

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

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018

OR

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

For the transition period from to

Commission File Number 001-36216

IDEAL POWER INC.

(Exact name of registrant as specified in its charter)

DELAWARE
(State or other jurisdiction of
incorporation or organization)

14-1999058
(I.R.S. Employer Identification No.)

4120 Freidrich Lane, Suite 100
Austin, Texas 78744
(Address of principal executive offices)

(512) 264-1542
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which each is registered
Common Stock, par value \$0.001	NASDAQ Capital Market

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§232.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company.

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark whether the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter.

As of June 30, 2018, the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the last sale price of the common equity was \$14,553,512. As of March 27, 2019, the issuer has 14,722,840 shares of common stock, par value \$0.001, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The information required by Part III of this Report, to the extent not set forth herein, is incorporated herein by reference from the Proxy Statement relating to the registrant's 2018 annual meeting of stockholders, which shall be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this Report relates.

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**SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND
OTHER INFORMATION CONTAINED IN THIS REPORT**

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and the provisions of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Forward-looking statements give our current expectations or forecasts of future events. You can identify these statements by the fact that they do not relate strictly to historical or current facts. You can find many (but not all) of these statements by looking for words such as "approximates," "believes," "hopes," "expects," "anticipates," "estimates," "projects," "intends," "plans," "would," "should," "could," "may" or other similar expressions in this report. In particular, these include statements relating to future actions, prospective products, applications, customers, technologies, future performance or results of anticipated products, expenses, and financial results. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or projections. Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

- our history of losses;
- our ability to generate revenue;
- our limited operating history;
- our ability to successfully market and sell future products;
- the size and growth of markets for our future products;
- regulatory developments that may affect our business;
- our ability to successfully develop new technologies, particularly our bi-directional bipolar junction transistor, or B-TRAN™;
- our expectations regarding the timing of prototype and commercial fabrication of B-TRAN™ devices;
- our expectations regarding the performance of our B-TRAN™ and the consistency of that performance with both internal and third-party simulations;
- the expected performance of future products incorporating our B-TRAN™;
- the performance of third-party consultants and service providers whom we have and will continue to rely on to assist us in development of our B-TRAN™ and related drive circuitry;
- the rate and degree of market acceptance for our B-TRAN™;
- our ability to successfully license our B-TRAN™ technology;
- our ability to secure strategic partnerships with semiconductor fabricators and others related to our B-TRAN™ technology;
- our ability to obtain, maintain, defend and enforce intellectual property rights protecting our current and future products;
- the success of our efforts to manage cash spending, particularly prior to the commercialization of our B-TRAN™ technology;
- general economic conditions and events and the impact they may have on us and our potential customers;
- our ability to obtain adequate financing in the future, as and when we need it;
- our success at managing the risks involved in the foregoing items; and
- other factors discussed in this report.

The forward-looking statements are based upon management's beliefs and assumptions and are made as of the date of this report. We undertake no obligation to publicly update or revise any forward-looking statements included in this report. You should not place undue reliance on these forward-looking statements.

PART I

ITEM 1: BUSINESS

Our Company

Ideal Power Inc. was formed in Texas on May 17, 2007 and converted to a Delaware corporation on July 15, 2013. Unless otherwise stated or the context otherwise requires, the terms "Ideal Power," "we," "us," "our" and the "Company" refer to Ideal Power Inc.

Until recently, we were primarily focused on the design, marketing and sale of electrical power conversion products using our proprietary technology called Power Packet Switching Architecture™, or PPSA™. PPSA™ is a power conversion technology that improves upon existing power conversion technologies in key product metrics, such as size and weight while providing built-in isolation and bi-directional and multi-port capabilities. PPSA™ utilizes standardized hardware with application specific embedded software. Our products were designed to be used in both on-grid and off-grid applications with a focus on solar + storage, microgrid and stand-alone energy storage applications. The principal products of the Company were 30-kilowatt power conversion systems, including 2-port and multi-port products.

On April 16, 2018, we realigned into two operating divisions: Power Conversion Systems, to continue the commercialization of our PPSA™ technology, and B-TRAN, to develop our Bi-directional bi-polar junction TRANsistor (B-TRAN™) solid state switch technology.

On January 2, 2019, our Board of Directors approved a strategic shift to focus on the commercialization of our B-TRAN™ technology and a plan to suspend further power converter system, or PPSA™, development and sales while we located a buyer for our power conversion systems division and PPSA™ technology. We have classified our PPSA™ business as held for sale and now shows this business as a discontinued operation in our financial statements.

To date, operations have been funded primarily through the sale of common stock. Total revenue generated from inception to date as of December 31, 2018 amounted to \$14.8 million with approximately \$12.3 million of that revenue from discontinued operations and the remainder from grant revenue for bi-directional power switch development. We did not have revenue from continuing operations in the years ended December 31, 2018 and 2017. We may pursue additional research and development grants, if and when available, to further develop and/or improve our technology.

Industry Background

A semiconductor material is a substance that, as its name suggests, is characterized for "conducting" electricity easily, while at the same time, working as an insulator to prevent the flow of electricity. By using semiconductors, it becomes possible to perform rectification for the one-directional flow of electricity, amplification for increasing electrical signals, and switching to open and close the flow of electricity.

Power semiconductors possess a structure that is different from regular semiconductors, enabling them to handle high voltages and large currents without damage. Failures may occur due to a rise in temperatures resulting from heat generated from handling large amounts of power. Therefore, methods have been developed to reduce the amount of power semiconductor loss, which is the cause of the heat generation, while also effectively releasing the generated heat to the outside.

Power semiconductors are mostly used in power conversion such as in changing voltages and frequencies, as well as changing DC to AC and AC to DC. Power semiconductors play an indispensable role in accurately driving motors from low to high speeds, controlling the voltage and flow of electricity in electric and hybrid vehicles, supplying power grids with power generated from solar cells with less power loss, and providing a stable source of electricity to various home appliances and electrical equipment. In recent years, there has been a greater demand for energy-savings and power consumption reductions, and as a result, the need for power semiconductors that minimize power loss has been increasing.

Power semiconductors are solid-state devices that act as a switch without any mechanical movement. Solid-state devices are completely made from a solid material, typically silicon, and their flow of charges is confined within this solid material. The term solid-state is often used to show a difference with the earlier technologies of vacuum and gas-discharge tube devices and also to exclude the conventional electro-mechanical devices such as relays, switches, hard drives and other devices with moving part. Solid-state switches are typically more efficient due to lower losses during power processing.

The \$12 billion global power semiconductor market may be categorized by component, material, end-use and geography. Based on component, the market includes power metal-oxide semiconductor field-effect transistors (“MOSFETs”), thyristors, rectifiers, bipolar junction transistors, insulated gate bipolar transistors (“IGBTs”) and power diodes. With respect to material, the power semiconductor market is bifurcated into silicon/germanium, silicon carbide and gallium nitride.

The end-use market is classified into automotive, industrial, renewable energy, telecommunication, consumer electronics, aerospace & defense, healthcare and others. Among these, automotive electronics accounts for significant consumption of power semiconductors. The number of semiconductors in vehicles has surged with the rising adoption of electric vehicles, plug-in electric vehicles, and hybrid electric vehicles. Further, the advent of drive-by-wire or x-by-wire technologies have led to a rise in number of electric components in vehicles over mechanical vehicle parts. This rise helps reduce vehicle weight which is directly related to improved fuel efficiency and reduced vehicular emissions. The heavy consumption of power semiconductors across several end use markets such as industrial, automotive, consumer electronics and renewable energy is a key growth driver of the power semiconductor market.

The telecommunications market is also a significant end-user of power semiconductors. This segment displays demand for radio frequency (“RF”) power amplifiers and IGBTs among others. With the launch of 5G, we believe the demand for power semiconductors is likely to increase.

Geographically, Asia Pacific accounts for the leading consumption of power semiconductors among other key regions. The region is also one of the leading exporters of power semiconductors in the world. The growth in the region is mainly attributed to China, which is the leading automotive and passenger vehicle market in the world. China is currently the leading consumer of power semiconductors. Furthermore, demand for power semiconductors is increasing from renewable energy sectors in the region.

Europe and North America are also leading consumers of power semiconductors among others in the global market.

Leading players in the global power semiconductor market include Infineon Technologies AG, Texas Instruments, ON Semiconductor, Fuji Electric Co. Ltd., ST Microelectronics N.V., Mitsubishi Electric Group, Semikron International GmbH, and Toshiba Corporation. While these companies are potential competitors, they are also potential licensees for our B-TRAN™ technology as there is not, to our knowledge, a high-efficiency bi-directional design available in the market.

Our Technology

To further improve the performance of our bi-directional PPSA™ technology and products, we identified the need for a true bi-directional power switch and applied for and, in 2012, received a grant from the U.S. Department of Energy’s Advanced Research Projects Agency-Energy (“ARPA-E”) to develop a bi-directional solid-state power switch. At the outset, our efforts under the ARPA-E grant were focused on the development of, including the manufacturing process development for, a bi-directional insulated gate bipolar transistor (“BD-IGBT”). Although work on BD-IGBTs had previously been done by others in research labs, it was a technology that had not yet been commercialized.

Our PPSA™-based products incorporate multiple IGBTs, which are power switches used in the process to convert power from one current form to another. IGBTs switch power in only one direction (DC to AC or AC to DC) and require the use of a blocking diode to prevent power from flowing back through the system. To enable our PPSA™ products to perform bi-directional power conversion, for each IGBT and diode used in our products, we were required to include a second IGBT and diode. These additional components have slight voltage drops that affect the electrical efficiency of our products and generate heat that must be dissipated. To eliminate the need to utilize four devices to create one bi-directional switch and to improve the performance of bi-directional switching, a true bi-directional switch is necessary. While we initially focused on the development of a BD-IGBT under the ARPA-E grant, we shifted our focus under the grant to the development of a new, highly efficient power switch called a bi-directional bipolar transistor, or B-TRAN™, that we believe will allow us to substitute one B-TRAN™ for two pairs of IGBTs and diodes used in PPSA™ products but, more importantly, is a potential replacement for conventional power switches in the broader power semiconductor market. The B-TRAN™ leverages many of the same processing steps we had developed for the BD-IGBT while also providing us with certain key advantages including patentability and higher efficiency compared to a BD-IGBT.

Based on third-party device software simulations and initial prototype testing, we believe that the B-TRANs™ can significantly improve electrical efficiency in power converters and many other power conversion applications. The higher efficiency would substantially reduce the heat generated by the operation of products utilizing this technology. As a result, products incorporating B-TRANs™ will require less space for heat dissipation which would enable increased power density, or power per pound, and reduce material costs.

In 2016, one of our semiconductor fabricators successfully tested single-sided B-TRAN™ silicon dies and the results were consistent with third-party simulations that predict significant performance and efficiency improvements over conventional power switches such as silicon-controlled rectifiers (“SCRs”), IGBTs and MOSFETs. In the second half of 2017, we shifted our focus to de-risking the proof of concept phase of the B-TRAN™ development timeline, as this phase of development was taking longer than anticipated due to the complexity of manufacturing complicated, two-sided power semiconductor devices. To facilitate this, we engaged a second semiconductor fabricator, on a parallel path, to produce a less complex to manufacture B-TRAN™ on an accelerated schedule for proof of concept and initial testing. In the first quarter of 2018, we successfully confirmed the proof of concept of double-sided B-TRAN™ prototypes, validating the ability to make B-TRAN™ semiconductor power switches using conventional silicon semiconductor fabrication equipment and processes. Test results on the standard double-sided prototypes measured B-TRAN™ electrical losses at less than 40% that of conventional power switches such as silicon IGBTs.

In the second quarter of 2018, a domestic semiconductor fabricator was qualified and engaged for development runs on the standard version of the B-TRAN™. As a result, we now have the next run of devices with two fabricators in process. These runs incorporate the results of prior runs and testing into the B-TRAN™ design and their manufacturing process. With the double-sided transistor behavior and low conduction losses confirmed and corrections and improvements in the manufacturing process implemented, the next goal is the completion of the fabrication of prototype engineering samples for engineering evaluation and evaluation by potential customers and partners. These samples will include a packaging design based on our previous work and a driver. We have completed the first design for the driver with a prototype driver already built and tested for basic functionality. The coupling of device samples with a driver will form the basis of an intelligent module required for potential customer and partner evaluation.

Business Strategy & Target Markets

Once we have completed the fabrication of engineering samples for engineering evaluation and evaluation by potential customers and partners, we intend to engage potential partners for our B-TRAN™ utilizing a licensing model.

Potential target markets for B-TRAN™ devices include, but are not limited to, electric and hybrid vehicles electronic controls, industrial motor drives, direct current-based distribution and transmission switches and controls and renewable energy and energy storage system power converters. We are currently in the process of fully developing our commercialization strategy for our B-TRAN™ technology.

Intellectual Property

We rely on a combination of patents, laws that protect intellectual property, confidentiality procedures, and contractual restrictions with our employees and others, to establish and protect our intellectual property rights. As of December 31, 2018, we had 32 US and nine foreign issued patents on our B-TRAN™ technology as well as over 30 additional pending U.S. and international patent applications on our B-TRAN™ technology. We expect to continue to build our patent estate for our bi-directional switch technology and other technological developments that broaden the scope of our technology platform.

Competition

We will compete against well-established incumbent power semiconductor device suppliers, including companies that already operate at a large scale in the single-sided (uni-directional) power switch market with IGBTs and MOSFETs. We expect that these power semiconductor device providers will base their products on current technologies serving the uni-directional power switch market, although we continue to monitor the competitive landscape for offerings or potential offerings based on new technologies. To date, we are not aware of any offerings or potential offerings based on a true high efficiency bi-directional design other than our potential products based on our B-TRAN™ technology.

Employees

As of February 28, 2019, we had 7 employees, all of whom are full-time employees. None of these employees are covered by a collective bargaining agreement, and we believe our relationship with our employees is good.

Government Regulation

Government approval is not required for us to license our B-TRAN™ technology. However, government support for certain of our potential target markets including electric and hybrid vehicles, renewable energy, grid storage, electric vehicle charging infrastructure and improved grid resiliency, may impact the size and growth rate of these potential target markets.

Available Information

Our Internet address is www.idealpower.com and our investor relations website is located at ir.idealpower.com. We make available free of charge on our investor relations website under the heading "SEC Filings" our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports as soon as reasonably practicable after such materials are electronically filed with (or furnished to) the SEC. We also make available on our website, our corporate governance documents, including our code of conduct and ethics. Information contained on our website is not incorporated by reference into this Annual Report on Form 10-K. In addition, the public may read and copy materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site, www.sec.gov, that includes filings of and information about issuers that file electronically with the SEC.

ITEM 1A: RISK FACTORS

We are subject to various risks that may materially harm our business, prospects, financial condition and results of operations. An investment in our common stock is speculative and involves a high degree of risk. In evaluating an investment in shares of our common stock, you should carefully consider the risks described below, together with the other information included in this report.

The risks described below are not the only risks we face. If any of the events described in the following risk factors actually occurs, or if additional risks and uncertainties later materialize, that are not currently known to us or that we currently deem immaterial, then our business, prospects, results of operations and financial condition could be materially adversely affected. In that event, the trading price of our common stock could decline, and you may lose all or part of your investment in our shares. The risks discussed below include forward-looking statements, and our actual results may differ substantially from those discussed in these forward-looking statements.

Risks Related to the Company

We lack an established operating history on which to evaluate our business and determine if we will be able to execute our business plan. We have also incurred losses in prior periods, expect to incur losses in the future and currently generate no revenue.

We were formed in Texas on May 17, 2007 and converted to a Delaware corporation on July 15, 2013. We have a limited operating history that makes it difficult to evaluate our business. We have discontinued our power conversion systems division which has historically accounted for all of our sales and we cannot say with certainty when we will commercialize our B-TRAN™ technology, if ever, and thus do not expect to generate any revenue in the near future.

Since inception, we have sustained approximately \$63 million in net losses and we had a net loss for the year ended December 31, 2018 of approximately \$7.9 million. We expect to have operating losses at least until such time as we have commercialized our B-TRAN™ technology and developed a substantial and stable revenue base. We cannot assure you that we can develop a stable revenue base or achieve or sustain profitability in the future.

As sales of our discontinued products have generated limited operating revenues, we have been funding operations primarily through the sale of common stock. We currently generate no revenue and, in order to fund our operations going forward, will need to raise additional funds and such funds may not be available on commercially acceptable terms, if at all. If we are unable to raise funds on acceptable terms, we may not be able to execute our business plan and generate sustainable revenue. This may seriously harm our business, financial condition and results of operations. In the event we are not able to continue operations, investors will likely suffer a complete loss of their investments in our securities.

Our future success is difficult to predict because we will likely target certain emerging and evolving markets

The electric and hybrid vehicles electronic controls and renewable energy and energy storage system power converter markets are emerging and evolving markets which may make it difficult to evaluate our future prospects and which may lead to period to period variability in our operating results. Our potential products are based on unique technology which we believe offers significant advantages in these markets, but these markets are in a relatively early stage of development and it is uncertain how rapidly they will develop. It is also uncertain whether our potential products will achieve high levels of demand and acceptance in these markets and as these markets grow. If companies in these industries do not perceive or value the benefits of our technologies and future products, or if they are unwilling to adopt our products as alternatives to traditional power switch solutions, the market for our potential products may not develop or may develop more slowly than we expect, which could significantly and adversely impact our future operating results.

We may also be subject to business cycles. The timing, length, and volatility of these business cycles may be difficult to predict. These markets may be cyclical because of sudden changes in customers' manufacturing capacity requirements and spending, which depend in part on capacity utilization, overall customer demand, the availability and amount of government incentive programs, inventory levels relative to demand, and access to affordable capital. These changes may affect the timing and amounts of customers' purchases and investments in technology, and materially affect our future licensing revenue and net income. If we are not able to timely and appropriately adapt to changes in our business environment or to accurately assess where we are positioned within a business cycle, our business, financial condition, or results of operations may be materially and adversely affected.

Product development is an inherently uncertain process, and we may encounter unanticipated development challenges and may not be able to meet our product design and commercialization milestones.

Prototype development and testing may be subject to unanticipated and significant delays, expenses and technical or other problems. We cannot guarantee that we will successfully achieve our milestones within our planned timeframe or ever. We are in the process of developing prototypes of B-TRAN™ devices prior to the commercialization of these products. We cannot predict whether prototypes of the B-TRAN™ will achieve results consistent with our expectations and third-party simulations. A prototype could cost significantly more than expected or the prototype design and construction process could uncover problems that are not consistent with our expectations. Prototypes of B-TRAN™ devices are a material part of our business plan, and if they are not proven to be successful, our business and prospects would be harmed.

More generally, the future commercialization of products using our technology and designs may also be adversely affected by many factors not within our control, including:

- the willingness of market participants to try new products incorporating our technology and the perceptions of these market participants of the safety, reliability, functionality and cost effectiveness of these products;
- the emergence of newer, possibly more effective technologies;
- the future cost and availability of the raw materials and components needed to manufacture and use products incorporating our technology; and
- the adoption of new regulatory or industry standards that may adversely affect the use or cost of products incorporating our technology.

Accordingly, we cannot predict that products incorporating our technology will be accepted on a scale sufficient to support development of mass markets for them.

Our semiconductor fabrication partners may be unable to successfully and cost-effectively develop and implement new process steps necessary for bi-directional semiconductor device development at scale.

While the manufacturing of B-TRAN™ devices uses conventional equipment and process steps, there is heightened risk in the fabrication process due to the handling and processing of both sides of the wafer and achieving the required front to back alignment of the features. Two-sided wafer processing and handling is necessary as the B-TRAN™, unlike conventional power semiconductor devices, is a two-sided bi-directional device. In addition, the cost to manufacture a B-TRAN™ will be impacted by the number of process steps, the processing time and the size of the wafer. Current B-TRAN™ prototypes under development utilize a smaller 4-inch diameter wafer resulting in fewer die per wafer. As a result, the cost per die is higher than if larger diameter wafers were utilized. For example, if a 6-inch wafer was used it would have twice the area and thus could produce twice as many die as a six inch wafer resulting in a lower cost per die. If our semiconductor fabricator partners are unable to successfully and cost-effectively develop and implement new process steps necessary for bi-directional semiconductor device development at the prototype stage or at scale, our business, financial condition and results of operations would be materially and adversely affected.

There are a limited number of semiconductor fabrication development facilities in the United States. There are also a limited number of well-capitalized semiconductor fabricators working with the small diameter wafers necessary for our current development. Our inability to engage such partners in a cost-effective manner or the loss of any fabrication development partner once engaged may materially delay our development efforts and may have a materially adverse effect on our business, financial condition and results of operations.

We, or our licensees, must achieve design wins to obtain customers, although design wins achieved may not necessarily result in substantial sales or licensing revenue to us.

We anticipate that our future designs will typically be integrated into systems by our potential customers. This may result in the need to customize our designs for certain applications or customers. We will need to work with semiconductor partners and/or manufacturers early in their design cycles to ensure that our designs will meet the requirements of their systems. Manufacturers typically choose one or two vendors to provide the components for use in their systems. Selection as one of these vendors is called a design win. It is critical that we, or our licensees, achieve these design wins in order to obtain customers and generate sales and licensing revenue.

We believe that equipment manufacturers often select their suppliers based on factors including long-term relationships and end user demand. Accordingly, we may have difficulty achieving design wins from equipment manufacturers as our products will be new entrants into the market. Our efforts to achieve design wins, or assist our licensees in achieving design wins, may be time consuming and expensive and may not be successful. If we or our licensees are not successful in achieving design wins, or if we or our licensees do achieve design wins but the customers' systems that utilize our designs are not successful, our business, financial condition, and results of operations could be materially and adversely impacted.

Once a manufacturer chooses a component for use in a particular system, it is likely to retain that component for the life of that system. In addition, the sales cycle into certain potential target markets such as the automotive market are typically very long. Our future growth could experience material and prolonged adverse effects if we fail to achieve design wins or if the design wins do not result in substantial revenue for us.

Our corporate realignment and strategic shift may not be successful.

On April 16, 2018, we realigned our two operating divisions: Power Conversion Systems, to continue the commercialization of our PPSA™ technology, and B-TRAN, to develop our B-TRAN™ solid state switch technology. On January 2, 2019, our Board of Directors approved a strategic shift to focus on the commercialization of our BTRAN™ technology and a plan to suspend further power converter system, or PPSA™, development and sales while we locate a buyer for our power conversion systems division and PPSA™ technology. The success of this strategic shift will depend on our ability to successfully fabricate engineering samples for engineering evaluation and evaluation by our potential customers and partners for our B-TRAN™ technology, retain senior management or other highly qualified personnel and obtain sufficient resources, including additional capital. Accordingly, there are no assurances our change in strategic focus will be successful, which may have an adverse effect on our results of operations and financial condition.

We have received grant funds from the United States for the development of a bi-directional switch. In certain instances, the United States may obtain title to inventions related to this effort. If we were to lose title to those inventions, we may have to pay to license them from the United States in order to manufacture the inventions. If we were unable to license those inventions from the United States, it could slow down our product development.

In conjunction with the Advanced Research Projects Agency-Energy, or ARPA-E, grant we received from the Department of Energy, we granted to the United States a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States inventions related to the bi-directional switch and made within the scope of the grant. If we fail to disclose to the Department of Energy an invention made with grant funds that we disclose to patent counsel or for publication, or if we elect not to retain title to the invention, the United States may request that title to the subject invention be transferred to it.

We also granted "march-in-rights" to the United States in connection with any bi-directional switch inventions in which we choose not to retain title, if those inventions are made under the ARPA-E grant. Pursuant to the march-in-rights, the United States has the right to require us, any person to whom we have assigned our rights, or any exclusive licensee to grant a non-exclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant upon terms that are reasonable. If the license is not granted as requested, the United States has the right to grant the license if it determines that we have not achieved practical application of the invention in the field of use, the action is necessary to alleviate health or safety needs, the action is necessary to meet requirements for public use specified by Federal regulations and such requirements have not been satisfied, or the action is necessary because an agreement to manufacture the invention in the United States has not been obtained or waived or because any such agreement has been breached.

If we lost title to the United States as a result of any of these events, we would have to pay to license the inventions, if needed, from the United States to manufacture the bi-directional switch. If we were unable to license those inventions from the United States, it could slow down our product development.

As we continue to grow and to develop our intellectual property, we could attract threats from patent monetization firms or competitors alleging infringement. We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights.

As we continue to grow and to develop our intellectual property, we could attract threats from patent monetization firms or competitors alleging infringement of intellectual property rights.

In addition, some of our future competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. If we do not prevail in this type of litigation, we may be required to: pay monetary damages; stop commercial activities relating to our product; obtain one or more licenses in order to secure the rights to continue manufacturing or marketing certain products; or attempt to compete in the market with substantially similar products. Uncertainties resulting from the initiation and continuation of any litigation could limit our ability to continue some of our operations.

We expect to license our technology in the future; however the terms of these agreements may not prove to be advantageous to us. If the license agreements we enter into do not prove to be advantageous to us, our business and results of operations will be adversely affected.

We intend to employ a licensing strategy for our B-TRAN™ technology. However, we may not be able to secure license agreements with semiconductor fabrication partners or other strategic partners at all or on terms that are advantageous to us. Furthermore, the timing and volume of revenue earned from license agreements will be outside of our control. If the license agreements we enter into in the future do not prove to be advantageous to us, our business and results of operations will be adversely affected.

Any future revenue will rely on the marketing and sales efforts of third parties whom we do not control.

We expect that the marketing and sale of our products to end user customers will be conducted by future licensees of our technology. Consequently, commercial success of our products will depend, to a great extent, on the efforts of others. We may not be able to identify, maintain or establish appropriate relationships in the future. We can give no assurance that these third parties will focus adequate resources on selling our products or will be successful in selling them. In addition, these third parties may require customization of our designs or provide other concessions that could reduce the potential profitability of these relationships. Failure to develop favorable licensing relationships in our target markets will adversely affect our commercialization schedule and to the extent we enter into such relationships, the failure of our licensees to focus adequate resources on selling our products or be successful in selling them or to meet their monetary obligations to us, may adversely affect our financial condition and results of operations.

A material part of our success depends on our ability to manage third-party resources. Our failure to properly select, manage and retain qualified third-party resources could materially and adversely affect our results of operations and relations with our customers.

Our development efforts are highly dependent on third-party resources for semiconductor expertise and manufacturing. These third-party resources include experts in power semiconductor switches, semiconductor fabrication suppliers and other resources within the power switch ecosystem. The loss of one or more of our third-party consultants could have a material adverse effect on the timing of our development efforts which could, in turn, result in our business and results of operations being adversely affected. We also rely on our semiconductor fabrication partners to develop prototype devices. There can be no assurance that these manufacturing partners will provide devices in a timely and cost-efficient manner, provide quality devices or otherwise meet our needs and expectations. Our ability to manage such relationships and timely replace such partners, if necessary, is critical to our success. Our failure to timely replace consultants, fabrication partners and other suppliers within the power switch ecosystem, should that become necessary, could materially and adversely affect our results of operations and relations with our customers.

We will need additional financing to execute our business plan and fund operations, which additional financing may not be available on commercially reasonable terms or at all.

As our technology is in the development stage and has not yet been commercialized, we will be required to obtain additional financing to continue our operations and execute our business plan. Even in the event we complete the planned sale of our power conversion systems division in the near term, we will still need to raise additional capital within the next twelve to fifteen months from the date of issuance of this report to fund our future operations. We may not be able to obtain such financing on commercially reasonable terms or at all. If we are unable to obtain such financing when needed, our business could fail. Our independent registered public accounting firm, in its report on our 2018 financial statements, has raised substantial doubt about our ability to continue as a going concern. We will continue to incur significant costs as we develop and commercialize our B-TRAN™ technology. Although we are executing our business plan to commercialize and license this technology, continuing losses may impair our ability to fully meet our business objective or threaten our ability to continue as a going concern in future years. Any such inability to continue as a going concern may result in our stockholders losing their entire investment. There is no guarantee that we will begin generating revenue or secure additional financing on acceptable terms.

A failure to obtain government grants could have a material adverse effect on our development efforts and our ability to fund operations and execute on our business plan.

We expect to fund a portion of our development efforts with funds received under government grants. However, we may not be awarded any such grants, any such grant awards may be insufficient to fund a meaningful portion of our development spending and/or the timing of the receipt of any such award or awards may not coincide with the planned timing of our development efforts. Grants are subject to long procurement cycles, typically 6 to 12 months, and there may not be open grant solicitations for topics relevant to our B-TRAN™ technology. Grant topics are typically identified 1 to 2 years prior to the opening of the grant solicitation and the windows to submit proposals are discrete time periods. Further, the award of grants is a subjective process and government agencies often do not provide detailed feedback on why a grant was not received.

Other factors that could negatively impact our ability to obtain government grants is that our technology is still in a relatively early stage of development. If grant agencies determine that our technological readiness is not sufficiently advanced for a funded demonstration incorporating B-TRAN™ or potential partners determine that our technological readiness is not sufficient to partner with us on grant proposals, we may be unable to obtain government grants. Overall, there is a high degree of uncertainty in obtaining grants, particularly for technologies that have not been demonstrated with device samples, and we can provide no assurance that we will be able to obtain government grants to offset a significant, or any, portion of our development spending. If we do not obtain grants or our efforts to obtain grants take longer than expected to be successful, we will need to rely on other means to fund our development.

The macro-economic environment in the United States and abroad has adversely affected, and may in the future adversely affect, our ability to raise capital, which may potentially impact our ability to continue our operations.

We have and, prior to commercialization at scale, will continue to rely on raising funds from investors to support our research and development activities and our operations. Macro-economic conditions in the United States and abroad may result in a tightening of the credit markets and/or less capital available for small public companies, which may make it more difficult to raise capital. If we are unable to raise funds as and when we need them, we may be forced to curtail our operations or even cease operating altogether.

We are highly dependent on the services of key members of our management team. Our inability to retain these individuals could impede our business plan and growth strategies, which could have a negative impact on our business and the value of your investment.

Our ability to implement our business plan depends, to a critical extent, on the continued efforts and services of key members of our management team. If we lose the services of any of these persons during this important time in our development, the loss may result in a delay in the implementation of our business plan and plan of operations. We can give no assurance that we could find satisfactory replacements for these individuals on terms that would not be unduly expensive or burdensome to us. We do not currently carry a key-man life insurance policy that would assist us in recouping our costs in the event of the death or disability of any of these persons.

In addition, we will need additional semiconductor expertise as we draw closer to the commercialization of our technology. We can give no assurance that we will be able to identify and secure the necessary expertise at the appropriate time or at all.

Our operating results for any quarterly reporting period may fluctuate significantly depending on the timing and pace of our development spending and costs to commercialize our technology.

Our research and development costs and, in the future, our other operating costs may vary significantly from quarter to quarter depending on the current phase of development and commercialization of our technology and the timing of both semiconductor prototype and commercial production and negotiations with potential strategic partners. We also may intentionally accelerate our development costs or may be faced with unexpected delays or challenges with development that could significantly impact our operating results. Significant adverse fluctuations in our operating costs from period to period could adversely affect the market price for our common stock.

Any failure to sell our power conversion systems division in a timely manner could have a material adverse effect on our business, operating results and financial condition.

On January 2, 2019, our Board of Directors approved a plan to suspend further power converter system development and sales while we located a buyer for our power conversion systems division. If we fail to sell this division in a timely manner for consideration and at sales terms consistent with our expectations, our business, results of operations and financial condition will be adversely affected.

New technologies in the power semiconductor switch industry may supplant our technology in this market, which would harm our business and operations, and we may not be able to compete effectively in this industry and with any such new technologies.

The power semiconductor switch industry is subject to significant technological change. Our future success will depend on the cutting-edge relevance of our technology, and thereafter on our ability to appropriately respond to changing technologies and changes in function of products and quality. If new technologies supplant our technology, our business would be adversely affected and we will have to revise our plan of operation. We or our licensees could be competing against large power semiconductor device suppliers with substantially greater resources than us. If any of our competitors develop products to compete with our technology, we may not be able to commercialize our technology and our technology may not result in sufficient, or any, licensing revenue. Our potential competitors have substantially greater product development capabilities and financial and marketing resources than we do.

Risks Related to Owning Our Common Stock

The public market for our common stock may be volatile. This may affect the ability of our investors to sell their shares as well as the price at which they sell their shares.

The market price for the shares may be significantly affected by factors such as variations in the volume of trading activity, quarterly and yearly operating results, general trends in markets we expect to serve, and changes in state or federal regulations affecting us and our industry. Furthermore, in recent years the stock market has experienced extreme price and volume fluctuations that are unrelated or disproportionate to the operating performance of the affected companies. Such broad market fluctuations may adversely affect the market price of our common stock.

We have the right to issue, and have in the past issued, shares of preferred stock. If we were to issue additional preferred stock, it may have rights, preferences and privileges that may adversely affect the common stock.

We are authorized to issue 10,000,000 shares of “blank check” preferred stock, with such rights, preferences and privileges as may be determined from time-to-time by our board of directors. Our board of directors is empowered, without stockholder approval, to issue preferred stock in one or more series, and to fix for any series the dividend rights, dissolution or liquidation preferences, redemption prices, conversion rights, voting rights, and other rights, preferences and privileges for the preferred stock. The issuance of shares of preferred stock, depending on the rights, preferences and privileges attributable to the preferred stock, could reduce the voting rights and powers of the common stock and the portion of our assets allocated for distribution to common stockholders in a liquidation event, and could also result in dilution in the book value per share of the common stock we are offering. The preferred stock could also be utilized, under certain circumstances, as a method for raising additional capital or discouraging, delaying or preventing a change in control of the Company, to the detriment of the investors in the common stock offered hereby. We cannot assure you that we will not, under certain circumstances, issue shares of our preferred stock. At December 31, 2018, we had 1,518,430 shares of non-voting preferred stock outstanding.

We have not paid dividends in the past and have no immediate plans to pay dividends.

We plan to reinvest all of our earnings, to the extent we have earnings, in order to market our products and to cover operating costs and to otherwise become and remain competitive. We do not plan to pay any cash dividends with respect to our securities in the foreseeable future. We cannot assure you that we would, at any time, generate sufficient surplus cash that would be available for distribution to the holders of our common stock as a dividend. Therefore, you should not expect to receive cash dividends on our common stock.

We incur significant costs as a result of being a public company that reports to the Securities and Exchange Commission and our management is required to devote substantial time to meet compliance obligations.

As a public company reporting to the Securities and Exchange Commission, or the SEC, we incur significant legal, accounting and other expenses. We are subject to reporting requirements of the Exchange Act and the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC that impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Our management and other personnel are required to devote a substantial amount of time to these and other new compliance initiatives. In addition, we believe these rules and regulations may make it more costly for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage in the future. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, on our board committees or as executive officers.

If we are unable to regain compliance with the listing requirements of The NASDAQ Stock Market, our common stock may be delisted from Nasdaq which could have a material adverse effect on our financial condition and could make it more difficult for you to sell your shares.

Our common stock is listed on The NASDAQ Stock Market, and we are therefore subject to its continued listing requirements, including requirements with respect to the market value of publicly-held shares, market value of listed shares, minimum bid price per share, and minimum stockholder's equity, among others, and requirements relating to board and committee independence. If we fail to satisfy one or more of the requirements, we may be delisted from the Nasdaq.

On September 7, 2018, we received a notice letter from the Listing Qualifications staff of Nasdaq indicating that, based upon the closing bid price of our common stock for the last 30 consecutive business days, we no longer meet the requirement to maintain a minimum bid price of \$1 per share, as set forth in Nasdaq Listing Rule 5550(a)(2). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), Nasdaq provided us with a period of 180 calendar days, or until March 6, 2019, in which to regain compliance with the minimum bid price requirement. In order to regain compliance, the closing bid price of our common stock must be at least \$1 per share for a minimum of ten consecutive business days during this 180-day period.

On March 7, 2019, we received a notice letter from Nasdaq indicating that we had not regained compliance with the minimum bid price requirement. However, Nasdaq determined that we were eligible for an additional 180-day period, or until September 3, 2019, to regain compliance based on the fact that we met the continued listing requirement for market value of publicly held shares and all other initial listing standards for the Nasdaq Capital Market, with the exception of the bid price requirement, and we provided written notice to Nasdaq of our intent to cure the deficiency during this second compliance period, by effecting a reverse stock split, if necessary.

If we choose to implement a reverse stock split in order to regain compliance with the minimum bid price requirement, we must complete the split no later than 10 business days prior to September 3, 2019 in order to timely regain compliance. If we do not regain compliance by September 3, 2019, the Staff indicated that it will provide written notification to us that our common stock will be delisted. At that time, we may appeal the Staff's delisting determination to a Nasdaq Hearings Panel ("Panel"). Our common stock would remain listed pending the Panel's decision. There can be no assurance that, if we do appeal any delisting determination by the Staff to the Panel, that such appeal would be successful.

There can also be no assurance that we will be able to regain compliance with Nasdaq's minimum bid price requirement. If we do regain compliance with the Nasdaq's minimum bid price requirement, there can be no assurance that we will be able to maintain compliance with the continued listing requirements for The NASDAQ Stock Market, or that our common stock will not be delisted from The NASDAQ Stock Market in the future. In addition, we may be unable to meet other applicable listing requirements of The NASDAQ Stock Market, in which case our common stock could be delisted notwithstanding our ability to demonstrate compliance with the minimum bid price requirements.

Delisting from The NASDAQ Stock Market may adversely affect our ability to raise additional financing through the public or private sale of equity securities, may significantly affect the ability of investors to trade our securities and may negatively affect the value and liquidity of our common stock. Delisting also could have other negative results, including the potential loss of employee confidence, the loss of institutional investors or interest in business development opportunities. If we are delisted from The NASDAQ Stock Market and we are not able to list our common stock on another exchange, our common stock could be quoted on the OTC Bulletin Board or in the "pink sheets." As a result, we could face significant adverse consequences including, among others:

- a limited availability of market quotations for our securities;
- a determination that our common stock is a "penny stock" which will require brokers trading in our common stock to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our securities;
- a limited amount of news and little or no analyst coverage for us;
- we would no longer qualify for exemptions from state securities registration requirements, which may require us to comply with applicable state securities laws; and
- a decreased ability to issue additional securities (including pursuant to short-form registration statements on Form S-3) or obtain additional financing in the future.

Shares eligible for future sale may adversely affect the market for our common stock.

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

At December 31, 2018, we had 14,014,410 shares of common stock outstanding and 1,518,430 shares of preferred stock outstanding. Shares beneficially owned by our affiliates, if any, and employees are subject to volume and other restrictions under Rules 144 and 701 under the Securities Act, various vesting agreements, our insider trading policy and/or any applicable 10b5-1 trading plan. Shares that are not beneficially owned by our affiliates and employees generally can be freely sold in the public market, subject in some cases to restrictions under Rule 144.

At December 31, 2018, we had 8,794,900 potentially dilutive shares outstanding and we may grant additional options, stock-based awards and/or warrants in the future. If our stock price rises, the holders of vested options, stock-based awards or warrants may exercise their options, stock-based awards and/or warrants and sell a large number of shares. Any sale of a substantial number of shares of our common stock may have a material adverse effect on the market price of our common stock.

Our charter documents and Delaware law may inhibit a takeover that stockholders consider favorable.

Our Certificate of Incorporation, or Certificate, and bylaws and applicable provisions of Delaware law may delay or discourage transactions involving an actual or potential change in control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. The provisions in our Certificate and bylaws:

- authorize our board of directors to issue preferred stock without stockholder approval and to designate the rights, preferences and privileges of each class; if issued, such preferred stock would increase the number of outstanding shares of our capital stock and could include terms that may deter an acquisition of us;

- limit who may call stockholder meetings;
- do not permit stockholders to act by written consent;
- do not provide for cumulative voting rights; and
- provide that all vacancies may be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum.

In addition, Section 203 of the Delaware General Corporation Law may limit our ability to engage in any business combination with a person who beneficially owns 15% or more of our outstanding voting stock unless certain conditions are satisfied. This restriction lasts for a period of three years following the share acquisition. These provisions may have the effect of entrenching our management team and may deprive you of the opportunity to sell your shares to potential acquirers at a premium over prevailing prices. This potential inability to obtain a control premium could reduce the price of our common stock. See “Anti-Takeover Effects of Certain Provisions of Delaware Law and Our Charter Documents” for additional information.

If securities or industry analysts do not publish or do not continue to publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that industry or securities analysts publish about us or our business. Historically, a number of securities analysts published reports on us on a regular basis but this number has declined over the last year and, in general, the ratings of these analysts on our common stock has become less favorable. If any of the analysts who cover us now or in the future issue an adverse opinion regarding our stock, our stock price would likely decline. If one or more of these analysts ceases coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

ITEM 1B: UNRESOLVED STAFF COMMENTS

None.

ITEM 2: PROPERTIES

Our principal office is located at 4120 Freidrich Lane, Suite 100, Austin, Texas 78744. We lease 14,782 square feet of office and laboratory space under a triple net lease. On April 20, 2018, the Company entered into an amendment to its lease which extended the lease term from May 31, 2018 to May 31, 2021.

ITEM 3: LEGAL PROCEEDINGS

In 2017, the Company entered into arbitration with Libra Industries, Inc. (“Libra”), its prior contract manufacturer, with both parties asserting claims against the other party. At December 31, 2017, the Company recorded a \$100,000 accrual for the arbitration based on an expired settlement offer made by the Company to Libra. On June 21, 2018, the arbitrator issued a Final Award, final and binding award on all issues except as to attorney’s fees and costs. In the Final Award, the arbitrator denied Libra’s claims and awarded the Company \$163,105 on it claims. On July 15, 2018, the arbitrator issued a Supplemental Final Award on Attorney’s Fees and Costs, awarding the Company an additional \$165,346. As a result, during the year ended December 31, 2018, the Company reversed the previously recorded \$100,000 accrual resulting in a reduction to general and administrative expense and recognized the Final Award of \$163,105 as a reduction in loss from discontinued operations and the Supplemental Final Award on Attorney’s Fees and Costs of \$165,347 as a reduction in general and administrative expense. The Company received full payment on the total award on August 2, 2018.

On April 11, 2018, the Company received \$203,121 pursuant to a Judgment of Garnishment dated March 23, 2018 and related to the non-payment of an overdue accounts receivable balance by a former customer of the Company. The judgment included the past due balance of \$162,000 plus late fees and recovery of legal costs. During the year ended December 31, 2018, the Company reversed the allowance for doubtful accounts of \$162,000, originally recorded in 2017, with a corresponding reduction in loss from discontinued operations, recognized interest income of \$35,064 associated with late fees and a reduction in general and administrative expense of \$6,057 for the partial recovery of legal fees.

ITEM 4: MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5: MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is quoted under the symbol IPWR on the NASDAQ Capital Market. As of March 27, 2019, we had 117 shareholders of record. The name, address and telephone number of our stock transfer agent is Corporate Stock Transfer, Inc., 3200 Cherry Creek South Drive, Suite 430, Denver, Colorado 80209, (303) 282-4800.

Dividends

We have not paid any cash dividends on our common stock since our inception and do not anticipate paying any cash dividends in the foreseeable future. We plan to retain our earnings, if any, to provide funds for the expansion of our business.

Recent Issuances of Unregistered Securities and Use of Proceeds

None.

ITEM 6: SELECTED FINANCIAL DATA

As a smaller reporting company, we are not required to provide this information.

ITEM 7: MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the audited financial statements and related notes included elsewhere in this Annual Report on Form 10-K. In addition to historical information, this discussion and analysis here and throughout this Form 10-K contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements.

Overview

Ideal Power is located in Austin, Texas. Until recently, we were primarily focused on the design, marketing and sale of electrical power conversion products using our proprietary technology called Power Packet Switching Architecture™, or PPSA™. PPSA™ is a power conversion technology that improves upon existing power conversion technologies in key product metrics, such as size and weight while providing built-in isolation and bi-directional and multi-port capabilities. PPSA™ utilizes standardized hardware with application specific embedded software. Our products were designed to be used in both on-grid and off-grid applications with a focus on solar + storage, microgrid and stand-alone energy storage applications. The principal products of the Company were 30-kilowatt power conversion systems, including 2-port and multi-port products.

On April 16, 2018, we realigned into two operating divisions: Power Conversion Systems, to continue the commercialization of our PPSA™ technology, and B-TRAN, to develop our Bi-directional bi-polar junction TRANSistor (B-TRAN™) solid state switch technology.

On January 2, 2019, our Board of Directors approved a strategic shift to focus on the commercialization of our B-TRAN™ technology and a plan to suspend further power converter system, or PPSA™, development and sales while we located a buyer for our power conversion systems division and PPSA™ technology. We have classified our PPSA™ business as held for sale and now shows this business as a discontinued operation in our financial statements.

To date, operations have been funded primarily through the sale of common stock. Total revenue generated from inception to date as of December 31, 2018 amounted to \$14.8 million with approximately \$12.3 million of that revenue from discontinued operations and the remainder from grant revenue for bi-directional power switch development. We did not have revenue from continuing operations in the years ended December 31, 2018 and 2017. We may pursue additional research and development grants, if and when available, to further develop and/or improve our technology.

Critical Accounting Policies

The following discussion and analysis of financial condition and results of operations is based upon our financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Certain accounting policies and estimates are particularly important to the understanding of our financial position and results of operations and require the application of significant judgment by our management or can be materially affected by changes from period to period in economic factors or conditions that are outside of our control. As a result, they are subject to an inherent degree of uncertainty. In applying these policies, we use our judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on our historical operations, our future business plans and projected financial results, the terms of existing contracts, our observance of trends in the industry, information provided by our customers and information available from other outside sources, as appropriate. Please see Footnote 2 to our financial statements for a more complete description of our critical accounting policies.

Revenue Recognition. We recognize revenue from product sales in accordance with Accounting Standards Codification, or ASC, Topic 606, "Revenue from Contracts with Customers." Revenue is recognized in an amount that reflects the expected consideration to be received in exchange for the transfer of the promised goods or services to customers. We generally sell our products FOB shipping, where the risk of loss and title pass to the customer at the shipping point, and recognize revenue when products are shipped. All revenue is included within loss from discontinued operations for the years ended December 31, 2018 and 2017.

Research and Development. Research and development costs are presented as a line item under operating expenses and are expensed as incurred.

Intangible Assets. Our intangible assets are composed of patents, which are recorded at cost, and other intangible assets, which are recorded at cost plus the estimated present value of all future payments associated with the other intangible assets. We capitalize third-party legal costs and filing fees, if any, associated with obtaining patents on our new inventions or other intangible assets. Once the patent asset has been placed in service, the Company amortizes these costs over the shorter of the asset's legal life, generally 20 years, or its estimated economic life using the straight-line method. For the other intangible assets, the Company amortizes the asset over the term of the underlying agreements.

Income Taxes. We account for income taxes using an asset and liability approach which allows for the recognition and measurement of deferred tax assets based upon the likelihood of realization of tax benefits in future years. Under the asset and liability approach, deferred taxes are provided for the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. A valuation allowance is provided for deferred tax assets if it is more likely than not these items will either expire before we are able to realize their benefits, or that future deductibility is uncertain. Tax benefits from an uncertain tax position are recognized only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position.

Stock-Based Compensation. We apply Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 718, "Stock Compensation," when recording stock-based compensation. The fair value of each stock option award is estimated on the date of grant using the commonly used Black-Scholes option valuation model. The assumptions used in the Black-Scholes model are as follows:

Grant Price — The grant price is determined based on the closing share price on the date of grant.

Risk-free interest rate — The risk-free interest rate is based on the implied yield available on US Treasury securities at the time of grant with an equivalent term of the expected life of the award.

Expected lives — As permitted by SAB 107, due to our insufficient history of option activity, we utilize the simplified approach to estimate the options' expected term, calculated as the midpoint between the vesting period and the contractual life of the award.

Expected volatility — Volatility is estimated based on the historical volatilities of comparable companies.

Expected dividend yield — Dividend yield is based on current yield at the grant date or the average dividend yield over the historical period. We have never declared or paid dividends and have no plans to do so in the foreseeable future.

We use a Monte Carlo simulation pricing model to determine the fair value of performance stock units (“PSUs”). A typical Monte Carlo exercise simulates a distribution of stock prices to yield an expected distribution of stock prices during and at the end of the performance period. The simulations are repeated many times in order to derive a probabilistic assessment of stock performance. The stock-paths are simulated using assumptions which include expected stock price volatility and risk-free interest rate.

We account for stock issued to non-employees in accordance with the provisions of FASB ASC 505-50 “Equity Based Payments to Non-Employees.” FASB ASC 505-50 states that equity instruments that are issued in exchange for the receipt of goods or services should be measured at the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measurable. The measurement date occurs as of the earlier of (a) the date at which a performance commitment is reached or (b) absent a performance commitment, the date at which the performance necessary to earn the equity instruments is complete (that is, the vesting date).

Results of Operations

Comparison of the year ended December 31, 2018 to the year ended December 31, 2017

Research and Development Expenses. Research and development expenses increased by \$155,901, or 22%, to \$871,742 in the year ended December 31, 2018 from \$715,841 in the year ended December 31, 2017. The increase was due primarily to higher personnel costs of \$121,406, inclusive of higher stock-based compensation expense, and modestly higher material and third-party bi-directional power switch development costs. We expect higher research and development expenses in 2019 due to our strategic shift to focus on our B-TRAN™ technology.

General and Administrative Expenses. General and administrative expenses decreased by \$71,927, or 2%, to \$3,439,882 in the year ended December 31, 2018 from \$3,511,809 in the year ended December 31, 2017. The decrease was due primarily to lower stock-based compensation costs of \$352,714, personnel costs of \$190,373 and board cash compensation of \$55,000 largely offset by higher net legal fees of \$408,099 and contract labor costs of \$118,811. General and administrative expenses were impacted by an absence of grants in recent years to tenured executives, the Company’s cost reduction plan initiated in April 2017 and a significant increase in net legal fees in connection with the Company’s evaluation and pursuit of strategic alternatives for the business, partially offset by the recoupment of fees from litigation. We expect a significant reduction in our general and administrative expenses in 2019 due to the reduction in the size of the organization, including lower staffing levels, and other cost reduction activities.

Interest Income. Interest income increased to \$40,021 for the year ended December 31, 2018 compared to \$17,588 for the year ended December 31, 2017. Interest income for the year ended December 31, 2018 included \$35,064 in late fees awarded to the Company in connection with a legal proceeding against a former customer for non-payment of a \$162,000 receivable.

Loss from Operations. Our loss from operations for the year ended December 31, 2018 was \$4,271,603 or 1% higher than the \$4,210,062 loss from operations for year ended December 31, 2017.

Loss from Discontinued Operations. Our loss from discontinued operations for the year ended December 31, 2018 was \$3,633,386 or 42% lower than the \$6,225,036 loss from operations for year ended December 31, 2017. The loss from discontinued operations was significantly lower than the prior year due to both our cost reduction plan initiated in April 2017 as well as the discontinuation of new product development in early 2018. Loss from discontinued operations for the year ended December 31, 2018 includes a \$360,000 impairment on assets held for sale to write-down these assets to expected net proceeds from the anticipated sale.

Net Loss. As a result of the decrease in our loss from discontinued operations, our net loss for the year ended December 31, 2018, was \$7,904,989 as compared to a net loss of \$10,435,098 for the year ended December 31, 2017.

Liquidity and Capital Resources

We currently do not generate revenue. We have funded our operations through the sale of common stock.

As of December 31, 2018 and 2017, we had cash and cash equivalents of \$3,258,077 and \$10,022,247, respectively. Our net working capital and long-term debt at December 31, 2018 were \$3,548,564 and \$0, respectively.

Operating activities in the year ended December 31, 2018 resulted in cash outflows of \$6,546,216, which were due to the loss from continuing operations for the period of \$4,271,603, cash used in operating activities related to discontinued operations of \$2,713,957 and unfavorable balance sheet timing of \$485,471 offset by stock-based compensation of \$730,802, depreciation and amortization of \$137,509 and patent impairment charges of \$56,504. Operating activities in the year ended December 31, 2017 resulted in cash outflows of \$7,415,539, which were due to the loss from continuing operations for the period of \$4,210,062 and cash used in operating activities related to discontinued operations of \$4,457,278 offset primarily by stock-based compensation of \$988,886, depreciation and amortization of \$154,763 and patent impairment charges of \$87,655. We expect a significant reduction in cash outflows from operating activities in 2019 due to lower general and administrative spending, discussed in more detail above, as well as lower cash outflows from discontinued operations prior to the sale of these operations and the elimination of these cash outflows once a sale is completed.

Investing activities related to continuing operations in the years ended December 31, 2018 and 2017 resulted in cash outflows of \$134,149 and \$236,077, respectively, for the acquisition of fixed assets and intangible assets. Investing activities related to discontinued operations in the years ended December 31, 2018 and 2017 resulted in cash outflows of \$78,084 and \$197,953, respectively.

Financing activities in the year ended December 31, 2018 resulted in cash outflows of \$5,721 related to the Company paying employee taxes in exchange for common stock upon the vesting of restricted stock units. Financing activities in the year ended December 31, 2017 resulted in cash inflows of \$13,666,900 related primarily to our Private Placement net proceeds of \$13,657,331. In the Private Placement, each share of common stock or preferred stock was sold together with a warrant to purchase one share of common stock at a collective price of \$2.535. Investors purchased an aggregate of 5,220,826 shares of common stock and 708,430 shares of preferred stock together with warrants to purchase 5,929,256 shares of common stock in the Private Placement for aggregate gross proceeds of \$15.0 million. Net cash proceeds were \$13.7 million after offering fees and expenses, including the placement agent fee of \$1.1 million. Other financing activities in the years ended December 31, 2017 resulted in cash inflows of \$9,569 including an inflow of \$11,143 related to the exercise of stock options and warrants and a cash outflow of \$1,574 related to the Company paying employee taxes in exchange for common stock upon the vesting of restricted stock.

As our technology is in the development stage and has not yet been commercialized, we will be required to obtain additional financing to continue our operations and execute our business plan. Even in the event we complete the planned sale of our power conversion systems division in the near term, we will still need to raise additional capital within the next twelve to fifteen months from the date of issuance of this report to fund our future operations. We may not be able to obtain such financing on commercially reasonable terms or at all. If we are unable to obtain such financing when needed, we will be required to reduce operating costs, which could jeopardize current and future strategic initiatives and business plans, or cease operations. Our independent registered public accounting firm, in its report on our 2018 financial statements, has raised substantial doubt about our ability to continue as a going concern.

Inflation

We do not believe that inflation has had a material impact on our business and operating results during the periods presented, and we do not expect it to have a material impact in the near future, although there can be no assurances that our business will not be affected by inflation in the future.

Off-Balance Sheet Transactions

We do not have any off-balance sheet transactions.

Trends, Events and Uncertainties

Research and development of new technologies is, by its nature, unpredictable. Although we will undertake development efforts with commercially reasonable diligence, there can be no assurance that our working capital of \$3,548,564 as of December 31, 2018 will be sufficient to enable us to develop our technology to the extent needed to create future sales to sustain operations as contemplated herein. If our working capital is insufficient for this purpose, we will consider other options to continue our path to commercialization, including, but not limited to, additional financing through follow-on stock offerings, debt financing, co-development agreements, government grants, curtailment of operations, suspension of operations, sale or licensing of developed intellectual property, or other alternatives.

We cannot assure you that our technology will be adopted, that we will ever earn revenues sufficient to support our operations, or that we will ever be profitable. Furthermore, since we have no committed source of financing, we cannot assure you that we will be able to raise money as and when we need it to continue our operations. If we cannot raise funds as and when we need them, we may be required to severely curtail, or even to cease, our operations.

On January 2, 2019, our Board of Directors approved a strategic shift to focus on the commercialization of our B-TRAN™ technology and a plan to suspend further power converter system, or PPSA™, development and sales while we locate a buyer for our power conversion systems division and PPSA™ technology. It is uncertain whether this strategic shift will be successful. In addition, we can provide no assurance that we will be able to find a buyer for our power conversion systems division and PPSA™ technology. A failure to promptly sell this division will distract management resources from focusing on executing on the development and commercialization of our B-TRAN™ technology and result in a more rapid utilization of our working capital.

Other than as discussed above and elsewhere in this report, we are not aware of any trends, events or uncertainties that are likely to have a material effect on our financial condition.

ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a smaller reporting company, we are not required to provide this information.

ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Ideal Power Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Ideal Power, Inc. (the "Company") as of December 31, 2018 and 2017, and the related statements of operations, stockholders' equity and cash flows, for each of the two years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has incurred net losses and negative operating cash flows from inception, including a net loss of \$7.9 million and cash used in operations of \$6.5 million for the year ended December 31, 2018. These conditions, along with other matters as set forth in Note 2, raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Gumbiner Savett Inc.

We have served as the Company's auditor since 2013.

Santa Monica, California

April 1, 2019

IDEAL POWER INC.

Balance Sheets

	December 31,	
	2018	2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 3,258,077	\$ 10,022,247
Accounts receivable, net	-	5,618
Prepayments and other current assets	333,877	250,330
Current assets of discontinued operations held for sale	1,096,323	499,707
Total current assets	4,688,277	10,777,902
Property and equipment, net	63,214	134,654
Intangible assets, net	1,396,409	1,384,833
Other assets	17,920	37,500
Noncurrent assets of discontinued operations held for sale	-	1,232,098
Total assets	<u>\$ 6,165,820</u>	<u>\$ 13,566,987</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 94,203	\$ 212,824
Accrued expenses	167,755	448,185
Current liabilities of discontinued operations held for sale	877,755	869,621
Total current liabilities	1,139,713	1,530,630
Long-term liabilities	428,163	456,234
Total liabilities	1,567,876	1,986,864
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 10,000,000 shares authorized; 1,518,430 shares issued and outstanding at December 31, 2018 and 2017	1,518	1,518
Common stock, \$0.001 par value; 50,000,000 shares authorized; 14,027,590 shares issued and 14,014,410 shares outstanding at December 31, 2018 and 13,998,465 shares issued and 13,996,121 shares outstanding at December 31, 2017, respectively	14,028	13,998
Additional paid-in capital	68,009,860	67,081,359
Treasury stock, at cost; 13,180 shares at December 31, 2018 and 2,344 shares at December 31, 2017, respectively	(13,210)	(7,489)
Accumulated deficit	(63,414,252)	(55,509,263)
Total stockholders' equity	4,597,944	11,580,123
Total liabilities and stockholders' equity	<u>\$ 6,165,820</u>	<u>\$ 13,566,987</u>

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

IDEAL POWER INC.
Statements of Operations

	For the Year Ended December 31,	
	2018	2017
Product revenue	\$ -	\$ -
Cost of product revenue	-	-
Gross profit	<u>-</u>	<u>-</u>
Operating expenses:		
Research and development	871,742	715,841
General and administrative	3,439,882	3,511,809
Sales and marketing	-	-
Total operating expenses	<u>4,311,624</u>	<u>4,227,650</u>
Loss from continuing operations before interest	(4,311,624)	(4,227,650)
Interest income, net	40,021	17,588
Loss from continuing operations	(4,271,603)	(4,210,062)
Loss from discontinued operations	(3,633,386)	(6,225,036)
Net loss	<u>\$ (7,904,989)</u>	<u>\$ (10,435,098)</u>
Loss from continuing operations per share – basic and fully diluted	\$ (0.30)	\$ (0.32)
Loss from discontinued operations per share – basic and fully diluted	<u>(0.26)</u>	<u>(0.47)</u>
Net loss per share – basic and fully diluted	<u>\$ (0.56)</u>	<u>\$ (0.79)</u>
Weighted average number of shares outstanding – basic and fully diluted	<u>13,997,444</u>	<u>13,223,229</u>

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

IDEAL POWER INC.

Statement of Stockholders' Equity
For the Years Ended December 31, 2018 and 2017

	Common Stock		Preferred Stock		Additional Paid-In Capital	Treasury Stock		Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount		Shares	Amount		
Balances at December 31, 2016	9,560,896	\$ 9,561	—	—	\$ 52,310,481	1,683	\$ (5,915)	\$ (45,074,165)	\$ 7,239,962
Shares issued in offering, net of issuance costs	5,220,826	5,221	708,430	708	13,651,402	—	—	—	13,657,331
Exercise of options and warrants	26,743	26	—	—	11,117	—	—	—	11,143
Common stock to preferred stock exchange	(810,000)	(810)	810,000	810	—	—	—	—	—
Common stock tendered to pay taxes on restricted stock vesting	—	—	—	—	—	661	(1,574)	—	(1,574)
Stock-based compensation	—	—	—	—	1,108,359	—	—	—	1,108,359
Net loss for the year ended December 31, 2017	—	—	—	—	—	—	—	(10,435,098)	(10,435,098)
Balances at December 31, 2017	13,998,465	\$ 13,998	1,518,430	\$ 1,518	\$ 67,081,359	2,344	\$ (7,489)	\$ (55,509,263)	\$ 11,580,123
Vesting of performance stock	6,000	6	—	—	(6)	1,779	(2,188)	—	(2,188)
Vesting of restricted stock units	23,125	24	—	—	(24)	5,971	(3,105)	—	(3,105)
Common stock tendered to pay taxes on restricted stock vesting	—	—	—	—	—	586	(428)	—	(428)
Forfeiture of unvested restricted stock	—	—	—	—	—	2,500	—	—	—
Stock-based compensation	—	—	—	—	928,531	—	—	—	928,531
Net loss for the year ended December 31, 2018	—	—	—	—	—	—	—	(7,904,989)	(7,904,989)
Balances at December 31, 2018	14,027,590	\$ 14,028	1,518,430	\$ 1,518	\$ 68,009,860	13,180	\$ (13,210)	\$ (63,414,252)	\$ 4,597,944

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

IDEAL POWER INC.

Statements of Cash Flows

	For the Year Ended December 31,	
	2018	2017
Cash flows from operating activities:		
Loss from continuing operations	\$ (4,271,603)	\$ (4,210,062)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	137,509	154,763
Write-off of fixed assets	—	4,501
Write-off of capitalized patents	56,504	87,655
Stock-based compensation	730,802	988,886
Decrease (increase) in operating assets:		
Accounts receivable	5,618	(5,618)
Prepaid expenses and other assets	(63,967)	(19,583)
Increase (decrease) in operating liabilities:		
Accounts payable	(118,621)	57,100
Accrued expenses	(308,501)	(15,903)
Net cash used in operating activities	(3,832,259)	(2,958,261)
Net cash used in operating activities – discontinued operations	(2,713,957)	(4,457,278)
Cash flows from investing activities:		
Purchase of property and equipment	(1,088)	(64,747)
Acquisition of intangible assets	(133,061)	(171,330)
Net cash used in investing activities	(134,149)	(236,077)
Net cash used in investing activities – discontinued operations	(78,084)	(197,953)
Cash flows from financing activities:		
Net proceeds from issuance of common stock	—	13,657,331
Exercise of options and warrants	—	11,143
Payment of taxes related to restricted stock vesting	(5,721)	(1,574)
Net cash (used in) provided by financing activities	(5,721)	13,666,900
Net increase (decrease) in cash and cash equivalents – continuing operations	(3,972,129)	10,472,562
Net decrease in cash and cash equivalents – discontinued operations	(2,792,041)	(4,655,231)
Cash and cash equivalents at beginning of year	10,022,247	4,204,916
Cash and cash equivalents at end of year	<u>\$ 3,258,077</u>	<u>\$ 10,022,247</u>

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

Ideal Power Inc.

Notes to Financial Statements

Note 1 — Organization and Description of Business

Ideal Power Inc. (the “Company”) was incorporated in Texas on May 17, 2007 under the name Ideal Power Converters, Inc. The Company changed its name to Ideal Power Inc. on July 8, 2013 and re-incorporated in Delaware on July 15, 2013. With headquarters in Austin, Texas, it developed power conversion solutions with a focus on solar + storage, microgrid and stand-alone energy storage applications. The principal products of the Company were 30-kilowatt power conversion systems, including 2-port and multi-port products.

On April 16, 2018, the Company realigned into two operating divisions: Power Conversion Systems, to continue the commercialization of its PPSA™ technology, and B-TRAN, to develop its Bi-directional bi-polar junction TRANSistor (B-TRAN™) solid state switch technology. On January 2, 2019, the Board of Directors of the Company approved a strategic shift to focus on the commercialization of its B-TRAN™ technology and a plan to suspend further power converter system development and sales while the Company located a buyer for its power conversion systems division.

Since its inception, the Company has generated limited revenues from the sale of products and has financed its research and development efforts and operations primarily through the sale of common stock. The Company’s continued operations are dependent upon its ability to obtain adequate sources of funding through future revenues, follow-on stock offerings, debt financing, co-development agreements, government grants, sale or licensing of developed intellectual property or other alternatives.

Note 2 — Summary of Significant Accounting Policies

Basis of Presentation

The preparation of financial statements in conformity with US GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Liquidity and Going Concern

The Company has incurred net losses and negative operating cash flows since inception, including a net loss of \$7.9 million and cash used in operating activities of \$6.5 million for the year ended December 31, 2018. At December 31, 2018, the Company had net working capital of \$3.5 million and the Company’s principal source of liquidity consisted of \$3.3 million of cash and cash equivalents.

In order to meet the Company’s operating requirements through at least the next twelve months from the date of issuance of these financial statements, it will need to raise additional capital from third parties. There can be no assurance that the Company will be successful in obtaining third-party financing. If external financing sources are not available or are inadequate to fund operations, or the technology under development is not capable of generating sustainable revenues in the future, the Company will be required to reduce operating costs, which could jeopardize future strategic initiatives and business plans. Accordingly, these factors, among others raise substantial doubt about the Company’s ability to continue as a going concern.

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The ability of the Company to continue as a going concern is dependent on its ability to raise additional capital and to develop profitable operations through implementation of its current business initiatives, however, there can be no assurances that the Company will be able to do so. The accompanying financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents.

Accounts Receivable

Trade accounts receivable are stated net of an allowance for doubtful accounts. The Company performs ongoing credit evaluations of its customers' financial condition. In limited instances, the Company may require an upfront deposit and, in most cases, the Company charges interest on past due amounts. Management estimates the allowance for doubtful accounts based on review and analysis of specific customer balances that may not be collectible, customer payment history and any other customer-specific information that may impact the evaluation of the specific customer's credit. All trade accounts receivable are included within current assets held for sale at both December 31, 2018 and 2017.

Inventories

Inventories are stated at the lower of cost (first in, first out method) or net realizable value. Net realizable value is the estimated selling price less the selling costs. Inventory quantities on hand are reviewed regularly and a write-down for excess and obsolete inventory is recorded based primarily on an estimated forecast of product demand, market conditions and anticipated production requirements in the near future. All inventories, net of reserves, are included within current assets held for sale at both December 31, 2018 and 2017.

Property and Equipment

Property and equipment are stated at historical cost less accumulated depreciation and amortization. Major additions and improvements are capitalized while maintenance and repairs that do not improve or extend the useful life of the respective asset are expensed. Depreciation and amortization of property and equipment is computed using the straight-line method over their estimated useful lives. Leasehold improvements are amortized over the shorter of the life of the asset or the related leases. Estimated useful lives of the principal classes of assets are as follows:

Leasehold improvements	Shorter of lease term or useful life
Machinery and equipment	5 years
Furniture, fixtures and computers	3 – 5 years

Intangible Assets

The Company's intangible assets are composed of patents, which are recorded at cost, and other intangible assets, which are recorded at cost plus the estimated present value of all future payments associated with the other intangible assets. The Company capitalizes third-party legal costs and filing fees, if any, associated with obtaining patents or other intangible assets. Once the patent asset has been placed in service, the Company amortizes these costs over the shorter of the asset's legal life, generally 20 years, or its estimated economic life using the straight-line method. For the other intangible assets, the Company amortizes the asset over the 17-year term of the underlying agreements.

Assets and Liabilities of Discontinued Operations Held for Sale

Assets and liabilities are classified as held for sale when all of the following criteria for a plan of sale have been met: (1) management, having the authority to approve the action, commits to a plan to sell the assets; (2) the assets are available for immediate sale, in their present condition, subject only to terms that are usual and customary for sales of such assets; (3) an active program to locate a buyer and other actions required to complete the plan to sell the assets have been initiated; (4) the sale of the assets is probable and is expected to be completed within one year; (5) the assets are being actively marketed for a price that is reasonable in relation to their current fair value; and (6) actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or the plan will be withdrawn. When all of these criteria have been met, the assets (and liabilities) are classified as held for sale in the balance sheet. Assets classified as held for sale are reported at the lower of their carrying value or fair value less costs to sell. Depreciation of assets ceases upon designation as held for sale.

Impairment of Long-Lived Assets

The long-lived assets, consisting of property and equipment and intangible assets, held and used by the Company are reviewed for impairment no less frequently than annually or whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. In the event that facts and circumstances indicate that the cost of any long-lived assets may be impaired, an evaluation of recoverability is performed. For continuing operations, management has determined that there was an impairment in the value of long-lived assets in the amount of \$56,504 and \$92,156 during the years ended December 31, 2018 and 2017, respectively.

Fair Value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities measured at fair value are categorized based on whether or not the inputs are observable in the market and the degree that the inputs are observable. The categorization of financial assets and liabilities within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The three levels of inputs used to establish fair value are the following:

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

The Company's financial instruments primarily consist of cash and cash equivalents, accounts payable and long-term liabilities. As of the balance sheet dates, the estimated fair values of the financial instruments were not materially different from their carrying values as presented on the balance sheets. This is primarily attributed to the short-term nature of these instruments.

In 2016, the Company recorded a long-term liability for the estimated present value of future payments under a licensing agreement. In 2017, the Company recorded an adjustment to increase the long-term liability due to an increase in the future payments due under this licensing agreement. The Company determined the discount rate to estimate the present value of the future payments based on the applicable treasury rates. The Company's long-term liability is classified within Level 3. See Note 6 and Note 12 for more details regarding the licensing agreement. The Company did not identify any other assets and liabilities that are required to be presented in the balance sheets at fair value.

Revenue Recognition

Revenue from product sales is recognized in accordance with Accounting Standards Codification, or ASC, Topic 606, "Revenue from Contracts with Customers." Revenue is recognized in an amount that reflects the expected consideration to be received in exchange for the transfer of the promised goods or services to customers. The Company generally sells its products FOB shipping, where the risk of loss and title pass to the customer at the shipping point, and recognizes revenue when products are shipped. All revenue is included within loss from discontinued operations for the years ended December 31, 2018 and 2017.

Product Warranties

The Company generally provides a ten-year limited warranty on its products except for its product for the solar + storage market for which the Company provides a five-year limited warranty. Accruals for product warranties are estimated based upon limited historical warranty experience, engineering experience and judgment, and third-party assessments of the reliability of the Company's products. Accruals for product warranties were previously recorded in cost of product revenue at the time revenue was recognized in order to match revenues with related expenses but are now included in loss from discontinued operations for the years ended December 31, 2018 and 2017. The Company assesses the adequacy of its estimated warranty liability quarterly and adjusts the reserve as necessary. The warranty reserve was previously included within accrued expenses but is now included within current liabilities held for sale at both December 31, 2018 and 2017.

Research and Development

Research and development costs are presented as a line item under operating expenses and are expensed as incurred.

Income Taxes

The Company accounts for income taxes using an asset and liability approach which allows for the recognition and measurement of deferred tax assets based upon the likelihood of realization of tax benefits in future years. Under the asset and liability approach, deferred taxes are provided for the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. A valuation allowance is provided for deferred tax assets if it is more likely than not these items will either expire before the Company is able to realize their benefits, or that future deductibility is uncertain. At December 31, 2018 and 2017, the Company has established a full reserve against all deferred tax assets.

Tax benefits from an uncertain tax position are recognized only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate resolution.

Net Loss Per Share

The Company applies Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 260, “Earnings per Share.” Basic earnings (loss) per share is computed by dividing earnings (loss) available to common stockholders by the weighted-average number of common shares outstanding. Diluted earnings (loss) per share is computed similar to basic earnings (loss) per share except that the denominator is increased to include additional common shares available upon exercise of equity awards and warrants using the treasury stock method. In periods with a net loss, no common share equivalents are included because their effect would be anti-dilutive. At December 31, 2018 and 2017, potentially dilutive shares outstanding amounted to 8,794,900 and 8,837,315, respectively.

Stock Based Compensation

The Company applies FASB ASC 718, “Stock Compensation,” when recording stock-based compensation. The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option valuation model.

The Company uses a Monte Carlo simulation pricing model to determine the fair value of performance stock units (“PSUs”). A typical Monte Carlo exercise simulates a distribution of stock prices to yield an expected distribution of stock prices during and at the end of the performance period. The simulations are repeated many times in order to derive a probabilistic assessment of stock performance. The stock-paths are simulated using assumptions which include expected stock price volatility and risk-free interest rate.

The Company accounts for stock issued to non-employees in accordance with the provisions of FASB ASC 505-50 “Equity Based Payments to Non-Employees.” FASB ASC 505-50 states that equity instruments that are issued in exchange for the receipt of goods or services should be measured at the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measurable. The measurement date occurs as of the earlier of (a) the date at which a performance commitment is reached or (b) absent a performance commitment, the date at which the performance necessary to earn the equity instruments is complete (that is, the vesting date).

The Company issues common stock upon exercise of equity awards and warrants.

Presentation of Sales Taxes

Certain states impose a sales tax on the Company’s sales to nonexempt customers. The Company collects that sales tax from customers and remits the entire amount to the states. The Company’s accounting policy is to exclude the tax collected and remitted to the states from revenues and cost of revenues.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. The Company maintains its cash with a major financial institution located in the United States. Balances are insured by the Federal Deposit Insurance Corporation up to \$250,000. The Company maintains balances in excess of federally insured limits. The Company has not experienced losses in such accounts and believes it is not exposed to significant credit risk regarding its cash and cash equivalents.

The Company encounters a certain amount of risk as a result of a concentration of revenue from a few significant customers. Credit is extended to customers based on an evaluation of their financial condition. In limited instances, the Company may require an upfront deposit. The Company performs ongoing credit evaluations of its customers and records an allowance for potential bad debts based on available information.

Recently Adopted Standard

In July 2017, the FASB issued ASU 2017-11, Accounting for Certain Financial Instruments with Down Round Features and Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception. Part I of this ASU addresses the complexity of accounting for certain financial instruments with down round features. Per the ASU, a freestanding equity-linked financial instrument (or embedded conversion option) no longer would be accounted for as a derivative liability at fair value as a result of the existence of a down round feature. The ASU is effective for public entities for fiscal years beginning after December 15, 2018 and early adoption is permitted. The Company has elected to early adopt the ASU and will recognize the value of the effect of the down round provision, if and/or when triggered. The provision is associated with stock warrants issued as part of the Company's 2017 definitive securities purchase agreement, or the Private Placement. For more details regarding the 2017 Private Placement, see Notes 8 and 10.

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update (“ASU”) 2014-09, Revenue from Contracts with Customers (Topic 606), requiring an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The FASB issued several amendments to the standard, including clarification on accounting for licenses of intellectual property and identifying performance obligations. The standard replaced most existing revenue recognition guidance in U.S. GAAP when it became effective on January 1, 2018 and permits the use of either the retrospective or cumulative effect transition method. Adoption of the standard did not result in an adjustment to the opening balance of accumulated deficit at January 1, 2018, the date of initial adoption, and did not have a material effect on the Company’s financial statements for the year ended December 31, 2018.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230), in order to address eight specific cash flow issues with the objective of reducing the existing diversity in practice. The updated standard is effective for financial statements issued for annual periods beginning after December 15, 2017 and interim periods within those fiscal years with early adoption permitted. The adoption of the standard did not have a significant effect on the Company's financial statements.

In May 2017, the FASB issued ASU 2017-09, Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting. This ASU provides clarity and reduces both (1) diversity in practice and (2) cost and complexity when applying the guidance in Topic 718 to a change to the terms or conditions of a share-based payment award. The amendments in this ASU are effective for public entities for fiscal years and interim periods beginning after December 15, 2017, with early adoption permitted. The adoption of this standard did not have a material effect on the Company's financial statements.

Recent Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842), to increase transparency and comparability among organizations by requiring the recognition of lease assets and lease liabilities on the balance sheet. Most prominent among the amendments is the recognition of assets and liabilities by lessees for those leases classified as operating leases under previous U.S. GAAP. Under the new standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. The new standard will be effective for annual and interim periods beginning after December 15, 2018, with early adoption permitted. The Company elected to not early adopt this standard. The Company will recognize its lease commitment as a lease liability and right-of-use asset upon adoption. For more details regarding the lease commitment, see Note 12.

Management does not believe that any other recently issued, but not yet effective, accounting standards, if adopted, would have a material impact on the Company's financial statements.

Note 3 — Discontinued Operations and Assets Held for Sale

In January 2019, the Board of Directors of the Company approved a strategic shift to focus on the commercialization of its B-TRAN™ technology and a plan to suspend further power converter system development and sales while the Company located a buyer for its power conversion systems division. The Company's power conversion system division, a component supplier to energy storage system integrators, had not achieved the necessary scale to generate positive cash flows. As the division was dependent on the ability of its customers to scale in the small commercial and industrial segment of the storage market and based on the sales forecasts and commitments provided by these customers, the Company did not expect its power conversion systems division to scale sufficiently in the short term, requiring an inflow of additional capital for the business. As such, the decision was made to exit the power conversion systems business and sell the division and the Company's PPSA™ technology and focus on the Company's B-TRAN™ technology.

As a result, the assets held for sale and discontinued operations criteria have been met and the Company's financial statements are presented in accordance with ASC 205. Under ASC 205-20-45-10, during the period in which a component meets the assets held for sale and discontinued operations criteria, an entity must present the assets and liabilities of the discontinued operation separately in the asset and liability sections of the balance sheet for the comparative reporting periods. The prior period balance sheet should be reclassified for the held for sale items. For income statements, the current and prior periods should report the results of operations of the component in discontinued operations when comparative income statements are presented.

The following is a reconciliation of the carrying amounts of major classes of assets and liabilities of the discontinued operations to assets and liabilities held for sale:

	December 31,	
	2018	2017
Accounts receivable, net	\$ 270,768	\$ 215,466
Inventories, net	131,342	251,363
Prepayments and other current assets	22,322	32,878
Current assets held for sale (1)		499,707
Property and equipment, net	329,738	534,917
Intangible assets, net (2)	342,153	697,181
Noncurrent assets held for sale (1)		1,232,098
Assets held for sale (1)	\$ 1,096,323	\$ 1,731,805
Accounts payable	\$ 356,113	\$ 236,651
Accrued expenses	521,642	632,970
Current liabilities held for sale	\$ 877,755	\$ 869,621

- (1) The assets of the discontinued operations classified as held for sale are classified as current on the December 31, 2018 balance sheet because it is probable that the sale will occur and proceeds will be collected within one year.
- (2) Includes an impairment charge of \$360,000, calculated as the net book value of assets held for sale prior to the impairment less the expected proceeds from the planned sale. The expected proceeds are based on the estimated fair value of the net assets held for sale less the estimated cost to sell the net assets held for sale.

The following is a reconciliation of the major classes of line items constituting loss on discontinued operations to loss on discontinued operations shown in the Statement of Operations:

	December 31,	
	2018	2017
Product revenue	\$ 1,624,773	\$ 1,212,270
Cost of product revenue	1,968,648	2,241,682
Research and development	2,095,138	3,469,064
General and administrative	59,873	278,043
Sales and marketing	774,500	1,448,517
Impairment	360,000	—
Loss on discontinued operations	<u>\$ (3,633,386)</u>	<u>\$ (6,225,036)</u>

Note 4 — Prepayments and Other Current Assets

Prepayments and other current assets consisted of the following:

	December 31,	
	2018	2017
Prepaid insurance	\$ 220,969	\$ 160,926
Prepaid software	43,409	41,253
Other	69,499	48,151
	<u>\$ 333,877</u>	<u>\$ 250,330</u>

Note 5 — Property and Equipment

Property and equipment, net consisted of the following:

	December 31,	
	2018	2017
Machinery and equipment	\$ 64,258	\$ 63,170
Building leasehold improvements	187,128	187,128
Furniture, fixtures, software and computers	135,285	135,285
	386,671	385,583
Accumulated depreciation and amortization	(323,457)	(250,929)
	<u>\$ 63,214</u>	<u>\$ 134,654</u>

Note 6 — Intangible Assets

Intangible assets, net consisted of the following:

	December 31,	
	2018	2017
Patents	\$ 824,004	\$ 747,447
Other intangible assets	732,175	732,175
	1,556,179	1,479,622
Accumulated amortization	(159,770)	(94,789)
	<u>\$ 1,396,409</u>	<u>\$ 1,384,833</u>

At December 31, 2018 and 2017, the Company had capitalized approximately \$354,427 and \$330,070, respectively, for costs related to patents that have not been awarded. During the years ended December 31, 2018 and 2017, the Company wrote-off \$56,504 and \$87,655, respectively, in previously capitalized patent costs.

Amortization expense amounted to \$64,981 and \$51,732 for the years ended December 31, 2018 and 2017, respectively. Amortization expense for the succeeding five years and thereafter is \$65,787 (2019-2023) and \$713,047 (thereafter).

Note 7 — Accrued Expenses

Accrued expenses consisted of the following:

	December 31,	
	2018	2017
Accrued professional fees	\$ 47,000	\$ 48,481
Accrued compensation	43,822	92,358
Accrued licensing fees	40,000	40,000
Accrued board of director fees	30,000	62,500
Accrued litigation	—	100,000
Accrued semiconductor fabrication costs	—	90,250
Other	6,933	14,596
	<u>\$ 167,755</u>	<u>\$ 448,185</u>

Note 8 — Equity

All shares of common stock have a par value of \$0.001. Each holder of common stock is entitled to one vote per share outstanding.

In February 2017, the Company's Board of Directors authorized Series A Convertible Preferred Stock consisting of 3,000,000 shares. Each share of the preferred stock has a par value of \$0.001 and a stated value of \$2.535 and is convertible at any time at the option of the holder into one share of common stock. The holder cannot convert the preferred stock to the extent its beneficial ownership would exceed 4.99% of the Company's common stock outstanding, subject to adjustment as provided in the Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock. The shares have no voting power, no liquidation preference or additional dividend entitlements. In February 2017, an investor exchanged 810,000 shares of common stock for 810,000 shares of preferred stock.

On March 3, 2017, the Company closed on a definitive securities purchase agreement, or the Private Placement, to sell the Company's common stock and preferred stock together with warrants to purchase shares of common stock. In the Private Placement, each share of common stock or preferred stock was sold together with a warrant to purchase one share of common stock at a collective price of \$2.535. Investors purchased an aggregate of 5,220,826 shares of common stock and 708,430 shares of preferred stock together with warrants to purchase 5,929,256 shares of common stock in the Private Placement for aggregate gross proceeds of \$15 million. Net cash proceeds were \$13,657,331 after offering fees and expenses, including the placement agent fee of approximately \$1.1 million.

As a result of the exchange and Private Placement, in the year ended December 31, 2017, the Company issued 1,518,430 shares of the Company's Series A Convertible Preferred Stock.

Note 9 — Equity Incentive Plan

On May 17, 2013, the Company adopted the 2013 Equity Incentive Plan (the "Plan") and reserved shares of common stock for issuance under the Plan. The Plan is administered by the Compensation Committee of the Company's Board of Directors.

At December 31, 2018, there were 517,563 shares of common stock available for issuance under the Plan.

During the year ended December 31, 2018, the Company granted 122,039 stock options to Board members and 300,000 immediately vested stock options to an executive under the Plan. The estimated fair value of these stock options, calculated using the Black-Scholes option valuation model, was \$330,713, all of which was recognized during the year ended December 31, 2018.

During the year ended December 31, 2018, the Company granted 117,500 restricted stock units ("RSUs") and 12,000 performance stock units ("PSUs") to employees. The estimated fair value of these awards, calculated based on the closing stock price on the dates of grant, was \$158,110, of which \$37,880 was forfeited and \$45,467, net of a reversal of \$6,481, was recognized during the year ended December 31, 2018. The RSUs vest in four equal installments over a two-year vesting period.

For the year ended December 31, 2018, 6,000 PSUs vested and 6,000 PSUs were canceled as the related performance condition was not met.

A summary of the Company's RSU activity is as follows:

	Restricted Stock Units
Outstanding at January 1, 2018	—
Granted	117,500
Vested	(23,125)
Forfeited	(25,000)
Outstanding at December 31, 2018	<u>69,375</u>

As permitted by SAB 107, management utilizes the simplified approach to estimate the expected term of stock options, which represents the period of time that options granted are expected to be outstanding. The risk-free interest rate for periods within the contractual life of the option is based on the U.S. treasury yield in effect at the time of grant. The volatility is estimated based on the historical volatilities of comparable companies. The Company has never declared or paid dividends and has no plans to do so in the foreseeable future.

The assumptions used in the Black-Scholes model are as follows:

	For the year ended December 31,	
	2018	2017
Average risk-free interest rate	2.76%	2.16%
Expected dividend yield	—%	—%
Expected life	3.25 to 5.63 years	5.31 to 6.25 years
Expected volatility	70%	65%

A summary of the Company's stock option activity and related information is as follows:

	2018			2017		
	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Life (in years)	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Life (in years)
Outstanding at January 1	1,232,236	\$ 6.44	6.8	1,385,204	\$ 6.89	7.5
Granted	422,039	\$ 1.31		167,725	\$ 2.99	
Exercised	—			(26,743)	\$ 0.42	
Forfeited	(183,828)	\$ 5.54		(293,950)	\$ 7.14	
Outstanding at December 31	<u>1,470,447</u>	\$ 5.08	6.8	<u>1,232,236</u>	\$ 6.44	6.8
Exercisable at December 31	<u>1,401,522</u>	\$ 5.11	6.8	<u>910,436</u>	\$ 6.52	6.6

The following table sets forth additional information about stock options outstanding at December 31, 2018:

Range of Exercise Prices	Options Outstanding	Weighted Average Remaining Life (in years)	Weighted Average Exercise Price	Options Exercisable
\$1.22 – \$2.50	451,139	9.2	\$ 1.37	429,314
\$2.51 – \$5.00	190,942	6.4	\$ 3.72	168,942
\$5.01 – \$7.50	385,828	5.3	\$ 6.91	371,753
\$7.51 – \$8.27	442,538	5.9	\$ 7.86	431,513
	<u>1,470,447</u>			<u>1,401,522</u>

The Company recognized a charge of \$28,009 related to modification of a 2018 stock option grant to an executive. Under the original grant, the executive had up to 90 days after the termination of service to exercise the stock options. Pursuant to the amendment, the executive now has up to 5 years after the termination of service to exercise the stock options.

Stock options granted under the Plan have ten-year terms and generally vest annually over a four-year vesting period except for option grants to independent directors that generally vest quarterly over a one-year vesting period.

The estimated aggregate pretax intrinsic value (the difference between the Company's stock price on the last day of the year ended December 31, 2018 and the exercise prices, multiplied by the number of vested in-the-money options) is \$0. This amount changes based on the fair value of the Company's stock.

As of December 31, 2018, there was \$302,207 of unrecognized compensation cost related to non-vested share-based compensation arrangements. That cost is expected to be recognized over a weighted average period of 0.7 years.

Note 10 — Warrants

During the year ended December 31, 2017 and in connection with the Private Placement, investors received warrants to purchase 5,929,256 shares of common stock. The warrants have an exercise price of \$2.41 per share and expire three years from the date of issuance. The placement agent also received 237,170 warrants to purchase shares of common stock as part of its placement agent fee. The placement agent warrant has an exercise price of \$2.89 per share and has a three-year term from the date of issuance. The warrants contain a provision to protect investors from potential future dilutive events, or a down-round provision. The Company elected to early adopt ASU 2017-11 and will recognize the value of the effect of the down-round provision, if and/or when triggered.

The warrants were sold with shares of common stock for \$2.535 per unit. The unit price was allocated to the warrants and common stock based upon the pro rata fair market value of the securities, with the warrants valued using the Black-Scholes model. The allocated fair value of the warrants was estimated to be \$4.7 million on the date of issuance. In addition, the placement agent warrant was valued at \$249,440 on the date of issuance.

The assumptions used in the Black-Scholes model for these warrants are as follows:

Average risk-free interest rate	1.59%
Expected dividend yield	—%
Expected life	3 years
Expected volatility	65%

A summary of the Company's warrant activity and related information is as follows:

	2018		2017	
	Warrants	Weighted Average Exercise Price	Warrants	Weighted Average Exercise Price
Outstanding at January 1	7,481,079	\$ 2.79	1,398,653	\$ 4.57
Granted	—	\$ —	6,166,426	\$ 2.43
Exercised	—	\$ —	—	\$ —
Forfeited/Expired	(345,001)	\$ 6.25	(84,000)	\$ 6.25
Outstanding at December 31	<u>7,136,078</u>	<u>\$ 2.62</u>	<u>7,481,079</u>	<u>\$ 2.79</u>

No warrants were unvested at December 31, 2018. For the Company's two largest beneficial owners, the warrants they received in connection with the Private Placement may be exercised only to the extent that the total number of shares of common stock then beneficially owned by these shareholders does not exceed 9.99% of the outstanding shares of the Company's stock. The weighted average remaining life is 1.1 years. The estimated aggregate pretax intrinsic value (the difference between the Company's stock price on the last day of the year ended December 31, 2018 and the exercise prices, multiplied by the number of in-the-money warrants) is \$0.

Note 11 — Income Taxes

Income taxes are disproportionate to income due to net operating loss carryforwards, which are fully reserved. As of December 31, 2018, the Company has federal net operating loss carryforwards of approximately \$50 million which will begin to expire in 2031. The availability of the Company's net operating loss carryforwards may be subject to limitation if there is a change in the ownership of its stock of 50% or more. Management has concluded that it is more likely than not that the Company will not have sufficient foreseeable taxable income within the carryforward period permitted by current law to allow for the utilization of certain of the deductible amounts generating the deferred tax assets; therefore, a full valuation allowance has been established to reduce the net deferred tax assets to zero at December 31, 2018 and 2017.

The following is a summary of the significant components of the Company's net deferred income tax assets and liabilities as of December 31, 2018 and 2017:

	For the Year Ended December 31,	
	2018	2017
Current deferred income tax assets:		
Inventory – uniform capitalization	\$ 23,000	\$ 11,000
Accrued compensation and other	63,000	93,000
Less: valuation allowance	(86,000)	(104,000)
	<u>\$ —</u>	<u>\$ —</u>
Non-current deferred income tax assets and (liabilities):		
Net operating loss	\$ 10,435,000	\$ 8,995,000
Research and development credit	18,000	18,000
Warranty reserve	81,000	89,000
Warrants issued for services	45,000	45,000
Depreciation and amortization	73,000	47,000
Exercise of options and warrants	(33,000)	(33,000)
Stock based compensation	759,000	680,000
Intangibles and other	(422,000)	(466,000)
Less: valuation allowance	(10,956,000)	(9,375,000)
Net non-current deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

The Company has applied the provisions of FASB ASC 740, *Income Tax*, which clarifies the accounting for uncertainty in tax positions. FASB ASC 740 requires the recognition of the impact of a tax position in the financial statements if that position is more likely than not of being sustained on a tax return upon examination by the relevant taxing authority, based on the technical merits of the position. At December 31, 2018 and 2017, the Company had no unrecognized tax benefits.

The Company recognizes interest and penalties related to income tax matters in interest expense and operating expenses, respectively. As of December 31, 2018, and 2017, the Company has no accrued interest and penalties related to uncertain tax positions.

The Company is subject to tax in the United States (“U.S.”) and files tax returns in the U.S. federal and certain state jurisdictions. The Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2014. The Company currently is not under examination by any tax authority.

The reconciliation between the statutory income tax rate and the effective tax rate is as follows:

	For the Year Ended December 31,	
	2018	2017
Statutory federal income tax rate	(21)%	(34)%
Stock based compensation	1	1
Tax Reform	—	56
Valuation allowance	20	(23)
	<u>—%</u>	<u>—%</u>

On December 22, 2017, the Tax Cuts and Jobs Act (the “Tax Act”) was signed into law. The Tax Act contained significant changes to corporate taxation, including (i) the reduction of the corporate income tax rate to 21%, (ii) the acceleration of expensing for certain business assets, (iii) the one-time transition tax related to the transition of U.S. international tax from a worldwide tax system to a territorial tax system, (iv) the repeal of the domestic production deduction, (v) additional limitations on the deductibility of interest expense and (vi) expanded limitations on executive compensation.

The key impact of the Tax Act on the Company's financial statement for the year ended December 31, 2017, was the re-measurement of deferred tax balances to the new corporate tax rate. In order to calculate the effects of the new corporate tax rate on the Company's deferred tax balances, ASC 740 "Income Taxes" ("ASC 740") required the re-measurement of the Company's deferred tax balances as of the enactment date of the Tax Act, based on the rates at which the balances are expected to reverse in the future. The re-measurement of deferred tax balances resulted in a net reduction in deferred tax assets of \$5.9 million offset with a corresponding adjustment to the valuation allowance at December 31, 2017.

Note 12 — Commitments and Contingencies

Lease

The Company leases 14,782 square feet of office and laboratory space located in Austin, Texas. On April 20, 2018, the Company entered into an amendment to its existing operating lease which extended the lease term from May 31, 2018 to May 31, 2021. The annual base rent in the first year of the lease extension is \$184,775 and increases by \$7,391 in each succeeding year of the lease extension. In addition, the Company is required to pay its proportionate share of operating costs for the building under this triple net lease. Future minimum payments under the lease, as amended, are as follows:

For the year ended December 31,	Amount
2019	\$ 189,086
2020	196,477
2021	83,149
	<u>\$ 468,712</u>

Rent expense incurred for the years ended December 31, 2018 and 2017 amounted to \$245,525 and \$234,160 respectively.

License Agreement

In 2015, the Company entered into licensing agreements which expire on February 7, 2033. Per the agreements, the Company has an exclusive royalty-free license associated with semiconductor power switches which enhances its intellectual property portfolio. The agreements include both fixed and variable payments. The variable payments are a function of the number of associated patent filings pending and patents issued under the agreements. The Company will pay \$10,000 for each patent filing pending and \$20,000 for each patent issued within 20 days of December 21st of each year of the agreement, up to a maximum of \$100,000 per year (i.e. five issued patents).

Through December 31, 2018, two patents associated with the agreements were issued. At December 31, 2018 and 2017, the corresponding long-term liability for the estimated present value of future payments under the licensing agreement was \$428,163 and \$456,234, respectively. The Company is accruing interest for future payments related to the issued patents associated with the agreement. This long-term liability incurred in connection with these patent issuances is a non-cash investing activity with regard to the Company's statements of cash flows.

Legal Proceedings

In 2017, the Company entered into arbitration with Libra Industries, Inc. (Libra), its prior contract manufacturer, with both parties asserting claims against the other party. At December 31, 2017, the Company recorded a \$100,000 accrual for the arbitration based on an expired settlement offer made by the Company to Libra. On June 21, 2018, the arbitrator issued a Final Award, final and binding award on all issues except as to attorney's fees and costs. In the Final Award, the arbitrator denied Libra's claims and awarded the Company \$163,105 on its claims. On July 15, 2018, the arbitrator issued a Supplemental Final Award on Attorney's Fees and Costs, awarding the Company an additional \$165,346. As a result, during the year ended December 31, 2018, the Company reversed the previously recorded \$100,000 accrual resulting in a reduction to general and administrative expense and recognized the Final Award of \$163,105 as a reduction in loss from discontinued operations and the Supplemental Final Award on Attorney's Fees and Costs of \$165,347 as a reduction in general and administrative expense. The Company received full payment on the total award on August 2, 2018.

On April 11, 2018, the Company received \$203,121 pursuant to a Judgment of Garnishment dated March 23, 2018 and related to the non-payment of an overdue accounts receivable balance by a former customer of the Company. The judgment included the past due balance of \$162,000 plus late fees and recovery of legal costs. During the year ended December 31, 2018, the Company reversed the allowance for doubtful accounts of \$162,000, originally recorded in 2017, with a corresponding reduction in loss from discontinued operations, recognized interest income of \$35,064 associated with late fees and a reduction in general and administrative expense of \$6,057 for the partial recovery of legal fees.

Indemnification of Executives

The employment agreements of Company executives include an indemnification provision whereby the Company shall indemnify and defend, at the Company's expense, its executives so as long as an executive's actions were taken in good faith and in furtherance of Company's business and within the scope of executive's duties and authority.

Note 13 — Retirement Plan

The Company has a defined contribution retirement plan covering all of its employees. Under the plan, Company contributions are discretionary. No discretionary contributions were made by the Company in the years ended December 31, 2018 and 2017.

Note 14 — Subsequent Events

On January 2, 2019, the Board of Directors of the Company approved a strategic shift to focus on the commercialization of its B-TRAN™ technology and a plan to suspend further power converter system development and sales while the Company located a buyer for its power conversion systems division. On January 4, 2019, the Company implemented a reduction-in-force in connection with this exit activity and recognized an expense of \$92,600 in involuntary termination benefits. The Company did not recognize other associated costs related to exiting production of its power converters products as the sale of the power conversion systems division was deemed probable. At December 31, 2018, the Company has accounted for the assets and liabilities of the power conversion systems division as held for sale and presented this division as discontinued operations. See Note 2.

On February 21, 2019, a shareholder converted 708,430 shares of preferred stock to 708,430 shares of common stock.

On March 7, 2019, and following an initial notice of non-compliance from Nasdaq on September 7, 2018, the Company received a notice letter from Nasdaq indicating that it had not regained compliance with the minimum bid price requirement of \$1 per share, as set forth in Nasdaq Listing Rule 5550(a)(2). However, Nasdaq determined that the Company was eligible for an additional 180-day period, or until September 3, 2019, to regain compliance based on the fact that it met the continued listing requirement for market value of publicly held shares and all other initial listing standards for the Nasdaq Capital Market, with the exception of the minimum bid price requirement, and it had provided written notice to Nasdaq of its intent to cure the deficiency during this second compliance period, by effecting a reverse stock split, if necessary. If the Company is unable to regain compliance with the Nasdaq's minimum bid price requirement or with the continued listing requirements of The NASDAQ Stock Market, its common stock may be delisted in the future which could adversely affect its ability to raise additional capital.

ITEM 9: CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A: CONTROLS AND PROCEDURES

Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer ("CEO"), our principal executive officer, and our Chief Financial Officer ("CFO"), our principal financial and accounting officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. The evaluation was undertaken in consultation with our accounting personnel. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Internal control over financial reporting is a process designed by, or under the supervision of, our CEO and CFO and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our management, under the supervision and with the participation of our CEO and CFO, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations (COSO). Based on such evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2018.

This Annual Report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation requirements by our independent registered public accounting firm pursuant to rules of the SEC that permit us to provide only management's report in this Annual Report.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rule 13a-15(d) or 15d-15(d) of the Act during the three months ended December 31, 2018 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our CEO and CFO, do not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of a simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of control effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

ITEM 9B: OTHER INFORMATION

Not applicable.

PART III**ITEM 10: DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The following table sets forth the names and ages of all of our directors and executive officers. Our officers are appointed by, and serve at the pleasure of, the board of directors.

Name	Age	Position
Lon E. Bell, Ph.D.	78	President, Chief Executive Officer and Chairman of the Board
Timothy W. Burns, CPA	44	Chief Financial Officer, Secretary and Treasurer
R. Daniel Brdar	59	BTRAN Chief Commercial Officer, Director
David B. Eisenhaure	73	Director
Michael C. Turmelle	59	Director
Ted Lesster	80	Director

The remaining information required by this item is incorporated herein by reference from our Definitive Proxy Statement, involving the election of directors, to be filed pursuant to Regulation 14A with the SEC not later than 120 days after the end of the fiscal year covered by this Form 10-K (or Definitive Proxy Statement).

ITEM 11: EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference from our Definitive Proxy Statement.

ITEM 12: SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS*Securities Authorized for Issuance under Equity Compensation Plans*

The table below provides information, as of December 31, 2018, regarding the 2013 Equity Incentive Plan, or the Plan, under which our equity securities are authorized for issuance to officers, directors, employees, consultants, independent contractors and advisors.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	1,388,505(1)	\$ 4.69	517,563(2)

(1) This amount includes performance stock units, or PSUs, and restricted stock units, or RSUs, granted to employees.

(2) The aggregate number of shares reserved for issuance under the Plan will not be subject to future increases, absent shareholder approval of an increase in the securities authorized for issuance under the Plan.

The rest of the information required by this item is incorporated by reference from our Definitive Proxy Statement.

ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference from our Definitive Proxy Statement.

ITEM 14: PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated by reference from our Definitive Proxy Statement.

PART IV**ITEM 15: EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

(a) Documents Filed with Report

(1) *Financial Statements.*

[Report of Independent Registered Accounting Firm
Balance Sheets as of December 31, 2018 and 2017](#)

[Statements of Operations for the years ended December 31, 2018 and 2017](#)
[Statement of Stockholders' Equity for the years ended December 31, 2018 and 2017](#)
[Statements of Cash Flows for the years ended December 31, 2018 and 2017](#)

(2) *Exhibits.*

The exhibits filed as part of this Annual Report on Form 10-K are listed in the Exhibit Index immediately preceding the exhibits. We have identified in the Exhibit Index each management contract and compensation plan filed as an exhibit to this Annual Report on Form 10-K in response to Item 15(a) (3) of Form 10-K.

ITEM 16: FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Austin, State of Texas, on this 1st day of April 2019.

IDEAL POWER INC.

By: /s/ Lon Bell
Lon Bell,
Chief Executive Officer

By: /s/ Timothy Burns
Timothy Burns,
Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Dated: April 1, 2019 /s/ Lon Bell
Lon Bell,
Chief Executive Officer
(principal executive officer),
President and Chairman of the Board

Dated: April 1, 2019 /s/ Timothy Burns
Timothy Burns,
Chief Financial Officer
(principal financial and accounting officer),
Secretary and Treasurer

Dated: April 1, 2019 /s/ R. Daniel Brdar
R. Daniel Brdar, BTRAN Chief Commercial Officer and Director

Dated: April 1, 2019 /s/ David Eisenhaure
David B. Eisenhaure, Director

Dated: April 1, 2019 /s/ Michael Turmelle
Michael C. Turmelle, Director

Dated: April 1, 2019 /s/ Ted Lesster
Ted Lesster, Director

EXHIBIT INDEX

Exhibit No.	Description of Document
<u>3.1</u>	<u>Delaware Certificate of Conversion including Certificate of Incorporation (1)</u>
<u>3.2</u>	<u>Bylaws of Ideal Power Inc. (1)</u>
<u>3.3</u>	<u>Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (6)</u>
<u>4.1</u>	<u>Underwriter's Warrant (1)</u>
<u>4.2</u>	<u>Registration Rights Agreement by and among Company and the Investors party thereto, dated February 24, 2017 (6)</u>
<u>4.2</u>	<u>Form of Investor Warrant (6)</u>
<u>10.1</u>	<u>Form of Lock-Up Agreement (1)</u>
<u>10.2</u>	<u>Form of Warrant issued by the registrant to investors in the offering completed on July 17, 2012 (1)</u>
<u>10.3</u>	<u>Form of Warrant issued by the registrant to investors in the offering completed on August 31, 2012 (1)</u>
<u>10.4</u>	<u>Form of Replacement Warrant issued by the registrant to investors in the offering completed on August 31, 2012 (1)</u>
<u>10.5</u>	<u>Form of Warrant issued by the registrant to investors in the offering completed on November 21, 2012 (1)</u>
<u>10.6</u>	<u>Warrant issued to MDB Capital Group, LLC (MDB-1) dated November 21, 2012 (1)</u>
<u>10.7</u>	<u>Warrant issued to MDB Capital Group, LLC (MDB-2) dated November 21, 2012 (1)</u>
<u>10.8</u>	<u>Form of Warrant issued by the registrant to investors in the offering completed on July 29, 2013 (1)</u>
<u>10.9</u>	<u>Ideal Power Inc. 2013 Amended and Restated Equity Incentive Plan (5)</u>
<u>10.10</u>	<u>Addendum to Warrant issued to MDB Capital Group, LLC (MDB-1) dated July 10, 2013 (1)</u>
<u>10.11</u>	<u>Addendum to Warrant issued to MDB Capital Group, LLC (MDB-2) dated July 10, 2013 (1)</u>
<u>10.12</u>	<u>Form of Addendum to Stock Purchase Warrant (Series A) (1)</u>
<u>10.13</u>	<u>Form of Addendum to Stock Purchase Warrant (Series B) (1)</u>
<u>10.14</u>	<u>Revised and Restated Employment Agreement between the Company and R. Daniel Brdar dated April 16, 2018 (7) +</u>
<u>10.15</u>	<u>Non-Qualified Stock Option Award Agreement issued to R. Daniel Brdar (2) +</u>
<u>10.16</u>	<u>Lease Agreement between the Company and Agellan Commercial REIT U.S. L.P. dated March 24, 2014 (3)</u>
<u>10.17</u>	<u>Amendment No. 1 to Lease, effective April 17, 2018, by and between Ideal Power Inc. and Agellan Commercial REIT US L.P. (8)</u>
<u>10.18</u>	<u>Employment Agreement between the registrant and Timothy W. Burns dated September 16, 2014 (4) +</u>
<u>10.19</u>	<u>Purchase Agreement by and among Company and the Investors thereto dated February 24, 2017 (6)</u>
<u>10.20</u>	<u>Exchange Agreement by and among the Company and the common stockholders listed in Schedule 1 thereto dated February 24, 2017 (6)</u>
<u>10.21</u>	<u>Employment Agreement between the Company and Lon Bell dated April 27, 2018 (7) +</u>
<u>31.1</u>	<u>Certification of Principal Executive Officer, pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*</u>
<u>31.2</u>	<u>Certification of Principal Financial and Accounting Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*</u>
<u>32.1</u>	<u>Certification of Principal Executive Officer and Principal Financial and Accounting Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*</u>
101.INS	XBRL Instance Document*
101.SCH	XBRL Taxonomy Extension Schema*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase*
101.DEF	XBRL Taxonomy Extension Definition Linkbase*
101.LAB	XBRL Taxonomy Extension Label Linkbase*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase*

* Included herein.

+ Indicates a contract with management.

- (1) Incorporated by reference to the registrant's registration statement on Form S-1, file no. 333-190414, originally filed with the Securities and Exchange Commission on August 6, 2013, as amended.
- (2) Incorporated by reference to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on January 8, 2014.
- (3) Incorporated by reference to the registrant's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 28, 2014.
- (4) Incorporated by reference to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on September 19, 2014.
- (5) Incorporated by reference to the registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 13, 2015.
- (6) Incorporated by reference to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 27, 2017.
- (7) Incorporated by reference to the registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2018.
- (8) Incorporated by reference to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 26, 2018.

CERTIFICATION

I, Lon Bell, certify that:

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

Date: April 1, 2019

/s/ Lon Bell
Lon Bell
Chief Executive Officer (Principal Executive Officer)

CERTIFICATION

I, Timothy Burns, certify that:

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

Date: April 1, 2019

/s/ Timothy Burns

Timothy Burns

Chief Financial Officer

(Principal Financial and Accounting Officer)

CERTIFICATION

In connection with the periodic report of Ideal Power Inc. (the "Company") on Form 10-K for the year ending December 31, 2018 as filed with the Securities and Exchange Commission (the "Report"), we, Lon Bell, Chief Executive Officer (Principal Executive Officer) and Timothy Burns, Chief Financial Officer (Principal Financial and Accounting Officer) of the Company, hereby certify as of the date hereof, solely for purposes of Title 18, Chapter 63, Section 1350 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of our knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods indicated.

Date: April 1, 2019

/s/ Lon Bell

Lon Bell
Chief Executive Officer
(Principal Executive Officer)

/s/ Timothy Burns

Timothy Burns
Chief Financial Officer
(Principal Financial and Accounting Officer)
