owed in excess of \$50,000 (other than trade accounts payable incurred in the ordinary course of business) as of December 22, 2017.

Vendor	Type	Indebtedness	
CNA Insurance	Legal fees paid	\$ 1,503,609	Unsecured

Schedule 3.1(dd) Accountants

The Company's accounting firm for its 2017 financial statements is Moss Adams LLP.

FORM OF SERIES P WARRANT TO PURCHASE COMMON STOCK

REAL GOODS SOLAR, INC.

PREPAID SERIES P WARRANT TO PURCHASE COMMON STOCK

Warrant No.: P-[]

Number of Shares of Common Stock: []

Date of Issuance: [], 2018 (“**Issuance Date**”)

Real Goods Solar, Inc., a Colorado corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [PURCHASER], the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined in Section 1(b)) then in effect, at any time or times on or after the date hereof (the “**Initial Exercisability Date**”), but not after 11:59 p.m., New York time, on the Expiration Date, up to such number of fully paid and nonassessable shares of Common Stock equal to [], subject to adjustment as provided herein (the “**Warrant Shares**”). Except as otherwise defined herein, capitalized terms in this Prepaid Series P Warrant to Purchase Common Stock (including any warrants to purchase Common Stock issued in exchange, transfer or replacement hereof, this “**Warrant**”), shall have the meanings set forth in Section 17. This Warrant is one of the Prepaid Series P Warrants to Purchase Common Stock (the “**Series P Warrants**”) originally issued pursuant to Section 2 of the Securities Purchase Agreement, dated as of January __, 2018 (the “**Subscription Date**”), by and among the Company and the purchasers signatory thereto. The Exercise Price has been paid upon purchase of this Warrant except for further payment of \$0.01 per Warrant Share, to be paid on exercise hereof.

1. EXERCISE OF WARRANT.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder at any time or times on or after the Initial Exercisability Date, in whole or in part, by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the “**Exercise Notice**”), of the Holder’s election to exercise this Warrant and (ii) (A) payment to the Company of an amount equal to the applicable Exercise Price (as defined in Section 1(b)) multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the “**Aggregate Exercise Price**”) in cash by wire transfer of immediately available funds or (B) if the provisions of Section 1(d) are applicable, by notifying the Company that this Warrant is being exercised pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. No ink-original Exercise Notice shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Exercise Notice be required. Execution and delivery of an Exercise Notice for all of the then remaining Warrant Shares shall have the same effect as cancellation of the original of this Warrant after delivery of the Warrant Shares in accordance with the terms hereof. On or before the first (1st) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile an acknowledgment of confirmation of receipt of the Exercise Notice to the Holder and the Company’s transfer agent (the “**Transfer Agent**”). On or before the earlier of (i) the second (2nd) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period, following the date on which the Company has received the Exercise Notice, so long as the Holder delivers the Aggregate Exercise Price (or notice of a Cashless Exercise) on or prior to the first (1st) Trading Day following the date on which the Company has received the Exercise Notice (the “**Share Delivery Date**”) (provided that if the Aggregate Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Exercise Price (or notice of a Cashless Exercise) is delivered), the Company shall, (X) provided that the Transfer Agent is participating in The Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise. The Company agrees to maintain a transfer agent that is a participant in the DTC Fast Automated Securities Transfer Program so long as this Warrant remains outstanding and exercisable. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the issuance of Warrant Shares via DTC, if any. Upon delivery of the Exercise Notice, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder’s DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be. If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three (3) Trading Days after any exercise and at its own expense, issue a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares issuable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional Warrant Shares are to be issued upon the exercise of this Warrant, but rather the number of Warrant Shares to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes (other than the Holder’s income taxes) which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. The Company’s obligations to issue and deliver Warrant Shares in accordance with the terms and subject to the conditions hereof are absolute and unconditional, irrespective of any action or inaction by the 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. For purposes of clarity, if the Holder exercises this Warrant (other than by Cashless Exercise) at a time when the Holder may not sell the Warrant Shares without restriction or limitation either (I) pursuant to Rule 144 of the 1933 Act and without the requirement to be in compliance with Rule 144(c)(1) of the 1933 Act (or the Holder does not undertake to resell such Warrant Shares promptly after issuance while the Company is in compliance with the public information requirements of Rule 144(c)(1)) or (II) pursuant to an effective registration statement registering the Warrant Shares for issuance, the Company may satisfy the delivery of Warrant Shares under this Section 1(a) by issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise, which certificate may contain a restrictive legend.

(b) Exercise Price. For purposes of this Warrant, “**Exercise Price**” means the remaining amount of \$0.01, subject to adjustment as provided herein. The Exercise Price has been paid upon purchase of this Warrant except for the further payment of \$0.01 per Warrant Share, to be paid on exercise hereof.

(c) Company’s Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason, in the manner required by Section 1(a), to issue to the Holder on or prior to the Share Delivery Date either (I) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company’s share register or if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the Holder’s balance account with DTC, for such number of shares of Common Stock to which the Holder is entitled upon the Holder’s exercise of this Warrant, or (II) if the Registration Statement (as defined in Section 1(d)) covering the issuance of all of the Warrant Shares that are the subject of the Exercise Notice (the “**Unavailable Warrant Shares**”) is not available for the issuance of such Unavailable Warrant Shares and the Company fails to promptly, but in no event later than one (1) Trading Day thereafter, (x) so notify the Holder and (y) deliver the Warrant Shares electronically without any restrictive legend by crediting such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit / Withdrawal At Custodian system (the event described in the immediately foregoing clause (II) is hereinafter referred as a “**Notice Failure**” and together with the event described in clause (I) above, an “**Exercise Failure**”), as the case may be, and if on or after the Share Delivery Date the Holder (or any other Person in respect, or on behalf, of the Holder) purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of all or any portion of the number of shares of Common Stock equal to or any portion of the number of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company (a “**Buy-In**”), then, in addition to all other remedies available to the Holder, the Company shall, within three (3) Trading Days after the Holder’s request and in the Holder’s discretion, either (i) pay cash to the Holder in an amount equal to the Holder’s total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the “**Buy-In Price**”), at which point the Company’s obligation to deliver such certificate (and to issue such shares of Common Stock) or credit such Holder’s balance account with DTC for such shares of Common Stock shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit such Holder’s balance account with DTC, as applicable, and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the date of the applicable Exercise Notice and ending on the date of such issuance and payment under this Section 1(c). Nothing shall limit the 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 Company’s failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the exercise of this Warrant as required pursuant to the terms hereof.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Registration Statement on Form S-3 (File number 333-215985) or other applicable registration statement under the 1933 Act (the “**Registration Statement**”) covering the issuance of the Unavailable Warrant Shares is not available for the issuance of such Unavailable Warrant Shares the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the “Net Number” of shares of Common Stock determined according to the following formula (a “**Cashless Exercise**”):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{D}$$

For purposes of the foregoing formula:

A= the total number of shares with respect to which this Warrant is then being exercised.

B= the arithmetic average of the Closing Sale Prices of the Common Stock for the five (5) consecutive Trading Days ending on the date immediately preceding the date of the Exercise Notice.

C= the remaining \$0.01 Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

D= the Closing Sale Price of the Common Stock on the date of the Exercise Notice.

If Warrant Shares are issued in a Cashless Exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the 1933 Act, the Warrant Shares shall take on the registered characteristics of the Warrant being exercised, and the holding period of the Warrant being exercised may be tacked on to the holding period of the Warrant Shares. The Company agrees not to take any position contrary to this Section 1(d).

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 12.

(f) Beneficial Ownership Limitation on Exercises. Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 9.99% (the “**Maximum Percentage**”) of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f). For purposes of this Section 1(f), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the “**1934 Act**”). For purposes of this Warrant, in determining the number of outstanding shares of Common Stock the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the Securities and Exchange Commission (the “**SEC**”), as the case may be, (y) a more recent public announcement by the Company or (3) any other written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the “**Reported Outstanding Share Number**”). If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 1(f), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the “**Reduction Shares**”) and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the 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 Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder’s and the other Attribution Parties’ aggregate beneficial ownership exceeds the Maximum Percentage (the “**Excess Shares**”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided, however, that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Series P Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

(g) Insufficient Authorized Shares. If at any time while this Warrant remains outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon exercise of this Warrant at least a number of shares of Common Stock equal to the maximum number of shares of Common Stock as shall from time to time be necessary to effect the exercise of all of this Warrant then outstanding (the “**Required Reserve Amount**” and the failure to have such sufficient number of authorized and unreserved shares of Common Stock, an “**Authorized Share Failure**”), then the Company shall promptly take all action reasonably necessary to increase the Company’s authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for this Warrant and the other Series P Warrants then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than seventy-five (75) days after the occurrence of such Authorized Share Failure, the Company shall either (x) obtain the written consent of its shareholders for the approval of an increase in the number of authorized shares of Common Stock and provide each shareholder with an information statement with respect thereto or (y) hold a meeting of its shareholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each shareholder with a proxy statement and shall use its reasonable best efforts to solicit its shareholders’ approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the shareholders that they approve such proposal. Notwithstanding the foregoing, if any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding Common Stock to approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C. The initial number of shares of Common Stock reserved for exercise of this Warrant and the other Series P Warrants and each increase in the number of shares so reserved shall be allocated pro rata among the Holder and the holders of the other Series P Warrants, based on the number of shares of Common Stock issuable upon exercise of this Warrant (without regard to any limitations in exercise) issued to the Holder on the Issuance Date (the “**Authorized Share Allocation**”). In the event that the Holder shall sell or otherwise transfer this Warrant, each transferee shall be allocated a pro rata portion of such holder’s Authorized Share Allocation. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any Series P Warrants shall be allocated to the Holder and the remaining holders of Series P Warrants, pro rata based on the shares of Common Stock issuable upon exercise of the Series P Warrants then held by such holders (without regard to any limitations on the exercise of the Series P Warrants).

2 . ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and the number of Warrant Shares shall be adjusted from time to time as follows:

(a) [RESERVED]

(b) Adjustment Upon Subdivision or Combination of Shares of Common Stock. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased. Any adjustment under this Section 2(b) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(c) Other Events. If any event occurs of the type contemplated by the provisions of this Section 2, but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company’s Board of Directors will make an appropriate adjustment in the Exercise Price and the number of Warrant Shares, as mutually determined by the Company’s Board of Directors and the Required Holders, so as to protect the rights of the Holder; provided, however, that no such adjustment pursuant to this Section 2(c) will increase the Exercise Price or decrease the number of Warrant Shares as otherwise determined pursuant to this Section 2.

3. RIGHTS UPON DISTRIBUTION OF ASSETS. If the Company 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, options, evidence of indebtedness or any other assets 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 Warrant, 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 exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) 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, that to the extent that the Holder’s right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

4. PURCHASE RIGHTS: FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. In addition to any adjustments pursuant to Section 2 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class 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 exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) 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, that to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) Fundamental Transactions. The Company shall not enter into or be party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance reasonably satisfactory to the Required Holders and approved by the Required Holders, such approval not to be unreasonably withheld or delayed, prior to such Fundamental Transaction, including agreements, if so requested by the Holder, to deliver to each holder of the Series P Warrants in exchange for such Series P Warrants a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, an adjusted exercise price equal to the value for the shares of Common Stock reflected by the terms of such Fundamental Transaction, and exercisable for a corresponding number of shares of capital stock equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and satisfactory to the Required Holders, and with an exercise price which applies the exercise 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 adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the occurrence or consummation of such Fundamental Transaction). Upon the occurrence or consummation of any Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of any Fundamental Transaction that, the Company and the Successor Entity or Successor Entities, jointly and severally, shall succeed to, and the Company shall cause any Successor Entity or Successor Entities to jointly and severally succeed to, and be added to the term “Company” under this Warrant (so that from and after the date of such Fundamental Transaction, and the provisions of this Warrant referring to the “Company” shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Company and the Successor Entity or Successor Entities, jointly and severally, may exercise every right and power of the Company prior thereto and shall assume all of the obligations of the Company prior thereto under this Warrant with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company in this Warrant, and, solely at the request of the Holder, if the Successor Entity and/or Successor Entities is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market, shall deliver (in addition to and without limiting any right under this Warrant) to the Holder in exchange for this Warrant a security of the Successor Entity and/or Successor Entities evidenced by a written instrument substantially similar in form and substance to this Warrant and exercisable for a corresponding number of shares of capital stock of the Successor Entity and/or Successor Entities (the “**Successor Capital Stock**”) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction (such corresponding number of shares of Successor Capital Stock to be delivered to the Holder shall be equal to the greater of (A) the quotient of (i) the aggregate dollar value of all consideration (including cash consideration and any consideration other than cash (“**Non-Cash Consideration**”), in such Fundamental Transaction, as such values are set forth in any definitive agreement for the Fundamental Transaction that has been executed at the time of the first public announcement of the Fundamental Transaction or, if no such value is determinable from such definitive agreement, as determined in accordance with Section 12 with the term “Non-Cash Consideration” being substituted for the term “Exercise Price”) that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant) (the “**Aggregate Consideration**”) divided by (ii) the per share Closing Sale Price of such Successor Capital Stock on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (B) the product of (i) the Aggregate Consideration and (ii) the highest exchange ratio pursuant to which any shareholder of the Company may exchange Common Stock for Successor Capital Stock) (provided, however, that to the extent that the Holder’s right to receive any such shares of publicly traded common stock (or their equivalent) of the Successor Entity would result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, if applicable, then the Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held in abeyance for the Holder until such time or times, as its right thereto would not result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be delivered such shares to the extent as if there had been no such limitation), and such security shall be reasonably satisfactory to the Holder, and with an identical exercise price to the Exercise Price hereunder (such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting after the consummation or occurrence of such Fundamental Transaction the economic value of this Warrant that was in effect immediately prior to the consummation or occurrence of such Fundamental Transaction, as elected by the Holder solely at its option). Upon occurrence or consummation of the Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the occurrence or consummation of the Fundamental Transaction, as elected by the Holder solely at its option, shares of Common Stock, Successor Capital Stock or, in lieu of the shares of Common Stock or Successor Capital Stock (or other securities, cash, assets or other property purchasable upon the exercise of this Warrant prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), which for purposes of clarification may continue to be shares of Common Stock, if any, that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the occurrence or consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities, cash, assets or other property with respect to or in exchange for shares of Common Stock (a “**Corporate Event**”), the Company shall make appropriate provision to ensure that, and any applicable Successor Entity or Successor Entities shall ensure that, and it shall be a required condition to the occurrence or consummation of such Corporate Event that, the Holder will thereafter have the right to receive upon exercise of this Warrant at any time after the occurrence or consummation of the Corporate Event, shares of Common Stock or Successor Capital Stock or, if so elected by the Holder, in lieu of the shares of Common Stock (or other securities, cash, assets or other property) purchasable upon the exercise of this Warrant prior to such Corporate Event (but not in lieu of such items still issuable under Sections 3 and 4(a), which shall continue to be receivable on the Common Stock or on the such shares of stock, securities, cash, assets or any other property otherwise receivable with respect to or in exchange for shares of Common Stock), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights and any shares of Common Stock) which the Holder would have been entitled to receive upon the occurrence or consummation of such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event, had this Warrant been exercised immediately prior to such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event (without regard to any limitations on exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder. The provisions of this Section 4(b) shall apply similarly and equally to successive Fundamental Transactions and Corporate Events. Notwithstanding the foregoing, the Holder may elect, in its sole discretion, by delivery of written notice to the Company, to waive this Section 4(b) and allow the Company to enter into or be a party to a Fundamental Transaction without the assumption of this Warrant pursuant to the provisions of this Section 4(b), provided, however, that any such waiver shall only bind the Holder with respect to this Warrant and not the Holder with respect to any other warrant or other securities of the Company or any holder of other Series P Warrants.

(c) Notwithstanding anything herein to the contrary, the Company shall be required to obtain the prior written consent of the Required Holders to enter into, allow and/or consummate a Fundamental Transaction other than one in which a Successor Entity that is a publicly traded corporation whose stock is quoted or listed for trading on an Eligible Market assumes this Warrant such that the Warrant shall be exercisable for the publicly traded Common Stock of such Successor Entity.

5. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Incorporation or Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all of the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant, and (iii) shall, so long as any of the Series P Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the exercise of the Series P Warrants, the Required Reserve Amount to effect the exercise of the Series P Warrants then outstanding (without regard to any limitations on exercise).

6. WARRANT HOLDER NOT DEEMED A SHAREHOLDER. Except as otherwise specifically provided herein, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a shareholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a shareholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide the Holder with copies of the same notices and other information given to the shareholders of the Company generally, contemporaneously with the giving thereof to the shareholders.

7. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form (which shall not include the posting of any bond) and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new warrant or warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, that no Series P Warrants for fractional Warrant Shares shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

8. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, with respect to a notice to the Company or to a Holder, such notice shall be given in accordance with Section 5.4 of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the shares of Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of shares of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation; provided, however, in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder. It is expressly understood and agreed that the time of exercise specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended or waived and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

10. GOVERNING LAW; JURISDICTION; JURY TRIAL. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, 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 any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The Company 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 to the Company at the address set forth in the Securities Purchase Agreement 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 manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

11. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and all the Holders and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile or electronic mail within two (2) Business Days after receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within two (2) Business Days after such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within one (1) Business Day submit via facsimile (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Holder and approved by the Company, such approval not to be unreasonably withheld or delayed or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant, approved by the Holder, such approval not to be unreasonably withheld or delayed. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

14. TRANSFER. This Warrant and the Warrant Shares may be offered for sale, sold, transferred, pledged or assigned without the consent of the Company.

15. SEVERABILITY. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

16. DISCLOSURE. Upon receipt or delivery by the Company of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its subsidiaries, the Company shall within one (1) Business Day after any such receipt or delivery publicly disclose such material, nonpublic information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its subsidiaries, the Company so shall indicate to such Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its subsidiaries.

17. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) **“1933 Act”** means the Securities Act of 1933, as amended.

(b) **“Affiliate”** means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that “control” of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(a) **“Attribution Parties”** means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(b) **“Bloomberg”** means Bloomberg Financial Markets.

(c) **“Business Day”** means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(d) **“Closing Sale Price”** means, for any security as of any date, the last closing trade price for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing trade price, then the last trade price of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last trade price of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no last trade price is reported for such security by Bloomberg, the average of the ask prices of any market makers for such security as reported in the OTC Link or “pink sheets” by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(e) “**Common Stock**” means (i) the Company’s shares of Class A Common Stock, par value \$0.0001 per share, and (ii) any share capital into which such Common Stock shall have been changed or any share capital resulting from a reclassification of such Common Stock.

(f) “**Convertible Securities**” means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock.

(g) “**Eligible Market**” means the Principal Market, the NYSE American LLC, The NASDAQ Global Market, The NASDAQ Global Select Market, The New York Stock Exchange, Inc., the OTC Bulletin Board, the OTCQX or the OTCQB.

(h) “**Expiration Date**” means the date that is sixty (60) months after the Initial Exercisability Date, or, if such date falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a “**Holiday**”), the next day that is not a Holiday.

(i) “**Fundamental Transaction**” means (A) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that the Company shall, directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the Subscription Date calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other shareholders of the Company to surrender their shares of Common Stock without approval of the shareholders of the Company or (C) directly or indirectly, including through subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(j) **“Group”** means a “group” as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(k) **“Options”** means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(l) **“Parent Entity”** of a Person means an entity that, directly or indirectly, controls the applicable Person, including such entity whose common shares or common stock or equivalent equity security is quoted or listed on an Eligible Market (or, if so elected by the Required Holders, any other market, exchange or quotation system), or, if there is more than one such Person or such entity, the Person or such entity designated by the Required Holders or in the absence of such designation, such Person or entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(m) **“Person”** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(n) **“Principal Market”** means The NASDAQ Capital Market.

(o) **“Required Holders”** means the holders of the Series P Warrants representing at least a majority of the shares of Common Stock underlying the Series P Warrants then outstanding.

(p) **“Securities Purchase Agreement”** means the Securities Purchase Agreement, dated January __, 2018, entered into by the Company and the purchasers party thereto.

(q) **“Standard Settlement Period”** means the standard settlement period, expressed in a number of Trading Days, on the Company’s primary trading market or quotation system from time to time, with respect to trades of the Common Stock as in effect of the date of delivery of the Exercise Notice.

(r) **“Subject Entity”** means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(s) **“Successor Entity”** means one or more Person or Persons (or, if so elected by the Holder, the Company or Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or one or more Person or Persons (or, if so elected by the Holder, the Company or the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(t) **“Trading Day”** means any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Prepaid Series P Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

REAL GOODS SOLAR, INC.

By: _____
Name:
Title:

EXERCISE NOTICE
TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
PREPAID SERIES P WARRANT TO PURCHASE COMMON STOCK

REAL GOODS SOLAR, INC.

The undersigned holder hereby exercises the right to purchase _____ of the shares of Class A Common Stock, par value \$0.0001 per share (the "Warrant Shares"), of Real Goods Solar, Inc., a Colorado corporation (the "Company"), evidenced by the attached Prepaid Series P Warrant to Purchase Common Stock No. P-____ (the "Warrant"). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The holder intends that payment of the Exercise Price shall be made as:

_____ a "Cash Exercise" with respect to _____ Warrant Shares; or

_____ a "Cashless Exercise" with respect to _____ Warrant Shares.

2. Payment of Exercise Price. In the event that the holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the holder shall pay the Aggregate Exercise Price in the sum of \$_____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to the holder _____ Warrant Shares in accordance with the terms of the Warrant.

Please issue the Warrant Shares in the following name and to the following account:

Issue to: _____

Facsimile Number and Electronic Mail: _____

Authorization: _____

By: _____

Title: _____

Dated: _____

Broker Name: _____

Broker DTC #: _____

Broker Telephone #: _____

Account Number:
(if electronic book entry transfer) _____

Transaction Code Number:
(if electronic book entry transfer) _____

TRANSFER AGENT INSTRUCTIONS

REAL GOODS SOLAR, INC.

_____, 20__

Computershare Trust Company, N.A.
8742 Lucent Blvd. Suite 225
Highlands Ranch CO 80129
Telephone: (303) 262-0684
Facsimile: (303) 262-0609

Re: Order to Issue Common Stock of Real Goods Solar, Inc.

Ladies and Gentlemen:

Reference is made to (A) the Securities Purchase Agreement, dated as of January __, 2018, by and among Real Goods Solar, Inc., a Colorado corporation (the "**Company**"), and the purchasers party thereto, and the Company's Registration Statement on Form S-3 (File No. 333-215985) and the Company's prospectus filed on [____], 2018 pursuant to Rule 424 promulgated pursuant to the Securities Act of 1933, as amended (the "**1933 Act**") pursuant to which the Company is issuing to the purchasers (i) shares of Class A common stock of the Company, par value \$0.0001 per share (the "**Common Stock**"), and (ii) Series P Warrants (the "**Warrants**"), which are exercisable to purchase shares of Common Stock; (B) the related Transfer Agent Instructions, dated [____], 2018 (the "**January 2018 Instruction**"); (C) the exercise notice attached hereto (the "**Exercise Notice**"); and (D) a certificate of the General Counsel of the Company (or its outside legal counsel) that a registration statement covering the issuance of the shares of Common Stock subject to this letter has been declared effective by the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "**Counsel Instruction**").

This instruction letter shall serve as our authorization and direction to you to issue:

- to the recipient identified under "Issue to" in the Exercise Notice,
- in book entry form,
- such number of shares of Common Stock as set forth under "Delivery of Warrant Shares," respectively, in the Exercise Notice,
- out of the Transfer Agent Reserve (as defined in the January 2018 Instruction),
- by crediting the designated recipient's balance account with the Depository Trust Company, identified in the Exercise Notice under "Broker Name," "Broker DTC#," "Account Number," and "Transaction Code Number" through its Deposit Withdrawal at Custodian system

The issuance of these shares of Common Stock have been registered pursuant to an effective registration statement as indicated in the attached Counsel Instruction.

[Signature Page Follows]

Should you have any questions concerning this matter, please contact me at 303-222-8344.

Very truly yours,

REAL GOODS SOLAR, INC.

By: _____

Name:

Title:

B-17

PROSPECTUS

REAL GOODS SOLAR, INC.

\$130,716,933

Class A Common Stock

Preferred Stock

Warrants

Rights

Debt Securities

Units

We may offer and sell from time to time, in one or more offerings, Class A common stock, preferred stock, warrants, rights, debt securities and units (collectively, the “securities”) of Real Goods Solar, Inc. The aggregate amount of the securities offered by us under this prospectus will not exceed \$136,716,933.

Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with the additional information described under the heading “INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE” before you make your investment decision.

We may sell the securities to underwriters or dealers, through agents, or directly to investors, or a combination of these methods. We will set forth the names of any underwriters or agents in the applicable prospectus supplement.

Our Class A common stock is quoted on The Nasdaq Capital Market under the symbol “RGSE.” On July 10, 2017, the last reported sale price of our Class A common stock was \$0.92 per share. Pursuant to General Instruction I.B.6. of Form S-3, in no event will we sell the offered securities in a public primary offering with a value exceeding more than one-third of the aggregate market value of our Class A common stock held by non-affiliates in any 12-month period so long as the aggregate market value of our Class A common stock held by non-affiliates remains below \$75.0 million. We have not offered any securities pursuant to General Instruction I.B.6. during the 12 calendar months prior to and including the date of this prospectus.

Investing in our securities involves certain risks. See “RISK FACTORS” beginning on page 4 of this prospectus for the risks that you should consider. You should read this entire prospectus carefully before you make your investment decision.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is July 21, 2017.

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ABOUT THIS PROSPECTUS

Except where the context requires otherwise, in this prospectus the terms “Company,” “our company,” “Real Goods Solar,” “we,” “us,” and “our” refer to Real Goods Solar, Inc., a Colorado corporation, and where appropriate, its direct and indirect subsidiaries.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (the “SEC”) using a “shelf” registration process. Under the shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities that we may offer. Each time that we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement also may add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information incorporated by reference in this prospectus before making an investment in our securities. See “WHERE YOU CAN FIND MORE INFORMATION” for more information. We may use this prospectus to sell securities only if it is accompanied by a prospectus supplement. You should not assume that the information in this prospectus, any accompanying prospectus supplement or any document incorporated by reference is accurate as of any date other than the date of such document.

This prospectus contains trademarks, tradenames, service marks, and service names of the Company.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and documents incorporated by reference herein 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 implement our revenue growth strategy; our history of operating losses; our ability to achieve profitability; our ability to generate breakeven cash flow to fund our operations; our success in implementing our plans to increase future sales, and installations and revenue; restrictions on certain transactions and potential premiums and penalties under our outstanding warrants; 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 to which we may be subject from time to time; our failure to accurately predict future warranty claims; the outcome of a dispute with a customer of our former Commercial segment related to remedial work; the possibility that our insurance carrier seeks reimbursement of legal expenses up to \$1.5 million in connection with a now closed U.S. Securities and Exchange Commission investigation related to our July 2014 private placement; 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; increases in interest rates and tightening credit markets; our ability to meet customer expectations; risks and liabilities associated with placing employees and technicians in our customers' homes and businesses; product liability claims; future data security breaches, or our inability to protect personally identifiable information or other information about our customers; failure to comply with the director independence standards of the U.S. Securities and Exchange Commission and the Nasdaq Capital Market; 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; the terms of our outstanding warrants to purchase Class A common stock and securities purchase agreements in connection with past offerings which limit our ability to enter into certain transactions or obtain financing, and which could result in our paying premiums or penalties to the holders of outstanding warrants; an increase in our cost of materials that could arise if the United States imposes trade remedies on imported crystalline silicon photovoltaic cells and modules; 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, 2016 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 Report on Form 10-Q for the period ended March 31, 2017 .

Any forward-looking statement made by us in this prospectus and the documents incorporated by reference herein 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.

PROSPECTUS SUMMARY

This prospectus summary provides a brief overview of the key aspects of Real Goods Solar and the material terms of the offered securities that are known as of the date of this prospectus. Because it is a summary, it may not contain all of the information that may be important to you. For a more complete understanding of the terms of the offered securities, prior to making an investment decision, you should carefully read:

- This entire prospectus (including the section entitled “Risk Factors”), which explains the general terms of the securities we may offer;
- The applicable prospectus supplement, which explains specific terms of the securities being offered and updates and changes information in this prospectus; and
- The documents referred to in “WHERE YOU CAN FIND MORE INFORMATION” for information about Real Goods Solar, including our financial statements.

Overview of our Company

We are a residential and 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. Our solar energy systems use high-quality solar photovoltaic modules. We use proven technologies and techniques to help customers achieve 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 39 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 – catalog, for 2014, and corporate operations.

Our executive offices are located at 110 16th Street, 3rd Floor, Denver, CO 80202. Our telephone number is (303) 222-8300. Our website is www.rgsenergy.com. The information on our website is not intended to be a part of this prospectus, and you should not rely on any of the information provided there in making your decision to invest in our securities. Our website address referenced above is intended to be an inactive textual reference only and not an active hyperlink to our website.

Recent Developments

Reverse Stock Split

On January 25, 2017 at 11:59 pm Eastern Time, we executed a reverse stock split of all outstanding shares of our Common Stock at a ratio of one-for-thirty, whereby thirty shares of Common Stock were combined into one share of Common Stock. The reverse split was authorized by a vote of our shareholders at a special meeting held on January 23, 2017. We did not decrease our authorized shares of capital stock in connection with the reverse stock split. Share amounts set forth in this prospectus are presented to reflect the reverse split in all periods presented.

The Securities We May Offer

We may use this prospectus to offer:

- Class A common stock
- Preferred stock
- Warrants
- Rights
- Debt securities
- Units consisting of two or more of the other securities offered hereby or under another registration statement in any combination.

A prospectus supplement will describe the specific types, amounts, prices and detailed terms of any of these offered securities.

RISK FACTORS

An investment in our securities involves a high degree of risk. Before making an investment decision you should carefully read and consider the risks described below, together with all of the other information included or incorporated by reference in this prospectus, including, without limitation, the risk factors in the section entitled “Risk Factors” in our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are on file with the SEC. If any of the risks listed in our most recent Annual Report on Form 10-K or Quarterly Reports on Form 10-Q or any of the following risks actually occur, our business, financial condition, or results of operations could suffer. In that case, the market price of our Class A common stock offered by this prospectus could decline, and you may lose all or part of your investment. You should read the section entitled “Special Note Regarding Forward-Looking Statements” above for a discussion of what types of statements are forward-looking statements, as well as the significance of such statements in the context of this prospectus. Additional risks and uncertainties that we do not presently know or that we currently deem immaterial may also have a material adverse effect on our business.

USE OF PROCEEDS

Unless otherwise specified in a prospectus supplement accompanying this prospectus, we currently intend to use the net proceeds from the sale of the securities offered under this prospectus for general corporate purposes, which may include additions to working capital, financing of capital expenditures, repayment of existing or future indebtedness, and future acquisitions and strategic investment opportunities. Pending any use, as described in the applicable prospectus supplement, we plan to invest the net proceeds in short-term, investment grade, interest-bearing securities.

PLAN OF DISTRIBUTION

We may sell the securities being offered by this prospectus separately or together through any of the following methods:

- Directly to investors or purchasers;
- To investors through agents;
- Directly to agents;
- To or through brokers or dealers;
- To the public through underwriting syndicates led by one or more managing underwriters;

- To one or more underwriters acting alone for resale to investors or to the public;
- Through block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- Through a combination of any of these methods of sale; and
- Through any other method permitted pursuant to applicable law.

We may also issue securities upon exercise of warrants or as a dividend or distribution. We reserve the right to sell securities directly to investors on our own behalf in those jurisdictions where we are authorized to do so.

We may distribute the securities from time to time in one or more transactions:

- At a fixed price or prices, which may be changed from time to time;
- At market prices prevailing at the times of sale;
- At prices related to such prevailing market prices; or
- At negotiated prices.

Direct Sales and Sales through Agents

We may directly solicit offers to purchase the securities offered by this prospectus. Agents designated by us from time to time may solicit offers to purchase the securities. We will name any agent involved in the offer or sale of the securities and set forth any commissions payable by us to an agent in the applicable prospectus supplement. Unless otherwise indicated in the applicable prospectus supplement, any agent will be acting on a best efforts basis for the period of his or her appointment. Any agent may be deemed to be an “underwriter” of the securities as that term is defined in the Securities Act of 1933, as amended (the “Securities Act”).

Sales Through Underwriters or Dealers

If we use an underwriter or underwriters in the sale of securities, we will execute an underwriting agreement with the underwriter or underwriters at the time we reach an agreement for sale. We will set forth in the applicable prospectus supplement the names of the specific managing underwriter or underwriters, as well as any other underwriters, and the terms of the transactions, including compensation of the underwriters and dealers. This compensation may be in the form of discounts, concessions or commissions. The maximum underwriting compensation for any offering under the registration statement to which this prospectus relates may not exceed 8% of the offering proceeds. Underwriters and others participating in any offering of the securities may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. We will describe any of these activities in the applicable prospectus supplement.

If a dealer is used in the sale of the securities, we or an underwriter will sell securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. The applicable prospectus supplement will set forth the name of the dealer and the terms of the transactions.

We may directly solicit offers to purchase the securities, and we may sell directly to institutional investors or others. These persons may be deemed to be underwriters within the meaning of the Securities Act with respect to any resale of the securities. The applicable prospectus supplement will describe the terms of any direct sales, including the terms of any bidding or auction process.

Agreements we enter into with agents, underwriters and dealers may entitle them to indemnification by us against specified liabilities, including liabilities under the Securities Act, or to contribution by us to payments they may be required to make in respect of these liabilities. The applicable prospectus supplement will describe the terms and conditions of indemnification or contribution.

Delayed Delivery Contracts

We may authorize underwriters, dealers and agents to solicit offers by certain institutional investors to purchase offered securities under contracts providing for payment and delivery on a future date specified in the applicable prospectus supplement. The applicable prospectus supplement will also describe the public offering price for the securities and the commission payable for solicitation of these delayed delivery contracts. Delayed delivery contracts will contain definite fixed price and quantity terms. The obligations of a purchaser under these delayed delivery contracts will be subject to only two conditions:

- That the institution's purchase of the securities at the time of delivery of the securities is not prohibited under the law of any jurisdiction to which the institution is subject; and
- That we shall have sold to the underwriters the total principal amount of the offered securities, less the principal amount covered by the delayed delivery contracts.

"At the Market" Offerings

We may from time to time engage a firm to act as our agent for one or more offerings of our securities. We sometimes refer to this agent as our "offering agent." If we reach agreement with an offering agent with respect to a specific offering, including the number of securities and any minimum price below which sales may not be made, then the offering agent will try to sell such securities on the agreed terms. The offering agent could make sales in privately negotiated transactions or using any other method permitted by law, including sales deemed to be an "at the market" offering as defined in Rule 415 promulgated under the Securities Act, including sales made directly on any national exchange upon which our securities are listed, or sales made to or through a market maker other than on an exchange. The offering agent will be deemed to be an "underwriter" within the meaning of the Securities Act with respect to any sales effected through an "at the market" offering.

Market Making, Stabilization and Other Transactions

To the extent permitted by and in accordance with Regulation M promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), in connection with an offering, an underwriter may engage in over-allotments, stabilizing transactions, short covering transactions and penalty bids. Over-allotments involve sales in excess of the offering size, which creates a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would be otherwise. If commenced, the underwriters may discontinue any of these activities at any time.

To the extent permitted by and in accordance with Regulation M promulgated under the Exchange Act, any underwriters who are qualified market makers on any national exchange upon which our securities are listed may engage in passive market making transactions in the securities on such exchange during the business day prior to the pricing of an offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers.

In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

DESCRIPTION OF CLASS A COMMON STOCK

Our authorized common stock consists of 150,000,000 shares of Class A common stock, par value \$.0001 per share. As of July 10, 2017, there were 7,480,906 shares of our Class A common stock outstanding. Although we believe the following summary description of our Class A common stock set forth below is accurate, our articles of incorporation and our bylaws covers all material provisions affecting the rights of holders of our Class A common stock. This summary is not intended to be complete and is qualified by reference to the provisions of applicable law and to our articles of incorporation and bylaws.

Voting Rights

Each holder of shares of Class A common stock is entitled to one vote for each share held on all matters submitted to a vote of shareholders. There are no cumulative voting rights. All holders of shares of Class A common stock vote as a single group on all matters that are submitted to the shareholders for a vote. Accordingly, holders of a majority of the shares of Class A common stock entitled to vote in any election of directors may elect all of the directors who stand for election. Our entire board of directors stands for election each year. A required number of shareholders having the minimum number of votes that would be necessary to authorize or take action at a meeting at which all of the shares entitled to vote thereon were present and voted may consent to an action in writing and without a meeting under certain circumstances.

Dividends and Liquidation

Subject to any preferential rights of any outstanding shares of preferred stock, shares of Class A common stock are entitled to receive dividends, if any, as may be declared by our board of directors out of legally available funds. In the event of a liquidation, dissolution or winding up of our company, the shares of Class A common stock are entitled to our assets remaining after the payment of all of our debts and other liabilities, including preferential payments made to holders of any outstanding shares of preferred stock. Holders of shares of Class A common stock have no preemptive, subscription or redemption rights, and there are no redemption or sinking fund provisions applicable to the shares of Class A common stock.

Anti-Takeover Effects of Our Articles of Incorporation and Bylaws

The following provisions, which are contained in our articles of incorporation or bylaws, could have the effect of delaying, deferring or preventing a change in control of our company.

Our articles of incorporation and bylaws provide that our board may consist of any number of directors, which may be fixed from time to time by our board. Newly created directorships resulting from any increase in our authorized number of directors may be filled by the affirmative vote of a majority of the directors then in office or by an election at an annual meeting or special meeting of shareholders called for that purpose, and any vacancies on our board resulting from death, resignation, retirement, disqualification, removal from office or other cause may be filled a majority of our board then in office, even if less than a quorum is remaining in office.

Our bylaws require advance notice by a shareholder of any proposal to be brought before an annual meeting of shareholders by a shareholder, including any nomination for election of directors by any shareholder entitled to vote for the election of directors at the meeting. Our bylaws also provide that no shareholder proposal may be considered at a meeting of our shareholders unless the proposal relates to a matter on which a shareholder vote is required by our charter, bylaws or by applicable law.

Our board of directors has the power to issue preferred stock with designations, preferences, limitations and relative rights determined by the board of directors without any vote or action by shareholders. The issuance of preferred stock or of rights to purchase preferred stock could have the effect of making it more difficult for a third party to acquire Real Goods Solar, or of discouraging a third party from attempting to acquire Real Goods Solar.

Subject to repeal or change by action of our shareholders, our board may amend, supplement or repeal our bylaws or adopt new bylaws.

Registration Rights

In connection with the closing of its June 3, 2013 private placement, Real Goods Solar entered into a Registration Rights Agreement with the investors to have their shares of Real Goods Solar Class A common stock purchased in the private placement and issuable upon exercise of warrants purchased in the private placement registered with the SEC for public resale under the Securities Act. On June 20, 2013, Real Goods Solar filed a registration statement on Form S-3 to register these shares pursuant to the terms of this Registration Rights Agreement. The SEC declared the registration statement effective on July 3, 2013. Real Goods Solar is required to maintain the effectiveness of the registration statement until the earlier to occur of (a) the fifth anniversary of the effectiveness of the registration statement, or (b) the date on which all of the registrable securities covered by the Registration Rights Agreement have been sold or transferred in a manner that they may be resold without subsequent registration under the Securities Act.

The Registration Rights Agreement further provides that in the event that (a) the registration statement ceases to be effective and available to the investors under certain circumstances, or (b) Real Goods Solar fails to timely file all reports required to be filed under the Exchange Act other than Current Reports on Form 8-K, Real Goods Solar shall pay to the holders of registrable securities, on the occurrence of each such event and on each monthly anniversary thereof until the applicable event is cured, an amount in cash equal to 1.0% of the aggregate purchase price paid by an investor multiplied by the percentage of such investor's registrable securities that are not covered by the registration statement, up to a maximum of 10.0% of such aggregate purchase price. The foregoing description is subject to the terms and conditions identified in the Registration Rights Agreement.

On November 15, 2013, Real Goods Solar entered into an Underwriting Agreement with an underwriter in connection with a registered public offering. Pursuant to the Underwriting Agreement, Real Goods Solar has agreed to file a registration statement covering the issuance of the shares of Real Goods Solar Class A common stock underlying the warrants issued in the offering on November 20, 2013 and to cause such registration statement to be declared effective before the time the warrants become exercisable and to remain effective through the earlier of (a) the expiration date of the warrants and (b) the date on which all of the warrants shall have been exercised in full. The warrants are exercisable at any time on or after the one year anniversary of their original issuance and at any time up to the date that is five and one-half years after the date of their original issuance. If a registration statement registering the issuance of the shares of Real Goods Solar Class A common stock underlying the warrants under the Securities Act is not effective or available and an exemption from registration under the Securities Act is not available for the issuance of such shares, if the holder, in its sole discretion, elects to exercise a warrant, the holder shall do so through a cashless exercise, in which case the holder would receive upon such exercise the "net number" of shares of Real Goods Solar Class A common stock determined according to the formula set forth in the warrant.

In connection with the closing of its July 2, 2014 private placement, Real Goods Solar entered into a Registration Rights Agreement with the investors to have their shares of Real Goods Solar Class A common stock purchased in the private placement and issuable upon exercise of warrants purchased in the private placement registered with the SEC for public resale under the Securities Act. On July 31, 2014, Real Goods Solar filed a registration statement on Form S-3 to register these shares pursuant to the terms of this Registration Rights Agreement. The SEC declared the registration statement effective on August 11, 2014. Real Goods Solar is required to maintain the effectiveness of the registration statement until the earlier to occur of (a) the fifth anniversary of the effectiveness of the registration statement, or (b) the date on which all of the registrable securities covered by the Registration Rights Agreement have been sold or transferred in a manner that they may be resold without subsequent registration under the Securities Act.

The Registration Rights Agreement further provides that in the event that (a) the registration statement ceases to be effective and available to the investors under certain circumstances, or (b) Real Goods Solar fails to timely file all reports required to be filed under the Exchange Act other than Current Reports on Form 8-K, Real Goods Solar shall pay to the holders of registrable securities, on the occurrence of each such event and on each monthly anniversary thereof until the applicable event is cured, an amount in cash equal to 1.0% of the aggregate purchase price paid by an investor multiplied by the percentage of such investor's registrable securities that are not covered by the registration statement, up to a maximum of 10.0% of such aggregate purchase price. The foregoing description is subject to the terms and conditions identified in the Registration Rights Agreement.

On February 23, 2015, Real Goods Solar entered into a Securities Purchase Agreement with an investor in connection with a registered public offering. Pursuant to the Securities Purchase Agreement, Real Goods Solar must use reasonable best efforts to maintain a registration statement effective registering the Registerable Securities (as defined in the Securities Purchase Agreement) for as long as the Series A Warrants, the Series B Warrants, the Series C Warrants and the Series D Warrants issued pursuant to the terms of the Securities Purchase Agreement are outstanding.

On June 26, 2015, Real Goods Solar entered into a Securities Purchase Agreement with several investors in connection with a registered public offering. Pursuant to the Securities Purchase Agreement, Real Goods Solar must use reasonable best efforts to maintain a registration statement effective registering the Registerable Securities (as defined in the Securities Purchase Agreement) for as long as the Series F Warrants issued pursuant to the terms of the Securities Purchase Agreement are outstanding.

On December 8, 2016, Real Goods Solar entered into a Securities Purchase Agreement with several investors in connection with a registered public offering. Pursuant to the Securities Purchase Agreement, Real Goods Solar must use best efforts to maintain a registration statement effective registering the issuance or resale of the shares of Real Goods Solar Class A common stock issuable upon exercise of the Series I Warrants for five years.

On February 1, 2017, Real Goods Solar entered into a Securities Purchase Agreement with several investors in connection with a registered public offering. Pursuant to the Securities Purchase Agreement, Real Goods Solar must use best efforts to maintain a registration statement effective registering the issuance or resale of the shares of Real Goods Solar Class A common stock issuable upon exercise of the Series K Warrants and the Series L Warrants, as applicable, for five years.

On February 7, 2017, Real Goods Solar entered into a Securities Purchase Agreement with several investors in connection with a registered public offering. Pursuant to the Securities Purchase Agreement, Real Goods Solar must use best efforts to maintain a registration statement effective registering the issuance or resale of the shares of Real Goods Solar Class A common stock issuable upon exercise of the Series M Warrants and the Series N Warrants, as applicable, for five years.

Transfer Agent and Registrar

The transfer agent and registrar for our Class A common stock is Computershare Trust Company.

Listing

Our Class A common stock is listed on the Nasdaq Capital Market under the symbol "RGSE."

DESCRIPTION OF PREFERRED STOCK

Our board of directors is authorized, subject to any limitations prescribed by Colorado law, to issue at any time up to 50,000,000 shares of preferred stock. Our board of directors may provide for the issuance of the preferred stock in one or more series or classes with designations, preferences, limitations and relative rights determined by the board of directors without any vote or action by our shareholders as expressed in articles of amendment filed with the Colorado Secretary of State. As a result, the board has the power to issue preferred stock with voting, conversion and other rights and preferences that could adversely affect the voting power or other rights of the holders of our common stock. Although we have no current plans to issue any preferred stock, the issuance of preferred stock or of rights to purchase preferred stock could have the effect of making it more difficult for a third party to acquire us, or of discouraging a third party from attempting to acquire us. Such an issuance could also dilute the voting power or other incidents of ownership of holders of our common stock.

The issuance of preferred stock could adversely affect the voting power of holders of our common stock, and the likelihood that preferred holders will receive dividend and liquidation preferences may have the effect of delaying, deferring or preventing a change in control of the Company, which could depress the market price of our common stock.

Unless otherwise indicated in the prospectus supplement, all shares of preferred stock to be issued from time to time under this prospectus will be fully paid and nonassessable.

The prospectus supplement relating to the preferred stock offered will contain a description of the specific terms of that series as fixed by our board of directors, including, as applicable:

- The number of shares of preferred stock offered and the offering price of the preferred stock;
- The title and stated value of the preferred stock;
- The dividend rate(s), period(s) or payment date(s) or method(s) of calculation of such rates, periods or dates applicable to the preferred stock;
- The date from which dividends on the preferred stock will accumulate, if applicable;
- The liquidation rights of the preferred stock;
- The procedures for auction and remarketing, if any, of the preferred stock;
- The sinking fund provisions, if applicable, for the preferred stock;
- The redemption provisions, if applicable, for the preferred stock;
- Whether the preferred stock will be convertible into or exchangeable for other securities offered hereby or under another registration statement and, if so, the terms and conditions of the conversion or exchange, including the conversion price or exchange ratio and the conversion or exchange period (or the method of determining the same);
- Whether the preferred stock will have voting rights and the terms of any voting rights, if any;
- Whether the preferred stock will be listed on any securities exchange;
- Whether the preferred stock will be issued with any other securities offered hereby or under another registration statement and, if so, the amount and terms of these securities; and
- Any other specific terms, preferences or rights of, or limitations or restrictions on, the preferred stock.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of common stock, preferred stock, debt securities or other securities offered hereby or under another registration statement. Warrants may be issued independently or together with common stock, preferred stock, debt securities or other securities offered hereby or under another registration statement and may be attached to or separate from any such offered securities. Series of warrants may be issued under a separate warrant agreement entered into between us and a bank or trust company, as warrant agent, all as will be set forth in the prospectus supplement relating to the particular issue of warrants. The warrant agent would act solely as our agent in connection with the warrants and would not assume any obligation or relationship of agency or trust for or with any holders of warrants or beneficial owners of warrants.

As of July 10, 2017, we had outstanding warrants to purchase 6,527,958 shares of our Class A common stock.

The prospectus supplement relating to the warrants offered will contain a description of the specific terms of that series as fixed by our board of directors, including, as applicable:

- The title and aggregate number of the warrants;

- The offering price;
- The currency or currencies, including composite currencies or currency units, in which the price of the warrants may be payable;
- The number of shares of common stock or preferred stock, or the number or amount of other securities offered hereby or under another registration statement, purchasable upon the exercise of a warrant;
- The exercise price or manner of determining the exercise price, the manner in which the exercise price may be paid, and any minimum number of warrants exercisable at one time;
- When the warrants become exercisable and the expiration date;
- The terms of any right of ours to redeem or call the warrants;
- The terms of any right of ours to accelerate the exercisability of the warrants;
- Where the warrant certificates may be transferred and exchanged;
- Whether the warrants are to be issued with common stock, preferred stock or other securities offered hereby or under another registration statement and, if so, the number and terms of any such offered securities;
- The date, if any, on and after which the warrants and the related shares of common stock, preferred stock or other securities offered hereby or under another registration statement will be separately transferable;
- United States federal income tax consequences applicable to the warrants; and
- Any other terms of the warrants, including terms, procedures and limitations relating to exchange and exercise of the warrants.

You should refer to the provisions of the warrant agreement that will be filed with the SEC in connection with the offering of warrants for the complete terms of the warrant agreement.

Prior to the exercise of any warrants, holders of such warrants will not have any rights of holders of the securities purchasable upon such exercise, including the right to receive payments of dividends, or the right to vote such underlying securities.

DESCRIPTION OF RIGHTS

We may issue rights to purchase common stock, preferred stock or debt securities. These rights may be issued independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the rights in such offering. In connection with any offering of such rights, we may enter into a standby arrangement with one or more underwriters or other purchasers pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering.

Each series of rights will be issued under a separate rights agreement which we will enter into with a bank or trust company, as rights agent, all as set forth in the applicable prospectus supplement. The rights agent will act solely as our agent in connection with the certificates relating to the rights and will not assume any obligation or relationship of agency or trust with any holders of rights certificates or beneficial owners of rights. We will file the rights agreement and the rights certificates relating to each series of rights with the SEC, and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of rights.

The applicable prospectus supplement will describe the specific terms of any offering of rights for which this prospectus is being delivered, including the following:

- The date of determining the stockholders entitled to the rights distribution;
- The number of rights issued or to be issued to each stockholder;
- The exercise price payable for each share of common stock, preferred stock, debt securities or other securities offered hereby or under another registration statement upon the exercise of the rights;
- The number and terms of the shares of common stock, preferred stock, debt securities or other securities offered hereby or under another registration statement which may be purchased per each right;
- The extent to which the rights are transferable;
- The date on which the holder's ability to exercise the rights shall commence, and the date on which the rights shall expire;
- The extent to which the rights may include an over-subscription privilege with respect to unsubscribed securities;
- If applicable, the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of such rights; and
- Any other terms of the rights, including the terms, procedures, conditions and limitations relating to the exchange and exercise of the rights.

The description in the applicable prospectus supplement of any rights that we may offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable rights certificate, which will be filed with the SEC.

DESCRIPTION OF DEBT SECURITIES

We may issue senior debt securities or subordinated debt securities. Senior debt securities will be issued under an indenture, the "senior indenture," between us and the trustee named in the applicable prospectus supplement, as trustee. Subordinated debt securities will be issued under a separate indenture, the "subordinated indenture," between us and the trustee named in the applicable prospectus supplement, as trustee. The senior indenture and the subordinated indenture are sometimes collectively referred to in this prospectus as the "indentures." The indentures will be subject to and governed by the Trust Indenture Act of 1939. A copy of the form of each of these indentures is filed as an exhibit to the registration statement of which this prospectus is a part. This prospectus describes the general terms and provisions of the debt securities. When we offer to sell a particular series of debt securities, we will describe the specific terms of the securities in a supplement to this prospectus. The prospectus supplement will also indicate whether the general terms and provisions described in this prospectus apply to a particular series of debt securities.

The following briefly describes the general terms and provisions of the debt securities and the indentures governing them which may be offered. The particular terms of the debt securities offered, and the extent, if any, to which these general provisions may apply to the debt securities so offered, will be described in a prospectus supplement relating to those securities. The following descriptions of the indentures are not complete and are subject to, and are qualified in their entirety by reference to, all the provisions of the respective indentures.

General

The indentures permit us to issue the debt securities from time to time, without limitation as to aggregate principal amount, and in one or more series. The indentures also do not limit or otherwise restrict the amount of other indebtedness which we may incur or other securities which we or our subsidiaries may issue, including indebtedness which may rank senior to the debt securities. Nothing in the subordinated indenture prohibits the issuance of securities representing subordinated indebtedness that is senior or junior to the subordinated debt securities. Debt securities we issue may be secured or unsecured.

Unless we give you different information in the prospectus supplement, the senior debt securities will be unsubordinated obligations and will rank equally with all of our other unsecured and unsubordinated indebtedness. Payments on the subordinated debt securities will be subordinated to the prior payment in full of all of our senior indebtedness, as described under "Subordination" and in the applicable prospectus supplement. Payments on secured debt securities will be secured by the collateral described in the applicable prospectus supplement.

We may issue debt securities if the conditions contained in the applicable indenture are satisfied. These conditions include the adoption of resolutions by our board of directors that establish the terms of the debt securities being issued. Any resolution approving the issuance of any issue of debt securities will include the terms of that issue of debt securities, which may include:

- The title and series designation;
- The aggregate principal amount and the limit, if any, on the aggregate principal amount or initial issue price of the debt securities which may be issued under the applicable indenture;
- The principal amount payable, whether at maturity or upon earlier acceleration;
- Whether the principal amount payable will be determined with reference to an index, formula or other method which may be based on one or more currencies, currency units, composite currencies, commodities, equity indices or other indices;
- Whether the debt securities will be issued as original issue discount securities (as defined below);
- The date or dates on which the principal of the debt securities is payable;
- Any fixed or variable interest rate or rates per annum or the method or formula for determining an interest rate;
- The date from which any interest will accrue;
- Any interest payment dates;
- Whether the debt securities are senior or subordinated, and if subordinated, the terms of the subordination;
- Whether the debt securities are secured or unsecured, and if secured, the collateral securing the debt securities;
- The price or prices at which the debt securities will be issued, which may be expressed as a percentage of the aggregate principal amount of those debt securities;
- The stated maturity date;
- Whether the debt securities are to be issued in global form;

- Any sinking fund requirements;
- Any provisions for redemption, the redemption price and any remarketing arrangements;
- The denominations of the securities or series of securities;
- Whether the debt securities are denominated or payable in U.S. dollars or a foreign currency or units of two or more foreign currencies;
- Any restrictions on the offer, sale and delivery of the debt securities;
- The place or places where payments or deliveries on the debt securities will be made and may be presented for registration of transfer or exchange;
- Whether any of the debt securities will be subject to defeasance in advance of the date for redemption or the stated maturity date;
- The terms, if any, upon which the debt securities are convertible into other securities offered hereby or under another registration statement or another issuer and the terms and conditions upon which any conversion will be effected, including the initial conversion price or rate, the conversion period and any other provisions in addition to or instead of those described in this prospectus;
- Any other terms of the debt securities which are not inconsistent with the provisions of the applicable indenture;
- A description of any documents or certificates that must be received prior to the issuance of any definitive securities;
- Whether and under what circumstances additional amounts will be paid to non-U.S. citizens in connection with any tax, assessment or governmental charge and whether securities may be redeemed in lieu of paying such additional fees;
- The identity of each security registrar or paying agent (if other than trustee);
- Any provisions granting special rights to securities holders upon the occurrence of specified events;
- Any deletions from, modifications of, or additions to any default events or covenants set forth in the form of indenture;
- The portion of the principal amount payable upon the declaration of acceleration of the maturity of any securities; and
- The date any bearer securities of or within the series and any temporary global security representing outstanding securities shall be dated, if other than date of original issuance.

The debt securities may be issued as “original issue discount securities” which bear no interest or interest at a rate which at the time of issuance is below market rates and which will be sold at a substantial discount below their principal amount. If the maturity of any original issue discount security is accelerated, the amount payable to the holder of the security will be determined by the applicable prospectus supplement, the terms of the security and the relevant indenture, but may be an amount less than the amount payable at the maturity of the principal of that original issue discount security. Special federal income tax and other considerations relating to original issue discount securities will be described in the applicable prospectus supplement.

Please see the prospectus supplement or pricing supplement you have received or will receive for the terms of the specific debt securities we are offering.

You should be aware that special U.S. federal income tax, accounting and other considerations may apply to the debt securities. The prospectus supplement relating to an issue of debt securities will describe these considerations.

Registration and Transfer

Unless otherwise indicated in the applicable prospectus supplement, the debt securities will be issued in fully registered form. Holders may present debt securities in registered form for transfer or exchange for other debt securities of the same series at the offices of the applicable indenture trustee according to the terms of the applicable indenture and the debt securities.

Unless otherwise indicated in the applicable prospectus supplement, the debt securities will be issued in fully registered form, and in denominations of \$1,000 and any integral multiple thereof.

No service charge will be required for any transfer or exchange of the debt securities but we may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection with any transfer or exchange.

Payment and Place of Payment

We will pay or deliver principal and any premium and interest in the manner, at the places and subject to the restrictions set forth in the applicable indenture, the debt securities and the applicable prospectus supplement.

Global Securities

Each indenture provides that we may issue debt securities in global form. If any series of debt securities is issued in global form, the prospectus supplement will describe any circumstances under which beneficial owners of interests in any of those global debt securities may exchange their interests for debt securities of that series and of like tenor and principal amount in any authorized form and denomination.

Events of Default

Unless otherwise indicated in the applicable prospectus supplement, the following are events of default under the senior indenture with respect to the senior debt securities and under the subordinated indenture with respect to the subordinated debt securities:

- Default in the payment of any principal or premium or make-whole amount, if any, on the debt securities when due;
- Default in the payment of any interest on the debt securities, or of any coupon pertaining thereto, when due, which continues for 30 days;
- Default in the performance or breach of any other obligation contained in the applicable indenture for the benefit of that series of debt securities (other than defaults or breaches otherwise specifically addressed), which continues for 90 days after written notice of the default or breach;
- Specified events in bankruptcy, insolvency or reorganization of our Company or any of our significant subsidiaries; and
- Any other event of default provided with respect to the debt securities of any series.

If an event of default (other than an event of default arising from specified events in bankruptcy of us or any of our significant subsidiaries) occurs and is continuing for any series of debt securities, the indenture trustee or the holders of not less than 25% in aggregate principal amount or, under certain circumstances, issue price of the outstanding debt securities of that series may declare all amounts, or any lesser amount provided for in the debt securities of that series, to be immediately due and payable.

At any time after the applicable indenture trustee or the holders have accelerated a series of debt securities, but before the applicable indenture trustee has obtained a judgment or decree for payment of money due, the holders of a majority in aggregate principal amount of outstanding debt securities of that series may rescind and annul that acceleration and its consequences, provided that all payments or deliveries due, other than those due as a result of acceleration, have been made and all events of default have been remedied or waived.

The holders of a majority in principal amount or aggregate issue price of the outstanding debt securities of any series may waive any default with respect to that series, except a default:

- In the payment of any amounts due and payable or deliverable under the debt securities of that series; or
- In an obligation contained in, or a provision of, an indenture which cannot be modified under the terms of that indenture without the consent of each holder of each series of debt securities affected.

The holders of a majority in principal amount or, under certain circumstances, issue price of the outstanding debt securities of a series may direct the time, method and place of conducting any proceeding for any remedy available to the applicable indenture trustee or exercising any trust or power conferred on the indenture trustee with respect to debt securities of that series, provided that any direction is not in conflict with any rule of law or the applicable indenture and the trustee may take other actions, other than those that might lead to personal liability, not inconsistent with the direction. Subject to the provisions of the applicable indenture relating to the duties of the indenture trustee, before proceeding to exercise any right or power under the indenture at the direction of the holders, the indenture trustee is entitled to receive from those holders reasonable security or indemnity against the costs, expenses and liabilities which it might incur in complying with any direction.

A holder of any debt security of any series will have the right to institute a proceeding with respect to the applicable indenture or for any remedy under the indenture, if:

- That holder previously gives to the indenture trustee written notice of a continuing event of default with respect to debt securities of that series;
- The holders of not less than 25% in principal amount of the outstanding securities of that series have made written request and offered the indenture trustee indemnity satisfactory to the indenture trustee to institute that proceeding as indenture trustee;
- The indenture trustee will not have received from the holders of a majority in principal amount or, under certain circumstances, issue price of the outstanding debt securities of that series a direction inconsistent with the request; and
- The indenture trustee fails to institute the proceeding within 60 days.

However, the holder of any debt security or coupon has the right to receive payment of the principal of (and premium or make-whole amount, if any) and interest on, and any additional amounts in respect of, such debt security or payment of such coupon on the respective due dates (or, in the case of redemption, on the redemption date) and to institute suit for the enforcement of any such payment.

We are required to furnish to the indenture trustees annually a statement as to the performance of our obligations under the indentures and as to any default in that performance.

Modification and Waiver

Unless otherwise indicated in the applicable prospectus supplement, we and the applicable indenture trustee may amend and modify each indenture or debt securities under that indenture with the consent of holders of at least a majority in principal amount or, under certain circumstances, issue price of each series of all outstanding debt securities then outstanding under the indenture affected. However, without the consent of each holder of any debt security issued under the applicable indenture, we may not amend or modify that indenture to:

- Change the stated maturity date of the principal of (or premium or make-whole amount, if any, on), or any installment of principal or interest on, any debt security issued under that indenture;
- Reduce the principal amount of or any make-whole amount, the rate of interest on or any additional amounts payable in respect thereof, or any premium payable upon the redemption of any debt security issued under that indenture;
- Reduce the amount of principal of an original issue discount security or make-whole amount, if any, issued under that indenture payable upon acceleration of its maturity; or provable in bankruptcy or adversely affect any right of repayment of a debt security;
- Change the place or currency of payment of principal or any premium or any make-whole amount or interest on, any debt security issued under that indenture;
- Impair the right to institute suit for the enforcement of any payment or delivery on or with respect to any debt security issued under that indenture;
- Reduce the percentage in principal amount of debt securities of any series issued under that indenture, the consent of whose holders is required to modify or amend the indenture or to waive compliance with certain provisions of the indenture; or
- Make any change that adversely affects the right to convert or exchange any security or decrease the conversion/exchange rate or increase the conversion/exchange price.

The holders of at least a majority in principal amount of the outstanding debt securities of any series issued under that indenture may, with respect to that series, waive past defaults under the indenture, except as described under “Events of Default.”

Unless otherwise indicated in the applicable prospectus supplement, we and the applicable indenture trustee may also amend and modify each indenture without the consent of any holder for any of the following purposes:

- To evidence the succession of another person to our company;
- To add to our covenants for the benefit of the holders of all or any series of debt securities;
- To add events of default for the benefit of the holders of all or any series of debt securities;
- To surrender any right or power conferred by the applicable indenture upon our company, or to make any change that does not adversely affect the legal rights of the holder provided by the indenture in any material respect;
- To change or eliminate any of the provisions of the applicable indenture in respect of any series of debt securities, so long as any such change or elimination will become effective only in respect of any series of securities when there is no outstanding security of that series which is entitled to the benefit of that provision;
- To establish the form or terms of debt securities of any series;

- To evidence and provide for the acceptance of appointment by a successor indenture trustee;
- To cure any ambiguity or correct any defect or inconsistency in the applicable indenture;
- To provide for uncertified securities as in addition to certified securities;
- To close the indenture with respect to the authentication and delivery of additional series of securities or to qualify or maintain qualifications of the applicable indenture under the Trust Indenture Act; or
- To supplement any of the provisions of an indenture as is necessary to permit or facilitate the defeasance or discharge of any series of securities under specified provisions of the indenture, provided that any such action shall not adversely affect the interests of the holders of securities of such series or any other series of securities under the indenture in any material respect.

Consolidation, Merger and Sale of Assets

Unless otherwise indicated in the applicable prospectus supplement, we may consolidate or merge with or into any other corporation, and we may sell, lease or convey all or substantially all of our assets to any corporation, provided that the resulting corporation, if other than our company, is a corporation organized and existing under the laws of the United States or any U.S. state and assumes all of our obligations to pay or deliver the principal and any premium or make-whole amount, if any, and any interest on, the debt securities; and perform and observe all of our other obligations under the indentures and supplemental indentures. We are not, or any successor corporation, as the case may be, is not, immediately after any consolidation or merger, in default under the indentures.

The indentures do not provide for any right of acceleration in the event of a consolidation, merger, sale of all or substantially all of the assets, recapitalization or change in our stock ownership. In addition, the indentures do not contain any provision that would protect the holders of debt securities against a sudden and dramatic decline in credit quality resulting from takeovers, recapitalizations or similar restructurings.

Regarding the Indenture Trustee

The occurrence of any default under either the senior indenture or the subordinated indenture could create a conflicting interest for the indenture trustee under the Trust Indenture Act if the same entity serves as trustee under both indentures. If that default has not been cured or waived within 90 days after the indenture trustee has or acquired a conflicting interest, the indenture trustee would generally be required by the Trust Indenture Act to eliminate that conflicting interest or resign as indenture trustee with respect to the debt securities issued under the senior indenture or the subordinated indenture. If the indenture trustee resigns, we are required to promptly appoint a successor trustee with respect to the affected securities.

The Trust Indenture Act also imposes certain limitations on the right of the indenture trustee, as a creditor of ours, to obtain payment of claims in certain cases, or to realize on certain property received in respect to any cash claim or otherwise. The indenture trustee will be permitted to engage in other transactions with us, provided that, if it acquires a conflicting interest within the meaning of Section 310 of the Trust Indenture Act, it generally must either eliminate that conflict or resign.

International Offering

If specified in the applicable prospectus supplement, we may issue debt securities outside the United States. Those debt securities will be described in the applicable prospectus supplement. In connection with any offering outside the United States, we will designate paying agents, registrars or other agents with respect to the debt securities, as specified in the applicable prospectus supplement.

We will describe in the applicable prospectus supplement whether our debt securities issued outside the United States: (1) may be subject to certain selling restrictions; (2) may be listed on one or more foreign stock exchanges; and (3) may have special U.S. tax and other considerations applicable to an offering outside the United States.

Defeasance

We may terminate or “defeasance” our obligations under the indenture with respect to the debt securities of any series by taking the following steps:

- (1) Depositing irrevocably with the indenture trustee an amount, which through the payment of interest, principal or premium, if any, will provide an amount sufficient to pay the entire amount of the senior debt securities:
 - In the case of senior debt securities denominated in U.S. dollars, U.S. dollars or U.S. government obligations;
 - In the case of senior debt securities denominated in a foreign currency, of money in that foreign currency or foreign government obligations of the foreign government or governments issuing that foreign currency; or
 - A combination of money and U.S. government obligations or foreign government obligations, as applicable;
- (2) Delivering:
 - An opinion of independent counsel that the holders of the senior debt securities of that series will have no federal income tax consequences as a result of that deposit and termination;
 - An opinion of independent counsel that registration is not required under Investment Company Act of 1940;
 - An opinion of counsel as to certain other matters; and
 - Officers’ certificates certifying as to compliance with the senior indenture and other matters; and
- (3) Paying all amounts due under the senior indenture.

Further, the defeasance cannot cause an event of default under the indenture or any other agreement or instrument and no default under the indenture or any such other agreement or instrument can exist at the time the defeasance occurs.

Subordination

The subordinated debt securities will be subordinated in right of payment to all senior debt. In certain circumstances relating to our liquidation, dissolution, receivership, reorganization, insolvency or similar proceedings, the holders of all senior debt will first be entitled to receive payment in full before the holders of the subordinated debt securities will be entitled to receive any payment on the subordinated debt securities.

If the maturity of any subordinated debt securities is accelerated, we will have to repay all senior debt before we can make any payment on the subordinated debt securities.

Unless otherwise specified in the prospectus supplement relating to the particular series of subordinated debt securities, “senior debt” is defined as:

the principal, premium, if any, unpaid interest (including interest accruing on or after the filing of any petition in bankruptcy or for reorganization relating to us whether or not a claim for post-filing interest is allowed in such proceeding), fees, charges, expenses, reimbursement and indemnification obligations, and all other amounts payable under or in respect of the following indebtedness of us for money borrowed, whether any such indebtedness exists as of the date of the indenture or is created, incurred, assumed or guaranteed after such date:

- (1) Any debt (a) for money borrowed by us, or (b) evidenced by a bond, note, debenture, or similar instrument (including purchase money obligations) given in connection with the acquisition of any business, property or assets, whether by purchase, merger, consolidation or otherwise, but shall not include any account payable or other obligation created or assumed in the ordinary course of business in connection with the obtaining of materials or services, or (c) which is a direct or indirect obligation which arises as a result of banker's acceptances or bank letters of credit issued to secure obligations of us, or to secure the payment of revenue bonds issued for the benefit of us whether contingent or otherwise;
- (2) Any debt of others described in the preceding clause (1) which we have guaranteed or for which we are otherwise liable;
- (3) The obligation of us as lessee under any lease of property which is reflected on our balance sheet as a capitalized lease; and
- (4) Any deferral, amendment, renewal, extension, supplement or refunding of any liability of the kind described in any of the preceding clauses (1), (2) and (3).

“Senior debt” does not include:

(i) any such indebtedness, obligation or liability referred to in clauses (1) through (4) above as to which, in the instrument creating or evidencing the same or pursuant to which the same is outstanding, it is provided that such indebtedness, obligation or liability is not superior in right of payment to the subordinated debt securities, or ranks *pari passu* with the subordinated debt securities, (ii) any such indebtedness, obligation or liability which is subordinated to indebtedness of us to substantially the same extent as or to a greater extent than the subordinated debt securities are subordinated, (iii) any indebtedness to one of our subsidiaries and (iv) the subordinated debt securities.

The subordinated indenture does not limit or prohibit the incurrence of additional senior indebtedness, which may include indebtedness that is senior to the subordinated debt securities, but subordinate to our other obligations. Any prospectus supplement relating to a particular series of subordinated debt securities will set forth the aggregate amount of our indebtedness senior to the subordinated debt securities as of a recent practicable date.

By reason of this subordination in favor of the holders of senior indebtedness, in the event of an insolvency, our creditors who are not holders of senior indebtedness may recover less, proportionately, than holders of senior indebtedness and may recover more, proportionately, than holders of the subordinated debt securities.

The prospectus supplement may further describe the provisions, if any, which may apply to the subordination of the subordinated debt securities of a particular series.

Restrictive Covenants

The subordinated indenture does not contain any significant restrictive covenants. The prospectus supplement relating to a series of subordinated debt securities may describe certain restrictive covenants, if any, to which we may be bound under the subordinated indenture.

DESCRIPTION OF UNITS

As specified in the applicable prospectus supplement, we may issue units consisting of one or more shares of Class A common stock or preferred stock, debt securities, warrants or any combination of such securities. In addition, the prospectus supplement relating to units will describe the terms of any units we issue, including as applicable:

- The designation and terms of the units and the securities included in the units;
- Any provision for the issuance, payment, settlement, transfer or exchange of the units;
- The date, if any, on and after which the units may be transferable separately;
- Whether we will apply to have the units traded on a securities exchange or securities quotation system;
- Any material U.S. federal income tax consequences; and
- How, for U.S. federal income tax purposes, the purchase price paid for the units is to be allocated among the component securities.

EXPERTS

The consolidated financial statements of Real Goods Solar, Inc. and its subsidiaries, as of and for the years ended December 31, 2015 and December 31, 2016, incorporated in this Prospectus by reference from the Real Goods Solar, Inc. Annual Report on Form 10-K for the year ended December 31, 2016 have been audited by Hein & Associates LLP, an independent registered public accounting firm, as stated in their report incorporated herein by reference, and have been incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon for us by Brownstein Hyatt Farber Schreck, LLP, Denver, Colorado.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus the information we file with the SEC, which means that we can disclose important information to you by referring you to other documents filed separately with the SEC. The information incorporated by reference is considered part of this prospectus and any accompanying prospectus supplement, and information that we file with the SEC subsequent to this prospectus and any accompanying prospectus supplement and prior to the termination of the particular offering referred to in a prospectus supplement will automatically be deemed to update and supersede this information. We incorporate by reference into this prospectus and any accompanying prospectus supplement the documents listed below (excluding any portions of such documents that have been “furnished” but not “filed” for purposes of the Exchange Act unless specifically incorporated by reference herein or therein):

- Our Annual Report on Form 10-K for the year ended December 31, 2016, filed March 10, 2017 as amended by Amendment No. 1 to Annual Report on Form 10-K/A, filed April 11, 2017 ;
- Our Quarterly Reports on Form 10-Q for the period ended March 31, 2017, filed May 10, 2017 ;
- Our current reports on Form 8-K (including amendments thereto) filed, January 9, 2017, January 24, 2017, January 26, 2017 (other than information furnished pursuant to Item 2.02 and Item 7.01 of Form 8-K), January 30, 2017, January 31, 2017, February 1, 2017 (other than information furnished pursuant to Item 7.01), February 2, 2017, February 6, 2017, February 8, 2017 (other than information furnished pursuant to Item 7.01), February 9, 2017 (other than information furnished pursuant to Item 7.01), February 10, 2017, May 24, 2017, June 5, 2017, June 15, 2017, and June 23, 2017; and

- The description of our Class A common stock contained in our registration statement on Form 8-A filed May 5, 2008 including any other amendments or reports filed for the purpose of updating such description (other than any portion of such filings that are furnished under applicable SEC rules rather than filed).

We also incorporate by reference all documents we subsequently file with the SEC (other than information furnished pursuant to Item 2.02 or Item 7.01 of Form 8-K or as otherwise permitted by SEC rules) pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the initial filing of the registration statement of which this prospectus is a part (including prior to the effectiveness of the registration statement) and prior to the termination of the offering. Any statement in a document incorporated by reference in this prospectus will be deemed to be modified or superseded to the extent a statement contained in this prospectus or any other subsequently filed document that is incorporated by reference in this prospectus modifies or supersedes such statement. Unless specifically stated to the contrary, none of the information that we disclose under Items 2.02 or 7.01 or corresponding information furnished under Item 9.01 or related exhibits of any Current Report on Form 8-K that we may from time to time furnish to the SEC will be incorporated by reference into, or otherwise included in this, prospectus.

This prospectus is part of a registration statement on Form S-3 that we have filed with the SEC relating to the securities. As permitted by SEC rules, this prospectus does not contain all of the information included in the registration statement and the accompanying exhibits and schedules we file with the SEC. You may refer to the registration statement and the exhibits and schedules for more information about us and our securities. The registration statement and exhibits and schedules are also available at the SEC's Public Reference Room or through its website.

We will provide, without charge and upon oral or written request, to each person, including any beneficial owner, to whom a copy of this prospectus has been delivered, a copy of any of the documents referred to above as being incorporated by reference into this prospectus but not delivered with it. You may obtain a copy of these filings, at no cost, by writing or calling us at Real Goods Solar, Inc., 110 16th Street, 3rd Floor, Denver, Colorado 80202, (303) 222-8300.

Exhibits to the filings will not be provided, however, unless those exhibits have been specifically incorporated by reference in this prospectus.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy and information statements and other information with the SEC. You may read and copy any materials we file with the SEC at the SEC's Public Reference Room in Washington, D.C. at 100 F Street, N.E., Room 1580, Washington, D.C. 20549.

You may obtain information about the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website that contains information we file electronically with the SEC, which you can access over the Internet at <http://www.sec.gov>. We maintain a website at <http://www.rgsenergy.com> with information about our company. Information contained on our website or any other website is not incorporated into this prospectus and does not constitute a part of this prospectus. Our website address referenced above is intended to be an inactive textual reference only and not an active hyperlink to our website.



Up to 1,600,000 Shares of Class A Common Stock

Series P Warrants to Purchase up to 1,600,000 Shares Class A Common Stock

PROSPECTUS SUPPLEMENT

WestPark Capital, Inc.

January 2, 2018
