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: 001-37960

POLAR POWER, INC.
(Exact name of registrant as specified in its charter)

Delaware	**33-0479020**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
249 E. Gardena Blvd., Gardena, California	**90248**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: **(310) 830-9153**

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

Title of class	**Name of each exchange on which each is registered**
Common Stock, $0.0001 par value	The NASDAQ Stock Market LLC

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 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 and post 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. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer ☐	Accelerated Filer ☐
Non-Accelerated Filer ☐	Smaller Reporting Company ☒
	Emerging Growth Company ☒

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

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

The aggregate market value of the registrant's voting common equity held by non-affiliates as of the last business day of the registrant's most recently completed second quarter was $23,965,548.

The number of shares outstanding of the Registrant's common stock, $0.0001 par value, as of April 1, 2019 was 10,143,158.

DOCUMENTS INCORPORATED BY REFERENCE
None

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CAUTIONARY STATEMENT

All statements included or incorporated by reference in this Annual Report on Form 10-K, other than statements or characterizations of historical fact, are forward-looking statements. Examples of forward-looking statements include, but are not limited to, statements concerning projected net sales, costs and expenses and gross margins; our accounting estimates, assumptions and judgments; the demand for ethanol and its co-products; the competitive nature of and anticipated growth in our industry; production capacity and goals; our ability to consummate acquisitions and integrate their operations successfully; and our prospective needs for additional capital. These forward-looking statements are based on our current expectations, estimates, approximations and projections about our industry and business, management's beliefs, and certain assumptions made by us, all of which are subject to change. Forward-looking statements can often be identified by words such as "anticipates," "expects," "intends," "plans," "predicts," "believes," "seeks," "estimates," "may," "will," "should," "would," "could," "potential," "continue," "ongoing," similar expressions and variations or negatives of these words. These statements are not guarantees of future performance and are subject to risks, uncertainties and assumptions that are difficult to predict. Therefore, our actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors, some of which are listed under "Risk Factors" in Item 1A of this Annual Report on Form 10-K. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K. We undertake no obligation to revise or update publicly any forward-looking statement for any reason, except as otherwise required by law.

PART I

Item 1. Business

Overview

We design, manufacture and sell direct current, or DC, power systems for applications primarily in the telecommunications market and, to a lesser extent, in other markets, including military, electric vehicle charging, cogeneration, distributed power and uninterruptable power supply. Within the telecommunications market, our systems provide reliable and low-cost energy for applications that do not have access to the utility grid or have critical power needs and cannot be without power in the event of utility grid failure. Within this market, we offer three configurations of our DC power systems, with output power ranging from 5 kW to 20 kW and with three possible sources of fuel: diesel, natural gas and liquid petroleum gas.

Our DC base power systems integrate our DC generator with automated controls that are programmed to efficiently charge various battery chemistries to provide backup energy during a power failure. In addition, these systems are also used to provide prime power in off-grid and bad-grid locations in telecommunications towers. Substantially all of our net sales are derived from sales of our DC base power systems to Tier-1 wireless telecommunications tower companies in the U.S.

Our DC hybrid power systems combine our DC base power systems with lithium-ion batteries (or other advanced battery chemistries) to efficiently store energy from DC generator or grid systems to provide back-up power or prime power. Our DC hybrid power system replaces lead acid systems with longer-life and higher efficiency lithium-ion batteries equipped with our proprietary battery management system, or BMS, which protects batteries from being over charged or over discharged during daily use.

Our DC solar hybrid power systems combine our DC hybrid power system with solar panels to produce and store lower cost energy generated by the solar panels into lithium batteries, thereby reducing a DC generator’s run time and operating costs.

Recent Events

In July 2018, we began shipments of DC power systems to another large U.S. Tier-1 wireless provider, T-Mobile, through its channel partner. During the year, our shipments to T-Mobile grew to 22% of our net sales. As a result, we currently sell our DC power systems to the top three U.S. Tier-1 wireless providers and reached record level of revenues of $24.0 million and a record backlog of $16.0 million at December 31, 2018.

In the fourth quarter of 2018, we installed DC hybrid system in Sri Lanka at an off-grid remote Tier-1 telecommunications tower site to demonstrate use of our DC generator and lithium battery system to power a remote site. Due to the lack of electric infrastructure, a significant percentage of telecommunications tower sites in Sri Lanka lack connection to the grid and thereby require renewable and battery storage devices in combination with generators to provide power to radio equipment. We believe that the successful demonstration of our DC hybrid power system in a prime power application will provide us access to the remote off-grid market in Sri Lanka.

In December 2018, we completed the installation of ten telecommunications towers in Namibia, which was part of the initial phase of a national program to bridge the digital divide between urban and rural Namibia. We believe that expanding our service offerings to telecommunications customers in emerging markets provides us with the opportunity to sell DC backup generators and storage batteries to these markets in the future.

In March 2018, we received Phase II approval and purchase orders for twenty light-weight, liquid cooled mobile DC power systems for use in the U.S. Army Robotic Mule project. This Squad Multipurpose Equipment Transport (SMET) program is part of a global military initiative to utilize electric propulsion powered vehicles to remotely provide surveillance, transportation and reconnaissance over wide areas, thereby improving survivability and reaction times in the battlefield. During fourth quarter of 2018, we delivered twenty systems for integration into Robotic Mule project. During first half of 2019, completed robotic mules will be field tested under various challenging operational and environmental conditions. We anticipate receiving additional production orders during 2019 upon successful completion of these field tests.

In November 2018, we began operations at our 29,000 square feet second manufacturing facility located at 400 E. Gardena Blvd, Gardena, CA 92804 which is located in proximity to our corporate offices and manufacturing facility. Our new facility is designed to increase production capacity of our fabrication, welding and final assembly operations.

Historical Background

We began operations in 1979 by releasing our first product, a solar powered vaccine refrigerator/freezer, for use in remote areas worldwide. This product was developed in support of a World Health Organization Cold Chain initiative and the U.S. Agency for International Development and for the first five years administered by the NASA Lewis Research Center. Since then, we have continued to expand our capabilities and product lines within the solar and renewable energy industries.

In 1984, we designed and manufactured test carts for Hughes Aircraft Company that provided cooling systems for testing F-14 radar assemblies. During the same period, we also supplied defense contractor, Martin Marietta, with computerized environmental control units for testing laser guided missile launch systems and a cooling system for a Phalanx Gun system to General Dynamics.

During most of the 1980s, we generated a majority of our revenues through development contracts with the U.S. Department of Defense and major defense companies for the design of DC power generator and cooling systems. We retain design rights on all of our engineering and product development contracts.

In 1991, we began commercialization of technologies originally pioneered by these military contracts, which led to the development of proprietary permanent magnet alternator and related power electronics that encompasses a DC power system. During that period, we also manufactured solar powered refrigerators used by United Nations foreign aid agencies to store and preserve vaccines in field-operated medical care centers.

During the 1990s, we developed and commercialized an advanced Permanent Magnet Homopolar Hybrid, or PMHH, DC alternator that is lighter and more efficient than a conventional AC alternator. Over the ensuing years, our generators and controls were extensively field tested in a variety of military applications. Our PMHH DC alternator technology was used as an auxiliary power source in military vehicles and as a prime power generator for military missions in the field. During this time, we also engineered, manufactured and sold DC power systems for various other applications including oil and gas fields, rural homes and farms and telecommunications. We also generated revenues by providing short-run production, prototyping and design services to develop energy efficient DC power systems for customers within the military, renewable energy and telecommunications markets.

With the significant growth of the telecommunications market in the 1990s, we elected to transition from manufacturing products primarily for military applications to the commercialization of these products for the telecommunications market. We were one of the first companies to introduce high efficiency, light weight, compact DC power systems to this market.

In 2005, we developed and manufactured a computerized ground support unit for Martin Marietta that was used in the U-2 aircraft and in the Global Hawk Unmanned Aerial Vehicle programs. During the same year, we developed our low-cost, higher efficiency 8000 Series DC alternators and our fully integrated next generation Supra Controller™ Series power control system which is designed to integrate and monitor engine controls, power controls and battery management system into a single integrated system.

From 2006 to 2011, we introduced our next generation of 8000 Series DC alternators with higher power output and efficiency and lower production costs with remote monitoring and controls. During this period, we obtained UL 2200 listing for our DC generators and introduced lithium-ion battery hybrid systems with our proprietary battery management system, or BMS.

In 2008, we expanded our marketing of DC power systems to telecommunications companies in an effort to supply DC power for the radio equipment located at a wireless cell tower sites as backup power in case of power outages. In 2013, after four years of extensive field testing, we received approval from Verizon Wireless to market our DC power systems to its regional facilities throughout the U.S.

In 1988, we introduced DC hybrid power systems designed for off-grid remote applications. These systems integrated our DC power systems with solar panels, lead acid batteries assembled into an outdoor enclosure with the capability to be remotely monitored and operated. In 2011, we introduced lithium ion batteries into our systems. During the 2013 and 2014, we shipped $1.7 million of our DC hybrid power systems, to two of the largest wireless telecommunications providers in Australia.

In 2015, due to a significant growth in sales, we moved our production facility to Gardena, CA expanding our production capacity by over 400%. A significant portion of our growth was a result of Verizon Wireless's national campaign to add backup generators to cellular sites located in inner cities and remote locations with bad grid conditions.

In 2016, our sales peaked at $22.8 million, with 95% of these sales to Verizon Wireless. In 2016, due to the increased product demand, we decided to raise equity capital to fund inventory growth and other working capital needs. In December 2016, we successfully closed our initial public offering of 2,400,000 shares of common stock with net proceeds of approximately $17 million.

In 2017, we expanded our sales and service infrastructure to diversify our customer base globally. We established regional sales offices in South Africa, U.A.E., Singapore, Poland and the Dominican Republic and established sales and service locations in Australia and Romania to locally manage the Southeast Asia and EMEA regions respectively.

In the U.S., we are an approved supplier to all of the four top Tier 1 wireless providers. During 2017, we generated revenues from the top two Tier-1 wireless providers and are currently providing products to three of the top four Tier 1 wireless providers.

In 2018, our revenues grew to $24.0 million as compared to $14.4 million in 2017. This growth of approximately 67% is mainly attributable to increased sales of our DC generator's to Tier-1 telecommunications customers in the U.S. markets. In addition, during 2018 we received purchase orders from Namibia, Sri Lanka, Thailand and Australia customers contributing 6% of our total annual revenues.

Markets

We operate primarily within the telecommunications market and, to a lesser extent, in other markets including military, electrical vehicle charging, cogeneration, distributed power and uninterruptable power supply.

Telecommunications

We believe that investments in wireless telecommunications infrastructure is on the rise globally due to rising data usage and increased pressure to reduce costs requiring providers to improve operational efficiencies while expanding coverage of networks into remote or rural areas. Increased reliance on wireless networks is also resulting in increased demand for reliability of these systems resulting in higher demand for power backup systems. We believe that some of the key aspects fueling the growth of telecommunications operators include:

- improved operational efficiency of telecommunications towers, with an emphasis on reducing power consumption and power generation costs;
- increased need for communications during natural and manmade disasters has resulted in strengthening of telecommunications infrastructure
- increased active user base through the expansion of networks in remote or rural areas in developing nations; and the U.S.

- increased densification and data transfer speeds that increase the usage of additional services like internet and video on smart mobile devices.

The electrical power requirement for cell towers can be segmented into the following areas:

- *Good Grid*. Currently, the majority of our sales are related to new installations in the U.S. It is within this market where we have the most competition from legacy alternating current, or AC, generation technology. The technological advantages of our DC power systems as compared to legacy AC power systems includes smaller size, longer reserve (backup) time, lower acoustic noise, the ability to operate on low gas pressures, ease of installation and site permitting. Because backup generators are typically operated less than 100 hours a year, the higher fuel efficiency, reduced maintenance and longer service life of our products are oftentimes not considered in the customer procurement process. As a standalone component, AC generators are typically lower in cost than an equivalent DC generator. As in installed cost, in most instances, DC generators will have a lower cost. Most wireless companies are highly compartmentalized thereby making it difficult for them to validate the ownership advantages of DC generators over AC generators.

- *Bad Grid:* This is comprised primarily of the overseas market Within this market, it is not uncommon for an electrical grid to operate other than on a 24-hour basis. Oftentimes, these grids will operate for only 4 to 18 hours a day. Typically, the cost of bad grid electricity is lower than the cost of fuel, so the goal is to store as much energy from the grid in a battery while its available and then use the battery while the grid is not operational. For extended outages beyond the battery energy storage, a generator is used. Due to the higher number of generator run hours, fuel economy becomes an important factor. Here is where we believe our hybrid systems, that are combined with lithium ion batteries, are more cost competitive as compared to AC generator systems.

- *Off Grid*. This is comprised primarily of the overseas market and, to a lesser extent, the U.S. market. We have been servicing this wireless market since 1994 (and the microwave tower market since 1985). AC generators compete in this market primarily due to their legacy presence and the lack of knowledge on the part of the wireless operators of the advantages of a DC generator. DC solar and non-solar hybrid applications represent our largest growth opportunities within the overseas markets.

In order to improve wireless tower efficiency, service providers are divesting these fixed assets to more agile regional tower operators, while simultaneously requiring an upgrade of the technologies to maintain competitive services as we have moved from 2G, 3G, 4G and soon, 5G services. As electronics efficiencies have improved, the amount of electronics on a cell site have increased thereby creating a greater demand for energy. The improvement in electronics, including the ability to operate at higher temperatures, has reduced the need for air conditioning. We consider this to be the single most important factor driving the use of DC generators within the telecommunications market. The other trend is the elimination of walk-in shelters in favor of housing electronics “outdoor” in smaller cabinets. Increased new construction of these outdoor tower facilities has provided us with the ability to market our higher-efficiency DC power systems to these tower operators globally.

Military

Food, communications, transportation and weapon systems are the lifeblood of a military unit. With few exceptions, military communications operate from 28 volts DC or 48 volts DC sources. Currently, many guns (including howitzers), cannons and motors use computers and require DC power. The use or robotics to move materials from one place to another and provide weaponized platform will have a larger effect on reducing casualties and help counter the effects of IEDs. We believe that the demand for DC power with the military is increasing as the use of pulsed energy weapon systems (i.e., weapons that either use pulses of electricity to fire ammunition or operate by sending an electric current to a target) are more widely used on the battle field. This increased use of electronics in military missions has resulted in an increased need for DC power and for more efficient ways of generating, storing and distributing energy. The military has assigned a special program management department to oversee the development and standardization of a new range of higher efficiency mobile power generators ranging in size from 5 kW to 200 kW. With pulsed weapon systems, DC power requirements can climb as high as 6 megawatts.

The objectives of the creation of a new generation of power generators are:

- enhanced mobility, reliability and maintainability;
- improved fuel efficiency;
- reduced system size and weight;
- reduced infrared and acoustic signatures;
- increased survivability in rugged combat operations; and
- reduced total cost of ownership.

Once the Advanced Medium Mobile Power Sources, or the AMMPS, the U.S. Department of Defense's third generation of military power generators, is fully implemented in vehicles and stationary platforms, it is expected that the new generators will save over 50 million gallons of fuel per year, according to the Mobile Electric Power Systems Command Brief issued by the U.S. Department of Defense in 2009. The new generation of mobile electric power generators will also have the capability to connect together to form an efficient power distribution center to create "power islands" that serve both DC and AC loads. In addition, solar and wind power is being added to AMMPS to create hybrid systems that can function as self-sustaining power sources in remote areas. The next generation of power systems are required to provide 21% higher fuel efficiency, reduce noise and weight and be capable of performing in extreme environments. Our DC hybrid power systems, with integrated controls that manage energy produced by solar and lithium battery solutions, provide higher fuel efficiency than traditional fossil fuel powered power systems currently used by the military. We believe our complete line of commercialized DC hybrid power systems in use for the past decade provides us with a competitive advantage in meeting stated power system goals outlined by Department of Defense.

Improvements in sensors, navigation and communication technologies have led to increased integration of situational awareness systems that allow all combat assets to communicate and coordinate both defensive and offensive efforts in combat. Reliance on these systems has led to an effort to integrate DC auxiliary power units ranging in size from 3 kW to 20 kW onboard combat vehicles independent of engine driven alternators. Integration of auxiliary power units to run climate control and on-board electronics while idling saves a significant amount of fuel and maintenance, a critical asset during combat operations. We believe that the integration of smaller horsepower auxiliary power units to operate climate control and on-board electronics systems, rather than large horsepower vehicle engines while idling, may save a significant amount of fuel and maintenance, both of which are critical assets during combat operations.

During the past two decades, we have shipped 2 kW and 30 kW advanced power units, comprised of hybrid vehicle power systems, auxiliary power systems and prime power systems, to the U.S. Department of Defense and to its prime contractors for a wide variety of missions covering the land, sea and air. During the years ended December 31, 2018 and 2017, sales of auxiliary power systems designed for use in military combat vehicles represented 2.4% and 1.3%, respectively, of our net sales.

Residential and Commercial Power

Combining a high-efficiency propane or natural gas fueled DC generator (i.e., low capital cost) with a zero-emissions renewable energy source (i.e., low operating cost) results in low-cost sustainable power. This is premise behind our solar hybrid system.

We believe that by using a DC generator operating on natural gas, with or without a solar PV array, will be instrumental in assisting electric utilities in meeting the increased power demand for electric car charging. Many homes and commercial business are without sufficient power to charge an electric vehicle, or EV, or fleet of EVs and the ability to increase electrical service can be cost prohibitive. In addition, the utilities' energy cost during peak demand may become too high making natural gas a cost-competitive alternative to the electric grid.

We also believe that energy requirements associated with EV charging could drive the use of combined heat and electrical power, or CHP.

Using DC generators with inverters in a CHP application could replace oil-fueled heaters in the Eastern U.S. These products can produce space heating and electricity at the same time. An advantage of CHP over current oil and natural fueled heating is that grid power is not required to operate the heaters blowers, fuel pumps, or controls. Our technology allows continued heating and provides electricity in the worst of storms.

Our Competitive Strengths

We have over a 30-year history and have developed a reputation as a proven supplier of reliable and advanced proprietary technology products to customers within the telecommunications, military, industrial and marine markets. We have invested significant capital and engineering expertise to develop products that capitalize on the growing trend towards environmentally friendly and fuel-efficient power generation systems. We further believe our success will be based on the following key competitive strengths:

- ***Proprietary Technologies.*** Our decades of research and development efforts has led to the integration of high-efficiency DC alternator technology integrated with conventional engines to provide highly reliable backup power solutions for telecommunications towers. During the last decade, we invested significant capital in the development of charge control algorithms that allow our DC power generators to safely charge various types of battery chemistries. We believe this feature, combined with our ability to remotely monitor our DC generators, gives our customers higher field reliability and uptime when compared to conventional AC generators.

- ***Engineering Expertise.*** During 2018, we invested significant capital in expanding our field sales staff globally. Our direct sales model, where our engineers and sales personnel jointly assess customer needs and design customized solutions, has resulted in success with the top three Tier-1 wireless providers in the U.S. We design and manufacture DC alternators, controls and enclosures in-house. We believe this allows us to customize designs to applications reducing system weight and size. In addition, DC alternators are inherently more efficient than AC systems, thereby more fuel efficient. Our proprietary battery charging algorithms reduce generator run time thereby reducing maintenance cost and increasing life.

- ***Manufacturing Competitiveness.*** We believe that our vertical integration approach to manufacturing lowers our production costs and improves our overall operational efficiency. In addition, vertically integrated manufacturing of our proprietary technologies such as DC alternators, charge controls and battery management systems, provides us with a greater control and protection over our intellectual property. We believe our modular approach to manufacturing provides us with the lowest manufacturing costs for our proprietary technologies while giving us the ability to deliver customized solutions to our Tier-1 wireless provider customers.

- ***Strong Customer Base.*** A significant percentage of our sales are comprised of direct sales to our customers. Currently, significant percentage of our U.S. sales are to national Tier-1 telecommunications providers with multiple facilities. Since 2017, we substantially expanded our global sales and service network to market directly to Tier-1 telecommunications providers. In the international markets, our customers are regional Tier-1 telecommunications providers. We have established sales offices in Namibia, Dubai, Singapore, Australia, Poland and the Dominican Republic. Our sales team directly markets to Tier-1 companies in their regions and during 2018, we received initial purchase orders from Tier-1 telecommunications providers in Namibia, Sri Lanka, Australia and Thailand.

- ***Experienced Management Team.*** Each of our President and Chief Executive Officer and key engineers has over 25 years of engineering and production experience in the design and manufacturing of power systems. Our engineers have equipment design experience, as well as hands-on skills to build prototypes. A key factor demonstrating management's abilities and our engineering aptitude can be found in our successful track record over the last 25 years of executing fixed-cost research, design and engineering contracts, with an average of eight projects per year.

Business Strategy

We believe the growth in wireless telecommunications infrastructure in the U.S. and international markets has led to a rapid rise in the need for DC backup power systems. With our 30 years of experience and reputation within the DC power systems market, we are working to increase awareness, availability and affordability of more efficient DC-based products as a backup power and charging source within the telecommunications industry. Because of the increased reliance on wireless networks during emergencies and natural disasters, existing and new wireless installations are being upgraded to provide reliable operations during time of emergency. The primary elements of our business strategy include:

- ***Further develop U.S. mobile telecommunications market.*** We continue to invest significant capital into our sales and marketing efforts to demonstrate our DC power systems to the top Tier-1 wireless providers in the U.S. During 2019, we expect to reach out to the more than 500 small wireless and cable operators in North America to discuss the benefits of our product offerings. These small telecommunications companies service rural areas that have more off-the-grid sites than the Tier 1 wireless telecommunications companies. Our goal is to further diversify our customer base. In 2018, 75% of our sales of DC power systems were to Tier-1 telecommunications customers. We believe increased demand to equip cellular tower sites with backup equipment, combined with our ability to compete on an economic basis with AC power systems at large volumes, will result in a significant transition of the marketplace from AC power systems to DC power systems.

- ***Expand global sales to bad-grid or off-grid markets:*** The increase in subscriber base in rural and remote areas in developing countries has increased the deployment of telecommunication sites in off-grid and bad-grid areas. Approximately 94% of our DC power systems sales are to U.S. customers, which we believe represents only 4.7% of the total global telecommunications market. Due to frequent power outages and lack of electric infrastructure in rural areas in developing nations, we believe a significant opportunity exists for sales of our backup DC power systems to customers located in regions, such as South East Asia, Australia and Africa. In 2017, we established regional direct sales offices in South Africa, U.A.E., Singapore, Australia, Romania, Poland and Dominican Republic to directly connect with Tier-1 telecommunications providers. During 2018 we demonstrated DC and DC Hybrid systems in South East Asia and Africa which have resulted in purchase orders and the approval of our products by over 35 Tier-1 telecommunications providers in those regions.

- ***Develop LPG and Natural Gas DC power systems.*** Increases in natural disasters and emergencies during the past decade has resulted in increased demand for backup power systems for residential and commercial applications. In addition, we believe that the rise in popularity of EV vehicles and trucks will strain the electrical grid creating the need to use natural gas to supplement the grid in a manner similar to what happened in Japan in the 1970s and 1980s. During that time, Japan used natural gas engines to power air-conditioning compressors thereby removing a large electrical demand from their electrical grid. The Gas Research Institute tried to develop a similar product for U.S. markets during that period, but the engine failed to meet market expectations. During 2018, we developed a supply relationship with Toyota Engines in Japan and Bosch in Germany to develop a new series of long-life, low-maintenance, fuel-efficient engines. This newer engine will replace our Kubota gas engines in our DC generators and which we believe will increase our competitiveness in both telecommunications and solar hybrid applications. We believe ease of access to natural gas and propane during natural emergencies in residential and commercial areas is a key advantage for our new product line. We plan to release this product line to market during the third quarter of 2019, initially targeting local regional markets in the western United States, while later expanding internationally in 2020.

- ***Expand renewable solar energy product offerings.*** We believe that increased environmental regulations, combined with the declining cost of solar and advanced storage batteries, has accelerated the shift of the telecommunications tower operators towards solar hybrid systems in off-grid and bad-grid regions worldwide. In 2013, we delivered 20 solar hybrid renewable energy DC power systems to the largest mobile telecommunications provider in Australia for installation in a remote mobile tower application. In developing regions like Africa, South East Asia and Latin America significant parts of these regions lack a basic electricity grid. In order to provide telecommunications services, companies require a combination of renewable and fossil fuel-based power generation solutions to be cost effective. In 2018, we demonstrated solar hybrid storage systems in Sri Lanka at a remote off-grid site to prove viability of our DC generators in prime power applications. We plan to target power markets in South East Asia and Sub-Saharan Africa where local governments are incentivizing the use of renewable energy within the telecommunications industry through favored spectrum auctions and tax incentives.

Our Technologies

In 1991, we began introducing DC power systems to provide backup and prime power for off-grid and bad-grid applications. Our initial products were predominantly designed for military applications and used as auxiliary power for vehicles, tanks and radar sites. In the late 1990s, we introduced our DC power systems for commercial applications like mobile telecommunications towers, solar refrigerators and oil field applications.

In 1992, we developed our own proprietary DC alternator to improve system efficiency, reduce costs and lower weight. Our design replaced a conventional 4-pole, three-phase designs with a light weight, low cost 12-pole and 32-pole designs (i.e., designs containing 12 or 36 magnetic poles) incorporating either 6 or 3 phases (i.e., containing 6 or 3 power circuits). Another unique aspect of the design of our DC alternators is the elimination of bearings, internal wiring connections, and an exciter (i.e., a device which supplies the magnetizing current to generate working flux) to provide a longer life cycle than conventional motor designs in the marketplace.

In 2002, we introduced our 6200 PMHH alternator, which combines the attributes of homopolar alternator technology with a permanent magnet. When mounted on an engine and operated at either a fixed or variable speed, the model 6200 PMHH generates a precise amount of regulated voltage and current. The DC output can then be used to power electronics or charge batteries.

In 2006, we introduced our next generation 8000 Series alternators designed for higher power and voltage applications, which features our proprietary 32-pole permanent magnet alternator technology. The 8000 Series offers high efficiency at a lower cost while integrating our proprietary digital control system, Supra Controller™, that manages and optimizes alternator output. Our Supra Controller™ networks all components via CAN bus communications and software and has the ability to control, analyze, monitor, record and communicate all key system parameters to ensure efficiency, safety and reliability of the overall system. The ability to remotely monitor and calibrate each system parameter, receive system alarms and auto-reset the system when a fault is corrected are the key differentiating factors of our DC power systems.

In telecommunications tower backup applications, backup generators are used to provide power during grid outages or to charge batteries to provide longer run times during emergencies. Due to battery costs and availability issues, many telecommunications providers are known to use various types of chemistries or capacities as storage sources. During the past decade, we have successfully integrated various battery chemistry charge algorithms into our Supra Controller™ software.

In 2011, we added charge algorithms for various lithium battery chemistries and integrated our proprietary BMS with our Supra Controller™ software. In 2013, we further expanded the integration of storage and renewable energy such as solar and wind into our Supra Controller™ software resulting in the shipment of twenty off-grid telecommunications tower power systems to Australia.

In 2017 and 2018, we demonstrated our DC hybrid power systems to telecommunications providers in South East Asia and Africa. We believe that the integration of renewable energy and storage batteries are ideal for off-grid remote locations in rural areas worldwide. During 2019, we plan to continue our research and development efforts to further enhance these integrations for remote telecommunications towers in South East Asia and Africa.

In 2018, we developed our next generation BMS that enhances our current technology to more accurately measure, monitor, control and integrate battery performance data with our Supra Controller™. In addition, we enhanced the user interface to allow us the ability to update or develop new charging algorithms in the field which can be remotely programmed or uploaded. We believe these enhancements will increase our penetration into the battery storage market during 2019.

Products and Services

We broadly classify our power systems into three categories:

- *DC base power systems.* Our basic system which is centered around a DC generator. Applications include both prime power and backup power.
- *DC hybrid power systems.* Our basic DC power system with added energy storage via lithium-ion or other battery chemistries.
- *DC Solar hybrid power systems.* Our DC hybrid power system with added renewable energy (i.e., solar panels).

DC Base Power Systems

Our DC base power systems are designed for use in prime power and backup power applications. All of our DC power systems are designed to last 20 years or more in backup applications and meet all UL2200 standards. To maximize operational life, we incorporate (over and above our competition) the following:

- all aluminum, powder coated, enclosure with stainless hardware, which is lightweight and corrosion resistant;
- 105 C rated signal wire, tinned copper strands;
- stainless steel braided covering hoses for fuel and coolant lines;
- Class 220 C magnet wire for alternator windings;
- watertight connectors in place of terminal strips and other non-sealed connectors; and
- our Supra Controller™ modules that are environmentally sealed.

We believe that the number one reliability issue with a generator set is the failure to start. To improve the reliability of our generators, we remove the engine's starting battery and replace it with a super capacitor. The super capacitor has a 15- to 20-year service life, greater cold cranking amps and withstands greater temperature extremes than conventional starting batteries.

To reduce maintenance and help ensure that there is always adequate oil, we increase the engine's oil capacity to provide for a 3,000-hour (natural gas / propane) or 1,500-hour (diesel) maintenance interval. Standard oil intervals for typical generators range from 200 to 500 hours.

DC Hybrid Power Systems

In most off-grid or bad-grid outdoor applications where DC loads are required, such as telecommunications towers in rural or remote areas, fuel costs of operating a generator can account for more than 60% of the total operating costs.

In most backup applications, such as telecommunications and uninterruptable power supply systems, lead acid batteries are used for providing transitional power while the generator starts up. In most of our prime power applications (including telecommunications) the goal is to reduce maintenance and fuel costs. Our Supra Controller™ automatically cycles the generator off when the loads are small and cycles it on again when the load increases or the battery charge is depleted. This cycling reduces engine maintenance and saves significant quantities of fuel.

Additional fuel savings are realized by using lithium-ion batteries in place of lead acid batteries. Lead acid batteries, when compared with lithium-ion batteries, have high internal resistance, are inherently inefficient during charging or discharging in cyclic load applications and therefore require longer to charge, resulting in higher fuel costs. In 2011, we completed the design and testing of a hybrid power system, where our DC power system was integrated with lithium-ion batteries to provide a longer life and higher fuel efficiency to cyclic DC power applications such as telecommunications towers.

Our DC hybrid power systems can monitor the charge/discharge cycle of either lithium-ion or lead acid batteries, or other battery types, on a cell by cell basis using our BMS. Our Supra Controller™ system incorporates a CAN bus communications capability that provides communication and control between the battery and the DC hybrid power system. Each cell in the battery pack is individually monitored for voltage and temperature, ensuring the safety and longevity of the battery bank. These power systems include enclosures, a lithium-ion battery pack, our proprietary BMS and our proprietary Supra Controller™ system that controls engine output, battery charging algorithms, cooling system and power control circuits that optimize DC load outputs.

DC Solar Hybrid Power Systems

Our DC solar hybrid power system combines our DC hybrid power system with solar photovoltaic modules and a custom engineered multi power point tracking charge controller. In most off-grid or bad-grid outdoor applications, such as telecommunications towers in rural or suburban areas, the fuel costs of operating a generator can account for more than half of the total operating costs. We believe that incorporating renewable energy sources, such as solar, with our DC hybrid power systems is ideal solution for numerous off-grid and bad-grid applications worldwide. Our DC solar hybrid power systems incorporate the following features:

- *Hybrid power panel.* We produce distribution panel assemblies that make use of punched and plated buss bars to make the heavy current connections between appliances. The industry standard is using labor intensive hand crimped wires and lugs which are accomplished in the field.

- *Photovoltaic Arrays.* Our telecommunications customers request photovoltaic array structures to withstand winds of 150 mph and 200 mph. We satisfy these requirements against the industry standard of 120 mph.

- *Shelter*. We provide an all-weather light-weight aluminum walk-in shelter that is easy to transport by truck or helicopter.

- *Lightning protection*. We provide the highest degree of lightning protection through the use of air-coil type inductors designed by us.

- *Air-Conditioning*. We provide DC air-conditioning if required in very hot weather environments. We also provide cooling systems using ambient air.

Service and Support

Global Network Management Tools

We offer global network management services through our telematics tool, which consists of our Supra Controller™ technology integrated with monitoring software. This hardware is integrated into each DC power system and collects critical data from the equipment and transmits this data back to the customer and our service department. This capability allows us and our customers to monitor system performance remotely and to remotely update the equipment with new revision software in the field.

Our telematics capabilities and services include:

- automated and continuous remote monitoring with auto alerts and notifications that can be transmitted via email or text messaging;
- maintenance management, which provides ability to schedule preventative maintenance based on actual equipment usage; and
- real-time, bi-directional communication capability for remote upgrades, testing and troubleshooting.

Our telematics tools also provide information to our customers on specific equipment utilization that provides the abilities to determine the functional status of the equipment and proactively schedule maintenance. We believe these tools assist in reducing equipment downtime, thereby reducing the overall cost of ownership. In addition, we plan to use these tools to monitor and provide accurate billing for our rental equipment deployed at customer facilities.

Aftermarket and Service Parts

We offer extensive aftermarket and service parts programs. We maintain an extensive inventory of aftermarket parts and sell parts directly to customers or through our qualified network of service providers. In addition, we require our regional service providers to maintain sufficient quantities of aftermarket parts in their inventory to ensure minimum downtime upon product failure.

We maintain accurate records of bill of materials for each serial number shipped and service our products well beyond their recommended lives. In the marketplace, our products are known for their long life and durability.

Product and Warranty Support

We offer product commissioning as an added service to all our customers and require the purchase of such services as a condition for acceptance of any warranty claims in the future. We offer installation of the equipment, preliminary testing, integration of equipment with other assets located at the site and introductory maintenance and safety training. We offer various levels of fee-based services to support our products in the field. In addition, we have trained product and application engineers that deliver high quality, responsive lifetime technical support to all our customers worldwide.

We further support our customers by using qualified regional independent service providers to perform warranty and aftermarket service and repair on our products. Our regional service providers are factory trained and certified prior to being authorized to repair or service our equipment. We generally reimburse regional service providers for the warranty services they perform on our systems.

Sales and Marketing

Our sales strategy focuses on using our direct sales force to market our DC backup power products to telecommunications providers in the U.S. Since 2017, we made significant investments in hiring additional sales personnel in the U.S. market to demonstrate our products to Tier-1 telecommunications providers. In 2017, we signed a national contract with an additional Tier-1 telecommunication provider which established national terms and conditions across our product line. In 2018, we started shipping DC backup power products to a third Tier-1 telecommunications customer, T-Mobile. Our products are purchased by regional centers operated by our telecommunications customers, thereby expanding our overall market into regions we may not have covered previously.

Since 2017, have we expanded our sales and service infrastructure in the international markets. We established regional sales offices in South Africa, U.A.E., Singapore, Poland and Dominican Republic and established sales and aftermarket service locations in Australia and Romania to locally manage South East Asia and EMEA regions, respectively. Due to a general lack of a reliable power grid, many emerging markets continue to expand their telecommunications infrastructures at a high rate. We believe that this lack of a reliable power grid, together with our knowledge of integrating renewables with generators, provides us with a opportunity to enter these emerging markets with our hybrid storage and renewable energy solutions.

We experienced a modest success in marketing our DC power products to military contractors in the U.S. We have allocated a dedicated sales force to market to government and military customers which has resulted in military sales contributing approximately 6% of the total sales during 2018.

We also market our products through our web site and by exhibiting our products at trade shows globally. Our primary sales are generated through product demonstrations and short-term rentals to demonstrate the capabilities of our products and value proposition to large mobile network providers worldwide. In 2018, we demonstrated our DC power systems to customers worldwide. In South East Asia, upon successful demonstration of our DC power system, we received an initial purchase order for twenty-five units from a Tier-1 telecommunications provider. We believe this strategy of demonstrating our products and technologies to prospective customers expedites the sales process for our DC power systems.

Distribution and Service

We market our products through various distribution channels that promote our products and brand and provide effective aftermarket support and service. While the majority of our sales are achieved through our direct sales force, we also utilize independent service providers and dealers to complement our global sales strategy.

We utilize a combination of factory trained technicians and independent service providers to provide installation, maintenance, service and training at customer locations throughout the U.S.

In the international markets, we utilize local service partners to perform installation and service on our equipment. We have hired trained personnel in Australia and Romania to assist in regional training of technicians and also in product demonstrations.

Competition

In the primarily 12 volt to 48 volt telecommunications power equipment market, we face competition from large diversified global and domestic companies that mainly manufacture and sell AC generator power systems designed for use as backup power or prime power applications. In the wireless tower markets in the U.S. and internationally, our competitors are segmented by regions with a core emphasis on run time of the power generation equipment, which can be further segmented into prime power or backup power applications.

Below are our primary competitors across these applications:

Prime Power. Our competitors include Caterpillar Inc., Generac Power Systems, Inc., Delta Power, Inc., Cummins Inc., 3Tech Corporate Limited, Ascot Industrial srl, Ausonia srl, Controllis and Kohler Co.

Backup Power. Our competitors include Ascot, Eltek Valere, General Electric, Delta Power, Generac Power Systems, Inc., Schneider Electric, Alpha Technologies Ltd. and Vertiv Co.

Manufacturing and Assembly

A significant percentage of our business comes from multinational global corporations seeking configured product solutions ready to be field deployed with a minimum installation time. Our manufacturing process begins with our direct sales force and engineering team defining customer application needs and concludes with the production of a custom configured product solution. We believe our ability to have total control over the sales and manufacturing process is a key competitive differentiator in the markets we serve.

By implementing vertical integration throughout our manufacturing process, we believe that we reduce overall manufacturing costs, thereby increasing profitability and market competitiveness. Our production processes encompass all aspects of production of our DC power systems, which includes alternators, aluminum enclosures, engine configurations, control electronics, cooling systems, wiring harnesses, exhaust systems and final assembly. Manufacturing of our proprietary technologies requires proprietary automated equipment that ensures total control and agility in our production processes. Over the past decade, we have made significant investments in highly specialized manufacturing tooling, jigs and fixtures that allow us to manufacture products at lower cost while maintaining the highest quality.

Our production assembly lines are designed to be flexible, and we utilize advanced manufacturing planning software to predict, monitor and control demand levels and product mix to provide the shortest delivery time to our customers. We utilize 3-D CAD software to product design and document assembly instructions throughout our production process. All our products are 100% tested to customer specific application requirements prior to shipment.

Throughout our operations we utilize computerized ERP software that integrates all our processes from lead generation to product shipment and aftermarket support. Our focus on safety, quality and on-time delivery is supported by employee training and information systems that monitor process and product quality and communicate trends and findings to senior management on a real-time basis.

Design Engineering/Research and Development

Our research and development efforts are market driven and are focused on the development of new technologies and product improvements, as well as reducing costs and improving product quality and reliability. During 2017, the primary focus of our research and development activities was the development of lighter-weight, more compact and lower cost DC power generation systems for our Tier-1 wireless provider customers in the U.S. and international markets. Significant resources were expended in enhancing our system controls like our Supra Controller™ and BMS. Features such as remote monitoring and self-diagnostics were enhanced to make systems more robust and intelligent.

A significant part of our research and development effort has focused on the development of control software that integrates engine controls, power management and battery algorithms to fully optimize fuel consumption in both prime power and backup power generation applications. We use a high level of integration with a single control and communication module, our Supra Controller™, rather than competitive system designs with a number of independent control modules controlling a single function. Our integrated approach ensures software compatibility, reduces complexity in wiring, increases reliability and reduces cost.

Our research and development expenditures increased by $573,173 to $1,907,810 during 2018, as compared to $1,334,637 in 2017. This growth in expenditures is attributable to an increase in new product development activities. During 2018, we developed a 20kW DC power system, a liquid-cooled DC power system for the SMET military project, developed and introduced our next generation BMS, and a system integrating renewable energy, battery storage and DC power for remote off-grid telecommunications tower sites in Southeast Asia. The costs related to these developments included increase in engineering staff, increase direct labor costs to fabricate and assemble prototypes and production units. We maintain an in-house design, prototyping, testing and application engineering capabilities including expertise in 3-D solid modeling and finite element analysis, computer-based modeling and testing, rapid prototyping, design verification testing and document publication, which includes manufacturing assembly instructions, supplier drawings and product manuals. In addition, we utilize third party testing laboratories to certify our products compliance to current applicable UL standards.

Intellectual Property

We possess a broad intellectual property portfolio comprised of electronics, software, engines, alternators, thermal systems and production techniques. We rely on trademark, copyright and trade secret laws to protect our intellectual property. Currently, we rely on common law rights to protect our “Polar Power, Inc.” trade name. We protect our trade secrets and other proprietary information by requiring confidentiality agreements from our employees, consultants and third parties that have access to such information. Despite these efforts, there can be no assurance that others will not gain access to our trade secrets, or that we can meaningfully protect our technology. In addition, effective trademark, copyright and trade secret protection may be unavailable or limited in certain foreign countries.

We consider our manufacturing process to be a trade secret and have non-disclosure agreements with our employees to protect the trade secrets held by us. However, such methods may not afford complete protection, and there can be no assurance that others will not independently develop similar know-how or obtain access to our know-how and manufacturing concepts. We may register patents and trademarks in future to protect our intellectual property rights and enhance our competitive position.

Suppliers

We attempt to mitigate the material adverse effect of component shortages in our business through detail material planning and by qualifying multiple vendor sources for key components and outside processes. In order to meet our customer demands, we forecast the supply of our long lead time items such as engines, castings and electronic components through strategic planning of inventory levels. We conduct on- site supplier audits of major suppliers to help ensure reliability, quality and sustainability of critical components.

Quality Control

We began concentrating on our quality control in the early 1980s, much of which was required by our customers at the time, including NASA and Hughes Aircraft. In the late 1980s, we implemented the MIL-I-45208A quality control system monitored by U.S. Department of Defense, to meet prime source requirements for a contract we received from the U.S. Army Picatinny Arsenal, to design and manufacture an advanced battery and monitoring system for a security device used in nuclear munitions depots around the world. We are currently in the process of obtaining an ISO 9000 certification.

Certifications

Our DC generator systems comply with UL2200 safety standards. Our products also comply with applicable regulatory emission standards of the Environmental Protection Agency, and the California Air Quality Management District.

Product Warranties

Our standard warranty on new products is two years from the date of delivery to the customer. We offer a limited extended warranty of up to five years on our certified DC power systems based on application and usage. Under our standard warranty, provisions for estimated expenses related to product warranties are made at the time products are sold. These estimates are established using historical information about the nature, frequency and average cost of warranty claim settlements as well as product manufacturing and recovery from suppliers. Historically, we have experienced warranty costs of below 1% of net sales which we believe is well within industry norms.

Information Systems

We utilize integrated information systems (i.e., ERP) that link our lead management, sales planning, order entry, purchasing, engineering, production control, manufacturing, inventory and accounting systems. During the past five years we have made significant investments to upgrade and customize our information systems to improve productivity and our ability to accurately forecast inventory and manpower requirements. We plan to invest additional capital in software and information systems to integrate aftermarket sales and service with our ERP system to improve post sales customer experience with our products and services.

Government Regulations and Environmental matters

Our products and their installations are subject to oversight and regulations at federal, state and local levels in accordance with regional statutes and ordinances relating to, building codes, fire codes, public safety, electrical and fuel connections, security protocols, and local and state licensing requirements. We are also regulated by federal, state and international environmental laws governing our use, transport and control of emissions. In addition to governing our manufacturing and other operations, these laws often impact the development of our products, including, but not limited to required compliance with air emissions standards applicable to internal combustion engines. Our products integrate engines with our proprietary technologies to produce efficient DC power. We rely on our engine suppliers to conform to the regional regulations and statutes to meet regional emission requirements.

Employees

As of April 1, 2019, we had 179 full time employees. Currently, 160 employees are located at our facilities in Gardena, California and twelve employees are located outside the U.S. None of our employees are represented by labor unions, and there have not been any work stoppages at our facilities. We consider our relationships with our employees to be generally satisfactory. In addition, from time to time, we utilize outside consultants or contractors for specific assignments.

Facilities

Our principal offices are located in Gardena, California, where we lease a 40,000 square foot facility that includes our corporate staff offices, our manufacturing facility, and our research and development center. We also lease a 29,000 square foot facility as our second manufacturing facility and a 15,000 square foot warehouse facility across the street from our corporate offices. We believe that our current facilities are sufficient to accommodate our anticipated production volumes for the next twelve months. If required, additional office and manufacturing space is available within less than three miles from our present location.

Legal Proceedings

From time to time, we may be involved in general commercial disputes arising in the ordinary course of our business. We are not currently involved in legal proceedings that could reasonably be expected to have material adverse effect on our business, prospects, financial condition or results of our operation.

Item 1A. Risk Factors

Before deciding to purchase, hold or sell our common stock, you should carefully consider the risks described below in addition to the other information contained in this Annual Report on Form 10-K and in our other filings with the Securities and Exchange Commission, or the SEC, including subsequent reports on Forms 10-Q and 8-K. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business. If any of these known or unknown risks or uncertainties actually occurs with material adverse effects on Polar Power, our business, financial condition, results of operations and/or liquidity could be seriously harmed. In that event, the market price for our common stock will likely decline, and you may lose all or part of your investment.

Risks Related to Our Business and Industry

We are dependent on a limited number of customers.

During the past two years a significant portion of our sales is to Tier-1 telecommunications providers located in the U.S. During each of the last two years, revenues derived from Verizon Wireless, comprised 10% and 71% of our total revenues for the years ended December 31, 2018 and 2017, respectively. In 2017, we received approved supplier status from AT&T which comprised 53% and 15% of our total revenues for the years ended December 31, 2018 and 2017, respectively. In 2018, sales to T-Mobile accounted for 22% of our net sales. We have made significant investments in both our domestic and international markets in order to diversify our sales mix and will continue to work towards achieving a more diversified customer base. However, in the short term any unfavorable change in our business relationship with our Tier-1 telecommunications wireless carrier customers, or delays in customer implementation and deployment of our products, could have a material adverse effect on results of operation and financial condition.

We derive substantially all our revenues from sales of our DC base power systems to three customers within the telecommunications market. Our efforts to expand our product portfolio or markets within which we operate may not succeed and may reduce our revenue growth rate.

We derive substantially all our revenues from sales of our DC base power systems to three customers within the telecommunications market, AT&T, Verizon Wireless and T-Mobile. Any factor adversely affecting sales of these power systems to these two customers or to other customers within this market, including market acceptance, product competition, performance and reliability, reputation, price competition and economic and market conditions, could adversely affect our business and results of operations. Our plan to invest in the development of higher capacity DC hybrid solar systems to address data centers and other applications within the telecommunications market may not result in an anticipated growth in sales and may reduce our revenue growth rate.

Many of our DC power systems involve long design and sales cycles, which could have an adverse impact on our results of operations and financial performance.

The design and sales cycle for our DC power systems, from initial contact with our potential customer to the shipments of our product, may be lengthy. Customers generally consider a wide range of factors before making a purchase decision. Prior to purchasing our products, our customers often require a significant technical review, tests and evaluations over long periods of time, assessments of competitive products and approval at a number of management levels within their organization. During the time our customers are evaluating our products, we may incur substantial sales and service, engineering and research and development expenses to customize our products to meet customer's application needs. We may also expend significant management efforts, increase manufacturing capacity, order long-lead-time components or purchase significant amounts of components and other inventory prior to receiving an order. Even after this evaluation process, a potential customer may not purchase our products.

The product development time before a customer agrees to purchase our DC power systems can be considerable. Our process for developing an integrated solution may require use of significant engineering resources, including design, prototyping, modeling, testing and application engineering. The length of this cycle is influenced by many factors, including the difficulty of the technical specification and complexity of the design and the customer's procurement processes. A significant period may elapse between our investment of time and resources in designing and developing a product for a customer and receipt of revenue from sales of that product. The length of this process, combined with unanticipated delays in the development cycles could materially affect our results of operations and financial conditions.

We do not have long-term commitments for significant revenues with most of our customers and may be unable to retain existing customers, attract new customers or replace departing customers with new customers that can provide comparable revenues and profit margins.

Because we generally do not obtain firm, long-term volume purchase commitments from our customers, most of our sales are derived from individual purchase orders. We remain dependent upon securing new purchase orders in the future in order to sustain and grow our revenues. Accordingly, there is no assurance that our revenues and business will grow in the future. Our failure to maintain and expand our customer relationships could materially and adversely affect our business and results of operations.

The high concentration of our sales within the telecommunications market could result in a significant reduction in sales and negatively affect our results of operations if demand for our DC power systems declines within this market.

We expect to be predominately focused on the manufacturing, marketing and sales of DC power systems to telecommunications companies for the foreseeable future. We may be unable to shift our business focus away from these activities. Accordingly, the emergence of new competing DC power products or lower-cost alternative technologies may reduce the demand for our products. A downturn in the demand for our DC power systems within the telecommunications market would likely materially and adversely affect our sales and results of operations.

Any failure by management to properly manage our expected growth could have a material adverse effect on our business, operating results and financial condition.

We anticipate that we will continue to grow in the near future. The growth of our business will require significant investments of capital and management's close attention. Our strategy envisions a period of growth that may impose a significant burden on our administrative, financial, and operational resources. If we experience difficulties in any of these areas, we may not be able to expand our business successfully or effectively manage our growth. Our ability to effectively manage our growth will require us to substantially expand the capabilities of our administrative and operational resources and to attract, train, manage and retain qualified management, engineers, and other personnel. We may be unable to do so. Further, our failure to properly manage our expected growth could have a material adverse effect on our ability to retain key personnel. In addition, our failure to successfully manage our growth could result in our sales not increasing commensurately with our capital investments. Any failure by management to manage growth and to respond to changes in our business could have a material adverse effect on our business, financial condition and results of operations.

The markets within which we compete are highly competitive. Many of our competitors have greater financial and other resources than we do and one or more of these competitors could use their greater financial and other resources to gain market share at our expense.

If our business continues to develop as expected, we anticipate that we will continue to grow in the near future. If, due to capital constraints or otherwise, we are unable to fulfill our existing backlog in a timely manner and/or procure and timely fulfill our anticipated future backlog, our customers and potential customers may decide to use competing DC power systems or continue the use of alternating current, or AC, power systems. If we are unable to fulfill the growing demand for products and services in a timely manner, our customers and potential customers may choose to purchase products from our competitors. Some of our larger competitors may be willing to reduce prices and accept lower margins in order to compete with us. In addition, we could face new competition from large international or domestic companies with established industrial brands and distribution networks that enter our end markets. Demand for our products may also be affected by our ability to respond to changes in design and functionality, to respond to downward pricing pressure, and to provide shorter lead times for our products than our competitors. If we are unable to respond successfully to these competitive pressures, we could lose market share, which could have an adverse impact on our results. We cannot assure that we will be able to compete successfully in our markets or compete effectively against current and new competitors as our industry continues to evolve.

Rapid technological changes may prevent us from remaining current with our technological resources and maintaining competitive product and service offerings.

The markets in which we and our customers operate are characterized by rapid technological change, especially within the telecommunications market. Significant technological changes could render our existing and potential new products, services and technology obsolete. Our future success will depend, in large part, upon our ability to:

- effectively identify and develop leading energy efficient technologies;

- continue to develop our technical expertise;

- enhance our current products and services with new, improved and competitive technology; and

- respond to technological changes in a cost-effective and timely manner.

If we are unable to successfully respond to technological change or if we do not respond to it in a cost-effective and timely manner, then our business will be materially and adversely affected. We cannot assure you that we will be successful in responding to changing technology. In addition, technologies developed by others may render our products, services and technology uncompetitive or obsolete. Even if we do successfully respond to technological advances, the integration of new technology may require substantial time and expense, and we cannot assure you that we will succeed in adapting our products, services and technology in a timely and cost-effective manner.

If we are unable to continue to develop new and enhanced products and services that achieve market acceptance in a timely manner, our competitive position and operating results could be harmed.

Our future success will depend on our ability to continue to develop new and enhanced DC power systems and related products and services that achieve market acceptance in a timely and cost-effective manner. The markets in which we and our customers operate are characterized by frequent introductions of new and enhanced products and services, evolving industry standards and regulatory requirements, government incentives and changes in customer needs. The successful development and market acceptance of our products and services depends on a number of factors, including:

- the changing requirements and preferences of the potential customers in our markets;

- the accurate prediction of market requirements, including regulatory issues;

- the timely completion and introduction of new products and services to avoid obsolescence;

- the quality, price and performance of new products and services;

- the availability, quality, price and performance of competing products and services;

- our customer service and support capabilities and responsiveness;

- the successful development of our relationships with existing and potential customers; and

- changes in industry standards.

We may experience financial or technical difficulties or limitations that could prevent us from introducing new or enhanced products or services. Furthermore, any of these new or enhanced products and services could contain problems that are discovered after they are introduced. We may need to significantly modify the design of these products and services to correct problems. Rapidly changing industry standards and customer preferences and requirements may impede market acceptance of our products and services.

Development and enhancement of our products and services will require significant additional investment and could strain our management, financial and operational resources. The lack of market acceptance of our products or services or our inability to generate sufficient revenues from this development or enhancement to offset their development costs could have a material adverse effect on our business. In addition, we may experience delays or other problems in releasing new products and services and enhancements, and any such delays or problems may cause customers to forego purchases of our products and services and to purchase those of our competitors.

We cannot provide assurance that products and services that we have recently developed or that we develop in the future will achieve market acceptance. If our new products and services fail to achieve market acceptance, or if we fail to develop new or enhanced products and services s that achieve market acceptance, our growth prospects, operating results and competitive position could be adversely affected.

We are dependent on relationships with our key material suppliers, and the partial or complete loss of one of these key suppliers, or the failure to find replacement suppliers or manufacturers in a timely manner, could adversely affect our business.

We have established relationships with third party engine suppliers and other key suppliers from which we source components for our power systems. We purchase standard configurations of engines for our DC power systems and are substantially dependent on timely supply from our three key engine suppliers, Yanmar Engines Company, Kubota Corporation, and Perkins Company. Purchases from Yanmar, Kubota, and Perkins represented approximately 14%, 2%, and 4% of our total cost of sales for 2018, respectively, and represented approximately 37%, 16%, and 1% of our total cost of sales for 2017, respectively. We do not have any long-term contracts or commitments with any of these suppliers. If any of these engine suppliers were to fail to provide emissions certified engines in a timely manner or fail to supply engines that meet our quality, quantity or cost requirements, or were to discontinue manufacturing any engines we source from them or discontinue providing any of these engines to us, and we were unable to obtain substitute sources in a timely manner or on terms acceptable to us, our ability to manufacture our products could be materially adversely affected.

Price increases in some of the key components in our DC power systems could materially and adversely affect our operating results and cash flows.

The prices of some of the key components of our DC power systems are subject to fluctuation due to market forces beyond our control, including changes in the costs of raw materials incorporated into these components. Such price increases occur from time to time due to spot shortages of commodities, increases in labor costs or longer-term shortages due to market forces. In particular, the prices of engines can fluctuate frequently and often significantly. We do not have any long-term contracts or commitments with our three key engine suppliers. Substantial increases in the prices of raw materials used in components which we source from our suppliers may result in increased prices charged by our suppliers. If we incur price increases from our suppliers for key components in our DC power systems, our production costs will increase. Given competitive market conditions, we may not be able to pass all or any of those cost increases on to our customers in the form of higher sales prices. To the extent our competitors do not suffer comparable component cost increases, we may have even greater difficulty passing along price increases and our competitive position may be harmed. As a result, increases in costs of key components may adversely affect our margins and otherwise adversely affect our operating results and cash flows.

A portion of our key components are sourced in foreign countries, exposing us to additional risks that may not exist in the U.S.

A portion of our key components, such as engines, magnets and cooling systems, are purchased from suppliers located overseas, primarily in Asia. Our international sourcing subjects us to a number of potential risks in addition to the risks associated with third-party sourcing generally. These risks include:

- inflation or changes in political and economic conditions;

- unstable regulatory environments;

- changes in import and export duties;
- currency rate fluctuations;
- trade restrictions;
- labor unrest;
- logistical and communications challenges; and
- other restraints and burdensome taxes.

These factors may have an adverse effect on our ability to source our purchased components overseas. In particular, if the U.S. dollar were to depreciate significantly against the currencies in which we purchase raw materials from foreign suppliers, our cost of goods sold could increase materially, which would adversely affect our results of operations.

The unavailability or shortage, or increase in the cost, of raw materials and components could have an adverse effect on our sales and profitability.

Our operations require raw materials, such as aluminum, copper and permanent magnets. Commodities such as aluminum and copper are known to have significant price volatility based on global economic conditions. An increase in global economic outlook may result in significant price increases in the cost of our raw materials. In addition, we use Neodymium permanent magnets in our alternators, for which there are a limited number of global suppliers that can meet our standards. Increase in manufacturing of electric vehicles worldwide can have an adverse effect on the cost or supply of these magnets. At our current production volumes, we are unable to secure large quantities of these commodities at fixed prices; however, we do have multiple sources of supply for our raw materials to meet our near term forecasted needs. Various factors could reduce the availability of raw materials and components and shortages may occur from time to time in the future. An increase in lead times for the supply of raw materials due to a global increase in demand for commodities outlined may significantly increase material costs of our products. If production was interrupted due to unavailability or shortage of raw materials and we were not able to find alternate third-party suppliers or re-engineer our products to accommodate different components or materials, we could experience disruptions in manufacturing and operations including product shortages, higher freight costs and re-engineering costs. If our supply of raw materials or components is disrupted or our lead times extended, our business, results of operations or financial condition could be materially adversely affected.

We manufacture and assemble a majority of our products at two facilities. Any prolonged disruption in the operations of this facility would result in a decline in our sales and profitability.

We manufacture and assemble our DC power systems at our facilities located in Gardena, California. Any prolonged disruption in the operations of our manufacturing and assembly facilities, whether due to equipment or information technology infrastructure failure, labor difficulties, destruction of or damage to this facility as a result of an earthquake, fire, flood, other catastrophes, and other operational problems would result in a decline in our sales and profitability. In the event of a business interruption at our facilities, we may be unable to shift manufacturing and assembly capabilities to alternate locations, accept materials from suppliers or meet customer shipment needs, among other severe consequences. Such an event could have a material and adverse impact on our financial condition and results of our operations.

Our business operations are subject to substantial government regulation.

Our business operations are subject to certain federal, state, local and foreign laws and regulations. For example, our products, services and technologies are subject to regulations relating to building codes, public safety, electrical connections, security protocols, and local and state licensing requirements. The regulations to which we are subject may change, additional regulations may be imposed, or existing regulations may be applied in a manner that creates special requirements for the implementation and operation of our products or services that may significantly impact or even eliminate some of our revenues or markets. In addition, we may incur material costs or liabilities in complying with any such regulations. Furthermore, some of our customers must comply with numerous laws and regulations, which may affect their willingness and ability to purchase our products, services and technologies.

The modification of existing laws and regulations or interpretations thereof or the adoption of future laws and regulations could adversely affect our business, cause us to modify or alter our methods of operations and increase our costs and the price of our products, services and technology. In addition, we cannot provide any assurance that we will be able, for financial or other reasons, to comply with all applicable laws and regulations. If we fail to comply with these laws and regulations, we could become subject to substantial penalties or restrictions that could materially and adversely affect our business.

Certain of our products are used in critical communications networks which may subject us to significant liability claims.

Because certain of our products for customers in the telecommunications industry are used in critical communications networks, we may be subject to significant liability claims if our products do not work properly. We warrant to our customers that our products will operate in accordance with our product specifications. If our products fail to conform to these specifications, our customers could require us to remedy the failure or could assert claims for damages. The provisions in our agreements with customers that are intended to limit our exposure to liability claims may not preclude all potential claims. In addition, any insurance policies we have may not adequately limit our exposure with respect to such claims. Liability claims could require us to spend significant time and money in litigation or to pay significant damages. Any such claims, whether or not successful, would be costly and time-consuming to defend, and could divert management’s attention and seriously damage our reputation and our business.

We could be adversely affected by our failure to comply with the laws applicable to our foreign activities, including the U.S. Foreign Corrupt Practices Act and other similar worldwide anti-bribery laws.

The U.S. Foreign Corrupt Practices Act, or the FCPA, and similar anti-bribery laws in other jurisdictions prohibit U.S.-based companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. We may pursue opportunities in certain parts of the world that experience government corruption, and in certain circumstances, compliance with anti-bribery laws may conflict with local customs and practices. Our policies mandate compliance with all applicable anti-bribery laws. Further, we require our partners, subcontractors, agents and others who work for us or on our behalf to comply with the FCPA and other anti-bribery laws. Although we have policies and procedures, and have conducted training, designed to ensure that we, our employees, our agents and others who work with us in foreign countries comply with the FCPA and other anti-bribery laws, there is no assurance that such policies, procedures or training will protect us against liability under the FCPA or other laws for actions taken by our agents, employees and intermediaries. If we are found to be liable for FCPA violations (either due to our own acts or inadvertence, or due to the acts or inadvertence of others), we could suffer from severe criminal or civil penalties or other sanctions, which could have a material adverse effect on our reputation, business, results of operations or cash flows. In addition, detecting, investigating and resolving actual or alleged FCPA violations is expensive and could consume significant time and attention of our senior management.

We are exposed to risks related to our international sales, and the failure to manage these risks could harm our business. If we fail to expand our business into international markets, our revenues and results of operations may be adversely affected.

In addition to our sales to customers within the U.S., we may become increasingly dependent on sales to customers outside the U.S. as we pursue expanding our business with customers worldwide. In 2017, we established full-time sales executives and support staff in: Australia, Dubai, Singapore, Romania, Poland, Africa and the Dominican Republic. In 2018 and 2017, our sales to international customers accounted for 6% and 2%, respectively, of total revenue. We expect that a significant portion of our future international sales will be from less developed or developing countries. As a result, the occurrence of any international, political, economic, or geographic event could result in a significant decline in revenue. There are significant risks associated with conducting operations internationally, requiring significant financial commitments to support such operations. These operations present a number of challenges including oversight of daily operating practices in each location, handling employee benefits and employee behavior. In addition, compliance with complex foreign and U.S. laws and regulations that apply to our international operations increases our cost of doing business in international jurisdictions. These numerous and sometimes conflicting laws and regulations include internal control and disclosure rules, data privacy and filtering requirements, anti-corruption laws, such as the FCPA, and other local laws prohibiting corrupt payments to governmental officials, and anti-competition regulations, among others.

Violations of these laws and regulations could result in fines and penalties, criminal sanctions against us, our officers, or our employees, prohibitions on the conduct of our business and on our ability to offer our products and services in one or more countries, and could also materially affect our brand, our international expansion efforts, our ability to attract and retain employees, our business, and our operating results. Although we have implemented policies and procedures designed to ensure compliance with these laws and regulations, there can be no assurance that our employees, contractors, or agents will not violate our policies.

Some of the risks and challenges of conducting business internationally include:

- requirements or preferences for domestic products or solutions, which could reduce demand for our products;
- unexpected changes in regulatory requirements;
- imposition of tariffs and other barriers and restrictions;
- restrictions on the import or export of critical technology;
- management communication and integration problems resulting from cultural and geographic dispersion;
- the burden of complying with a variety of laws and regulations in various countries;
- difficulties in enforcing contracts;
- the uncertainty of protection for intellectual property rights in some countries;
- application of the income tax laws and regulations of multiple jurisdictions, including relatively low-rate and relatively high-rate jurisdictions, to our sales and other transactions, which results in additional complexity and uncertainty;
- tariffs and trade barriers, export regulations and other regulatory and contractual limitations on our ability to sell products;
- greater risk of a failure of foreign employees to comply with both U.S. and foreign laws, including export and antitrust regulations, the FCPA and any trade regulations ensuring fair trade practices;

- heightened risk of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, or irregularities in, financial statements;
- potentially adverse tax consequences, including multiple and possibly overlapping tax structures;
- general economic and geopolitical conditions, including war and acts of terrorism;
- lack of the availability of qualified third-party financing; and
- currency exchange controls.

While these factors and the impacts of these factors are difficult to predict, any one or more of them could adversely affect our business, financial condition and results of operations in the future.

Failures or security breaches of our networks or information technology systems could have an adverse effect on our business.

We rely heavily on information technology, or IT, both in our products and services for customers and in our IT systems. Further, we collect and store sensitive information in our data centers and on our networks. Government agencies and security experts have warned about growing risks of hackers, cyber-criminals, malicious insiders and other actors targeting confidential information and all types of IT systems. These actors may engage in fraudulent activities, theft of confidential or proprietary information and sabotage.

Our IT systems and our confidential information may be vulnerable to damage or intrusion from a variety of attacks including computer viruses, worms or other malicious software programs. These attacks pose a risk to the security of the products, systems and networks of our customers, suppliers and third-party service providers, as well to the confidentiality of our information and the integrity and availability of our data. While we attempt to mitigate these risks through controls, due diligence, training, surveillance and other measures, we remain vulnerable to information security threats.

Despite the precautions we take, an intrusion or infection of our systems could result in the disruption of our business, loss of proprietary or confidential information, or injuries to people or property. Similarly, an attack on our IT systems could result in theft or disclosure of trade secrets or other intellectual property or a breach of confidential customer or employee information. Any such events could have an adverse impact on sales, harm our reputation and cause us to incur legal liability and increased costs to address such events and related security concerns. As the threats evolve and become more potent, we may incur additional costs to secure the products that we sell, as well as our data and infrastructure of networks and devices.

Risks Related to Our Intellectual Property

If we fail to adequately protect our intellectual property rights, we could lose important proprietary technology, which could materially and adversely affect our business.

Our success and ability to compete depends, in substantial part, upon our ability to develop and protect our proprietary technology and intellectual property rights to distinguish our products, services and technology from those of our competitors. The unauthorized use of our intellectual property rights and proprietary technology by others could materially harm our business.

Historically, we have relied primarily on a combination of trademark, copyright and trade secret laws, along with non-competition and confidentiality agreements, contractual provisions, licensing arrangements and proprietary software and manufacturing processes, to establish and protect our intellectual property rights. Although we hold several unregistered copyrights in our business, we believe that the success of our business depends more upon our proprietary technology, information, processes and know-how than on patents or trademark registrations. In addition, much of our proprietary information and technology may not be patentable; if we decided to apply for patents and/or trademarks in the future, we might not be successful in obtaining any such future patents or in registering any marks.

Despite our efforts to protect our intellectual property rights, existing laws afford only limited protection, and our actions may be inadequate to protect our rights or to prevent others from claiming violations of their proprietary rights. Unauthorized third parties may attempt to copy, reverse engineer or otherwise obtain, use or exploit aspects of our products and services, develop similar technology independently, or otherwise obtain and use information that we regard as proprietary. We cannot assure you that our competitors will not independently develop technology similar or superior to our technology or design around our intellectual property. In addition, the laws of some foreign countries may not protect our proprietary rights as fully or in the same manner as the laws of the U.S.

We may need to resort to litigation to enforce our intellectual property rights, to protect our trade secrets, and to determine the validity and scope of other companies' proprietary rights in the future. However, litigation could result in significant costs and in the diversion of management and financial resources. We cannot assure you that any such litigation will be successful or that we will prevail over counterclaims against us. Our failure to protect any of our important intellectual property rights or any litigation that we resort to in order to enforce those rights could materially and adversely affect our business.

If we face claims of intellectual property infringement by third parties, we could encounter expensive litigation, be liable for significant damages or incur restrictions on our ability to sell our products and services.

Although we are not aware of any present infringement of our products, services or technology on the intellectual property rights of others, we cannot be certain that our products, services and technologies do not or in the future will not infringe on the valid intellectual property rights held by third parties. In addition, we cannot assure you that third parties will not claim that we have infringed their intellectual property rights.

In recent years, there has been a significant amount of litigation in the U.S. involving patents and other intellectual property rights. In the future, we may be a party to litigation as a result of an alleged infringement of others' intellectual property. Successful infringement claims against us could result in substantial monetary liability, require us to enter into royalty or licensing arrangements, or otherwise materially disrupt the conduct of our business. In addition, even if we prevail on these claims, this litigation could be time-consuming and expensive to defend or settle, and could result in the diversion of our time and attention and of operational resources, which could materially and adversely affect our business. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop selling, incorporating or using our products and services that use the infringed intellectual property;

- obtain from the owner of the infringed intellectual property right a license to sell or use the relevant technology, which license may not be available on commercially reasonable terms, or at all; or

- redesign the products and services that use the technology.

If we are forced to take any of these actions, our business may be seriously harmed. Although we carry general liability insurance, our insurance may not cover potential claims of this type or may not be adequate to indemnify us for all liability that may be imposed.

Risks Related to Our Common Stock

Our operating results can fluctuate significantly from period to period, which makes our operating results difficult to predict and can cause our operating results in any particular period to be less than comparable periods and expectations from time to time.

Our operating results have fluctuated significantly from quarter-to-quarter, period-to-period and year-to-year during our operating history and are likely to continue to fluctuate in the future due to a variety of factors, many of which are outside of our control. Certain factors that may affect our operating results include, without limitation, those set forth under "Management's Discussion and Analysis of Financial Condition and Results of Operations —Critical Accounting Policies" in this Annual Report on Form 10-K.

Because we have little or no control over many of these factors, our operating results are difficult to predict. Any adverse change in any of these factors could negatively affect our business and results of operations.

Our revenues, net income (loss) and other operating results are heavily dependent upon the size and timing of customer orders and projects, and the timing of the completion of those projects. The timing of our receipt of large individual orders, and of project completion, is difficult for us to predict. Because our operating expenses are based on anticipated revenues over the mid- and long-term and because a high percentage of our operating expenses are relatively fixed, a shortfall or delay in recognizing revenues can cause our operating results to vary significantly from quarter-to-quarter and can result in significant operating losses or declines in profit margins in any particular quarter. If our revenues fall below our expectations in any particular quarter, we may not be able, or it may not be prudent for us, to reduce our expenses rapidly in response to the revenue shortfall, which can result in us suffering significant operating losses or declines in profit margins in that quarter.

Due to these factors and the other risks discussed in this Annual Report on Form 10-K, you should not rely on quarter-to-quarter, period-to-period or year-to-year comparisons of our results of operations as an indication of our future performance. Quarterly, period and annual comparisons of our operating results are not necessarily meaningful or indicative of future performance. As a result, it is likely that, from time to time, our results of operations or our revenue backlog could fall below historical levels or the expectations of public market analysts and investors, which could cause the trading price of our common stock to decline significantly.

Our Chairman, President and Chief Executive Officer owns a majority of our common stock and will exercise significant influence over matters requiring stockholder approval, regardless of the wishes of other stockholders.

Our Chairman, President, Chief Executive Officer and Secretary, Arthur D. Sams, beneficially owns approximately 55% of our outstanding shares of common stock. Mr. Sams therefore has significant influence over management and significant control over matters requiring stockholder approval, including the annual election of directors and significant corporate transactions, such as a merger or other sale of our company or our assets, for the foreseeable future. This concentrated control will limit stockholders' ability to influence corporate matters and, as a result, we may take actions that our stockholders do not view as beneficial. As a result, the market price of our common stock could be adversely affected.

We are a "controlled company" within the meaning of the NASDAQ Listing Rules. Although we do not currently intend to rely on the exemptions from certain corporate governance requirements afforded to a "controlled company" under NASDAQ Listing Rules, we could potentially seek to rely on such exemptions in the future.

Our Chairman, President, Chief Executive Officer and Secretary, Arthur D. Sams, controls a majority of our common stock. As a result, we are a "controlled company" within the meaning of the NASDAQ Listing Rules. Under these rules, a company of which more than 50% of the voting power for the election of directors is held by an individual, a group or another company is a "controlled company" and may elect not to comply with certain NASDAQ corporate governance requirements, including, without limitation (i) the requirement that a majority of the board of directors consist of independent directors, (ii) the requirement that the compensation of our officers be determined or recommended to our board of directors by a compensation committee that is comprised solely of independent directors, and (iii) the requirement that director nominees be selected or recommended to the board of directors by a majority of independent directors or a nominating committee comprised solely of independent directors. We do not currently intend to rely on those exemptions afforded to a "controlled company." Nonetheless, in the future, we could potentially seek to rely on certain of those exemptions afforded to a "controlled company," and in such case, you would not have the same protections afforded to stockholders of companies that are subject to all of the NASDAQ corporate governance requirements.

The price of our shares of common stock is volatile, and you could lose all or part of your investment.

The trading price of our shares of common stock is volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control, including limited trading volume. In addition to the factors discussed in the "Risk Factors" section and elsewhere in this Annual Report on Form 10-K, these factors include, without limitation:

- competition from existing technologies and products or new technologies and products that may emerge;
- the loss of significant customers, including AT&T, T-Mobile and Verizon Wireless;
- actual or anticipated variations in our quarterly operating results;
- failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;
- our cash position;
- announcement or expectation of additional financing efforts;
- issuances of debt or equity securities;
- our inability to successfully enter new markets or develop additional products;
- actual or anticipated fluctuations in our competitors' operating results or changes in their respective growth rates;
- sales of our shares of common stock by us, or our stockholders in the future;
- trading volume of our shares of common stock on The NASDAQ Capital Market;
- market conditions in our industry;
- overall performance of the equity markets and general political and economic conditions;
- introduction of new products or services by us or our competitors;
- additions or departures of key management, scientific or other personnel;
- publication of research reports about us or our industry or positive or negative recommendations or withdrawal of research coverage by securities or industry analysts;
- changes in the market valuation of similar companies;
- disputes or other developments related to intellectual property and other proprietary rights;

- changes in accounting practices;
- significant lawsuits, including stockholder litigation; and
- other events or factors, many of which are beyond our control.

Furthermore, the public equity markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of our shares of common stock.

We do not anticipate paying cash dividends, and accordingly, stockholders must rely on stock appreciation for any return on their investment.

We have never declared or paid cash dividends on our capital stock. We intend to retain a significant portion of our future earnings, if any, to finance the operations, development and growth of our business. Any future determination to declare dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions and other factors that our board of directors may deem relevant. As a result, only appreciation of the price of our common stock, which may never occur, will provide a return to stockholders.

If securities or industry analysts do not publish research or reports, or publish inaccurate or unfavorable research or reports about our business, our share price and trading volume could decline.

The trading market for our shares of common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If no securities or industry analysts undertake coverage of our company, the trading price for our shares of common stock may be negatively impacted. If we obtain securities or industry analyst coverage and if one or more of the analysts who covers us downgrades our shares of common stock, changes their opinion of our shares or publishes inaccurate or unfavorable research about our business, our share price would likely decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our shares of common stock could decrease and we could lose visibility in the financial markets, which could cause our share price and trading volume to decline.

We are not subject to the provisions of Section 203 of the Delaware General Corporation Law, which could negatively affect your investment.

We elected in our certificate of incorporation to not be subject to the provisions of Section 203 of the Delaware General Corporation Law, or Section 203. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A “business combination” includes a merger, asset sale or other transaction resulting in a financial benefit to the interested stockholder. An “interested stockholder” is a person who, together with affiliates and associates, owns (or, in certain cases, within three years prior, did own) 15% or more of the corporation’s voting stock. Our decision not to be subject to Section 203 will allow, for example, Arthur D. Sams, our Chairman, President, Chief Executive Officer and Secretary (who beneficially owns approximately 55% of our common stock) to transfer shares in excess of 15% of our voting stock to a third-party free of the restrictions imposed by Section 203. This may make us more vulnerable to takeovers that are completed without the approval of our board of directors and/or without giving us the ability to prohibit or delay such takeovers as effectively.

Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders. These provisions include:

- a requirement that special meetings of stockholders be called only by the board of directors, the president or the chief executive officer;
- advance notice requirements for stockholder proposals and nominations for election to our board of directors; and
- the authority of the board of directors to issue preferred stock on terms determined by the board of directors without stockholder approval and which preferred stock may include rights superior to the rights of the holders of common stock.

These anti-takeover provisions and other provisions in our certificate of incorporation and bylaws could make it more difficult for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors and could also delay or impede a merger, tender offer or proxy contest involving our Company. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing or cause us to take other corporate actions you desire. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

Our certificate of incorporation designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or other employees.

Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws, or (iv) any action asserting a claim against us governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the provisions of certificate of incorporation described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find these provisions of our certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, financial condition or results of operations.

We are an "emerging growth company," and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our shares of common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in this report, our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years, although circumstances could cause us to lose that status earlier, including if the market value of our shares of common stock held by non-affiliates exceeds $700 million as of any June 30 before that time or if we have total annual gross revenue of $1.07 billion or more during any fiscal year before that time, in which cases we would no longer be an emerging growth company as of the following December 31, or if we issue more than $1.0 billion in non-convertible debt during any three-year period before that time, in which case we would no longer be an emerging growth company immediately. We cannot predict if investors will find our shares of common stock less attractive because we may rely on these exemptions. If some investors find our shares of common stock less attractive as a result, there may be a less active trading market for our shares of common stock and our share price may be more volatile.

Under the JOBS Act, emerging growth companies also can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 of the Sarbanes-Oxley Act, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

We are required to disclose changes made in our internal controls and procedures on a quarterly basis and our management is required to assess the effectiveness of these controls annually. However, for as long as we are an “emerging growth company” under the JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting pursuant to Section 404. We could be an “emerging growth company” for up to five years. An independent assessment of the effectiveness of our internal controls could detect problems that our management’s assessment might not. Undetected material weaknesses in our internal controls could lead to financial statement restatements and require us to incur the expense of remediation.

We incur significant costs as a result of operating as a public company and our management expects to devote substantial time to public company compliance programs.

As a public company, we incur significant legal, accounting and other expenses due to our compliance with regulations and disclosure obligations applicable to us, including compliance with the Sarbanes-Oxley Act as well as rules implemented by the SEC and NASDAQ. The SEC and other regulators have continued to adopt new rules and regulations and make additional changes to existing regulations that require our compliance. In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that have required the SEC to adopt additional rules and regulations in these areas. Stockholder activism, the current political environment, and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact, in ways we cannot currently anticipate, the manner in which we operate our business. Our management and other personnel devote a substantial amount of time to these compliance programs and monitoring of public company reporting obligations and, as a result of the new corporate governance and executive compensation related rules, regulations, and guidelines prompted by the Dodd-Frank Act and further regulations and disclosure obligations expected in the future, we will likely need to devote additional time and costs to comply with such compliance programs and rules. These rules and regulations cause us to incur significant legal and financial compliance costs and make some activities more time-consuming and costly.

To comply with the requirements of being a public company, we may need to undertake various activities, including implementing new internal controls and procedures and hiring new accounting or internal audit staff. The Sarbanes-Oxley Act requires that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that information required to be disclosed in reports under the Securities Exchange Act of 1934, or the Exchange Act, is accumulated and communicated to our principal executive and financial officers. Our current controls and any new controls that we develop may become inadequate and weaknesses in our internal control over financial reporting may be discovered in the future.

Any failure to develop or maintain effective controls could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting which we may be required to include in our periodic reports we will file with the SEC under Section 404 of the Sarbanes-Oxley Act, harm our operating results, cause us to fail to meet our reporting obligations, or result in a restatement of our prior period financial statements. In the event that we are not able to demonstrate compliance with the Sarbanes-Oxley Act, that our internal control over financial reporting is perceived as inadequate or that we are unable to produce timely or accurate financial statements, investors may lose confidence in our operating results and the price of our common stock could decline. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on The NASDAQ Capital Market.

We are not currently required to comply with the SEC rules that implement Section 404 of the Sarbanes-Oxley Act, and are therefore not yet required to make a formal assessment of the effectiveness of our internal control over financial reporting for that purpose. However, we are required to comply with certain of these rules, which require management to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of our internal control over financial reporting commencing with our next annual report. This assessment will need to include the disclosure of any material weaknesses in our internal control over financial reporting identified by our management or our independent registered public accounting firm. We are just beginning the costly and challenging process of compiling the system and processing documentation needed to comply with such requirements. We may not be able to complete our evaluation, testing and any required remediation in a timely fashion. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective.

Raising additional capital, including through future sales and issuances of our common stock, the exercise of warrants or the exercise of rights to purchase common stock pursuant to our equity incentive plan could result in additional dilution of the percentage ownership of our stockholders, could cause our share price to fall and could restrict our operations.

We expect that significant additional capital will be needed in the future to continue our planned operations, including any potential acquisitions, purchasing of capital equipment, hiring new personnel, and continuing activities as an operating public company. To the extent we seek additional capital through a combination of public and private equity offerings and debt financings, our stockholders may experience substantial dilution. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our existing stockholders may be diluted, and the terms may include liquidation or other preferences that adversely affect the rights of our stockholders. Debt and receivables financings may be coupled with an equity component, such as warrants to purchase shares of our common stock, which could also result in dilution of our existing stockholders’ ownership. The incurrence of indebtedness would result in increased fixed payment obligations and could also result in certain restrictive covenants, such as limitations on our ability to incur additional debt and other operating restrictions that could adversely impact our ability to conduct our business. A failure to obtain adequate funds may cause us to curtail certain operational activities, including sales and marketing, in order to reduce costs and sustain the business, and would have a material adverse effect on our business and financial condition.

Under our 2016 Omnibus Stock Incentive Plan, as amended, or 2016 Plan, we may grant equity awards covering up to 1,754,385 shares of our common stock. As of December 31, 2018, we had granted options to purchase an aggregate of 360,000 shares of common stock under the 2016 Plan. We have registered 1,754,385 shares of common stock available for issuance under our 2016 Plan. Sales of shares issued upon exercise of options or granted under our 2016 Plan may result in material dilution to our existing stockholders, which could cause our share price to fall.

Our issuance of shares of preferred stock could adversely affect the market value of our common stock, dilute the voting power of common stockholders and delay or prevent a change of control.

Our board of directors has the authority to cause us to issue, without any further vote or action by the stockholders, up to 5,000,000 shares of preferred stock in one or more series, to designate the number of shares constituting any series, and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, voting rights, rights and terms of redemption, redemption price or prices and liquidation preferences of such series.

The issuance of shares of preferred stock with dividend or conversion rights, liquidation preferences or other economic terms favorable to the holders of preferred stock could adversely affect the market price for our common stock by making an investment in the common stock less attractive. For example, investors in the common stock may not wish to purchase common stock at a price above the conversion price of a series of convertible preferred stock because the holders of the preferred stock would effectively be entitled to purchase common stock at the lower conversion price causing economic dilution to the holders of common stock.

Further, the issuance of shares of preferred stock with voting rights may adversely affect the voting power of the holders of our other classes of voting stock either by diluting the voting power of our other classes of voting stock if they vote together as a single class, or by giving the holders of any such preferred stock the right to block an action on which they have a separate class vote even if the action were approved by the holders of our other classes of voting stock. The issuance of shares of preferred stock may also have the effect of delaying, deferring or preventing a change in control of our company without further action by the stockholders, even where stockholders are offered a premium for their shares.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our certificate of incorporation and bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. In addition, as permitted by Section 145 of the Delaware General Corporation Law, our bylaws and the indemnification agreements that we have entered into with our directors and officers provide that:

- We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.

- We may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law.

- We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.

- We will not be obligated pursuant to our bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification.

- The rights conferred in our bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.

- We may not retroactively amend our bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

To the extent that a claim for indemnification is brought by any of our directors or officers, it would reduce the amount of funds available for use in our business.

Our ability to attract and retain qualified members of our board of directors may be impacted due to new state laws, including recently enacted gender quotas.

In September 2018, California enacted SB 826 requiring public companies headquartered in California to maintain minimum female representation on their boards of directors as follows: by the end of 2019, at least one woman on its board, by the end of 2020, public company boards with five members will be required to have at least two female directors, and public company boards with six or more members will be required to have at least three female directors. Failure to achieve designated minimum levels in a timely manner exposes such companies to costly financial penalties and reputational harm. We cannot assure that we can recruit, attract and/or retain qualified members of the board and meet gender quotas as a result of the California law (should is not be repealed before the compliance deadlines), which may cause certain investors to divert their holdings in our stock and expose us to penalties and/or reputational harm.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our principal offices are located in Gardena, California, where we lease a 40,000 square feet facility that includes our corporate staff offices, our manufacturing facility, and our research and development center. We also lease a 29,000 square foot manufacturing facility and a 15,000 square foot storage facility near our principal offices. We believe that our current facilities are sufficient to accommodate our anticipated production volumes for the next twelve months. If required, additional office and manufacturing space is available within less than three miles from our present location.

Item 3. Legal Proceedings.

From time to time, we may be involved in general commercial disputes arising in the ordinary course of our business. We are not currently involved in legal proceedings that could reasonably be expected to have material adverse effect on our business, prospects, financial condition or results of our operation.

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.

Market Information

Shares of our common stock trade on The NASDAQ Capital Market under the symbol "POLA." Shares of our common stock began trading on The NASDAQ Capital Market on December 7, 2016. The table below sets forth for the quarters indicated for the years ended December 31, 2018 and December 31, 2017, the reported high and low bid prices of our common stock as reported on The NASDAQ Capital Market. The prices shown below reflect inter-dealer quotations without retail markups, markdowns or commissions, and may not necessarily represent actual transactions.

		High	Low
Year Ended December 31, 2017			
First Quarter	(January 1 – March 31)	$ 9.07	$ 7.64
Second Quarter	(April 1 – June 30)	$ 9.11	$ 4.64
Third Quarter	(July 1 – September 30)	$ 6.16	$ 4.17
Fourth Quarter	(October 1 – December 31)	$ 5.85	$ 4.79
Year Ended December 31, 2018			
First Quarter	(January 1 – March 31)	$ 5.26	$ 4.01
Second Quarter	(April 1 – June 30)	$ 6.85	$ 4.87
Third Quarter	(July 1 – September 30)	$ 6.65	$ 5.07
Fourth Quarter	(October 1 – December 31)	$ 6.20	$ 4.50

Security Holders

As of March 29, 2019, we had 10,143,158 shares of common stock outstanding held of record by approximately 17 stockholders. These holders of record include depositories that hold shares of stock for brokerage firms which, in turn, hold shares of stock for numerous beneficial owners. On March 29, 2019, the last reported sale price of our common stock on The NASDAQ Capital Market was $4.51 per share.

Dividend Policy

We have never declared or paid cash dividends on our capital stock. We intend to retain a significant portion of our future earnings, if any, to finance the operations, development and growth of our business. Any future determination to declare dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions and other factors that our board of directors may deem relevant. As a result, only appreciation of the price of our common stock, which may never occur, will provide a return to stockholders.

Recent Sales of Unregistered Securities

None.

Purchases of Equity Securities by the Issuer and Affiliated Persons

None.

Equity Compensation Plan

The following table provides information about our common stock that may be issued upon the exercise of options, warrants and rights under all of our existing equity compensation plans as of December 31, 2018.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants or Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans
Equity Compensation Plans Approved by Security Holders:			
2016 Plan	360,000	$ 5.28	1,724,385

Item 6. Selected Financial Data.

Not applicable.

Item 7. Management Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the related notes and other financial information included elsewhere in this Annual Report on Form 10-K. In addition to historical information, this discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below, and those discussed in the section titled "Risk Factors" and elsewhere in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results to be expected for any future period, and results for any interim period are not necessarily indicative of the results to be expected for the full year.

Overview

We design, manufacture and sell DC power systems for applications primarily in the telecommunications market and, to a lesser extent, in other markets, including military, electric vehicle charging, cogeneration, distributed power and uninterruptable power supply. Within the telecommunications market, our DC power systems provide reliable and low-cost DC power to service applications that do not have access to the utility grid (i.e., prime power applications) or have critical power needs and cannot be without power in the event of utility grid failure (i.e., back-up power applications). Within this market, we offer the following three configurations of our DC power systems, with output power ranging from 5 kW to 20 kW:

- ***DC base power systems***. These systems integrate a DC generator and automated controls with remote monitoring, which are typically contained within an environmentally regulated enclosure.

- ***DC hybrid power systems***. These systems incorporate lithium-ion batteries (or other advanced battery chemistries) with our proprietary BMS into our standard DC power systems.

- ***DC solar hybrid power systems***. These systems incorporate photovoltaic and other sources of renewable energy into our DC hybrid power system.

Our DC power systems are available in diesel, natural gas, liquid propane gas, gasoline and biofuel formats, with diesel, natural gas and liquid propane gas being the predominant formats and are capable of being remotely monitored by our global network management tool using our proprietary software technology, allowing us and our customers to collect performance data and update our products remotely.

We install, sell and service our products within our identified markets through our direct sales force and a network of independent service providers and dealers. In addition, we have established strategic relationships with local service partners in international markets to jointly promote, distribute and service our products.

During the years ended December 31, 2018 and 2017, 90% and 88%, respectively, of our total net sales were within the telecommunications market. In 2018, 85% of our total net sales were derived from our three largest customers, 53% from AT&T, 22% from T-Mobile, and 10% from Verizon Wireless. In 2017, 85% of our total net sales were derived from our two largest customers, 71% from Verizon Wireless and 14% from AT&T. During those periods, the majority of our sales were comprised of our DC base powers systems.

Critical Accounting Policies

Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that may have a significant impact on the portrayal of our financial condition and results of operations. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis of making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ materially from these estimates.

We believe that the following critical accounting policies, among others, affect our more significant judgment and estimates used in the preparation of our financial statements:

Revenue Recognition. During 2017, we recognized revenue from the sale of completed production units and parts when there is persuasive evidence that an arrangement exists, delivery of the product has occurred and title has passed, the selling price is both fixed and determinable, and collectability is reasonably assured, all of which occurs upon shipment of our product or delivery of the product to the destination specified by the customer. Once a product is delivered, we do not have a post-delivery obligation to provide additional services to the customer.

On January 1, 2018, we adopted ASU 2014-09, Revenue from Contracts with Customers (Topic 606), (ASC 606). The underlying principle of ASC 606 is to recognize revenue to depict the transfer of goods or services to customers at the amount expected to be collected. ASC 606 creates a five-step model that requires entities to exercise judgment when considering the terms of contract(s), which includes (1) identifying the contract(s) or agreement(s) with a customer, (2) identifying our performance obligations in the contract or agreement, (3) determining the transaction price, (4) allocating the transaction price to the separate performance obligations, and (5) recognizing revenue as each performance obligation is satisfied. Under ASC 606, revenue is recognized when performance obligations under the terms of a contract are satisfied, which occurs for us upon shipment or delivery of products or services to our customers based on written sales terms, which is also when control is transferred. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring the products or services to a customer. The implementation of ASC 606 had no impact on our financial statements and no cumulative effect adjustment was recognized.

We determine whether delivery has occurred based on when title transfers and the risks and rewards of ownership have transferred to the customer, which usually occurs when we place the product with the customer's carrier or deliver the product to a customer's location. We regularly review our customers' financial positions to ensure that collectability is reasonably assured. Except for warranties, we have no post-sales obligations.

Warranty Costs. We provide limited warranties for parts and labor at no cost to our customers within a specified time period after the sale. The warranty terms are typically from one to five years. Provisions for estimated expenses related to product warranties are made at the time products are sold. These estimates are established using historical information about the nature, frequency and average cost of warranty claim settlements as well as product manufacturing and recovery from suppliers. Management actively studies trends of warranty claims and takes action to improve product quality and minimize warranty costs. We estimate the actual historical warranty claims coupled with an analysis of unfulfilled claims to record a liability for specific warranty purposes. Our product warranty obligations are included in other accrued liabilities in the balance sheets. As of December 31, 2018 and 2017, we had accrued a liability for warranty reserve of $175,000 and $175,000, respectively. Management believes that the warranty accrual is appropriate; however actual claims incurred could differ from original estimates, requiring adjustments to the accrual. The product warranty accrual is allocated to current and liabilities in the balance sheets.

Inventory. We write down our inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated market value-based upon assumptions about future demand, future pricing and market conditions. If actual future demand, future pricing or market conditions are less favorable than those projected by management, additional inventory write-downs may be required and the differences could be material. Once established, write-downs are considered permanent adjustments to the cost basis of the obsolete or unmarketable inventories.

Income Taxes. Our estimate of income taxes payable, deferred income taxes and the effective tax rate is based on an analysis of many factors including interpretations of federal and state income tax laws, the difference between tax and financial reporting bases of assets and liabilities, estimates of amounts currently due or owed in various jurisdictions, and current accounting standards. We review and update our estimates on a quarterly basis as facts and circumstances change and actual results are known. We recognize income taxes for the amount of taxes payable or refundable for the current year and deferred tax liabilities and assets are recognized for the future tax consequences of transactions that have been recognized in our financial statements or tax returns. A valuation allowance is provided when it is more likely than not that some portion or the entire deferred tax asset will not be realized.

Effects of Inflation

The impact of inflation and changing prices has not been significant on the financial condition or results of operations of our company.

Impact of Recent Accounting Pronouncements

See "Note 1 – Organization and Summary of Significant Accounting Policies – Recent Accounting Pronouncements" of the Notes to Financial Statements commencing on page F-11 of this Annual Report on Form 10-K for management's discussion as to the impact of recent accounting pronouncements.

Jumpstart Our Business Startups Act of 2012

On April 5, 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. In other words, an "emerging growth company" can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

We are in the process of evaluating the benefits of relying on other exemptions and reduced reporting requirements provided by the JOBS Act. Subject to certain conditions set forth in the JOBS Act, if as an "emerging growth company" we choose to rely on such exemptions, we may not be required to, among other things, (i) provide an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404, (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act, (iii) comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis), and (iv) disclose certain executive compensation-related items such as the correlation between executive compensation and performance and comparisons of the Chief Executive Officer's compensation to median employee compensation. These exemptions will apply until we no longer meet the requirements of being an "emerging growth company." We will remain an "emerging growth company" until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of $1.07 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of this offering; (iii) the date on which we have issued more than $1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

Financial Performance Summary – Year Ended December 31, 2018

Our revenues increased by $9,627,628, or 67%, to $24,046,354 for the year ended December 31, 2018, as compared to $14,418,726 for the year ended December 31, 2017. We reported a net loss of $848,252 for 2018, as compared to net loss of $757,416 for 2017.

The increase in revenues during 2018 is a direct result of increased sales of our DC power systems to U.S. Tier-1 telecommunications customers and expansion of our customer base in the U.S. telecommunications market. Our backlog as of December 31, 2018 was approximately $16 million, with 92% of that amount being attributable to U.S. Tier-1 telecommunications customers, 4% to military customers, and 4% to other customers.

We anticipate that the majority of our future sales during the next twelve months will be comprised of DC power systems for applications within the mobile telecommunications tower market in the U.S. and international markets as we continue to expand our sales infrastructure in these markets.

Results of Operations

The tables presented below, which compare our results of operations from one period to another, present the results for each period, the change in those results from one period to another in both dollars and percentage change, and the results for each period as a percentage of net revenues. The columns present the following:

- The first two data columns in each table show the absolute results for each period presented.
- The columns entitled "Dollar Variance" and "Percentage Variance" shows the change in results, both in dollars and percentages. These two columns show favorable changes as a positive and unfavorable changes as negative. For example, when our net revenues increase from one period to the next, that change is shown as a positive number in both columns. Conversely, when expenses increase from one period to the next, that change is shown as a negative in both columns.
- The last two columns in each table show the results for each period as a percentage of net revenues.

Comparison of the Years Ended December 31, 2018 and 2017

	Year Ended December 31, 2018	Year Ended December 31, 2017	Dollar Variance Favorable (Unfavorable)	Percentage Variance Favorable (Unfavorable)	Results as a Percentage of Net Revenues for the Year Ended December 31, 2018	Results as a Percentage of Net Revenues for the Year Ended December 31, 2017
Net sales	$ 24,046,354	$ 14,418,726	$ 9,627,628	67%	100.0%	100.0%
Cost of sales	16,614,574	9,657,558	(6,957,016)	(72)%	69.1%	67.0%
Gross profit	7,431,780	4,761,168	2,670,612	56%	30.9%	33.0%
Sales and marketing expenses	2,579,457	1,348,455	(1,231,002)	(91)%	10.7%	9.4%
Research and development expenses	1,907,810	1,334,637	(573,173)	(43)%	7.9%	9.3%
General and administrative expenses	4,043,301	2,880,036	(1,163,265)	(40)%	16.8%	20.0%
Total operating expenses	8,530,568	5,563,128	(2,967,440)	(53)%	35.5%	38.6%
Loss from operations	(1,098,788)	(801,960)	(296,828)	(37)%	(4.6)%	(5.6)%
Interest expense	(20,170)	(17,822)	(2,348)	(13)%	(0.1)%	(0.1)%
Interest income	55,706	54,791	915	1.7%	0.2%	0.4%
Other income (expense), net	—	7,575	(7,575)	(100)%	0.0%	0.1%
Loss before income taxes	(1,063,252)	(757,416)	(305,836)	(40)%	(4.4)%	(5.3)%
Income tax benefit	215,000	—	215,000	100%	0.9%	0.0%
Net loss	$ (848,252)	$ (757,416)	$ (90,836)	(12)%	(3.5)%	(5.3)%

Net Sales. Net sales increased by $9,627,628, or 67%, to $24,046,354 for the year ended December 31, 2018, as compared to $14,418,726 for the year ended December 31, 2017. The increase was primarily due to an increase in sales of our DC power systems to U.S. Tier-1 telecommunications customers. U.S. telecommunications customers accounted for 90% of our total net sales during 2018, as compared to 88% of total net sales in 2017. Our strategy to diversify our customer base resulted in us securing the three largest U.S. Tier-1 telecommunications providers, AT&T, T-Mobile and Verizon Wireless, as our customers with each representing 53%, 22%, and 10%, respectively, of our total net sales in 2018. In 2017, AT&T and Verizon Wireless represented 71%, and 15%, respectively, of our total net sales.

Cost of Sales. Cost of sales increased by $6,957,016, or 72%, to $16,614,574 during 2018, compared to $9,657,558 during 2017. Cost of sales as a percentage of net sales increased from 67% in 2017 to 69% in 2018. In 2018, higher volume in net sales to top Tier-1 customers resulted in volume discounts thereby increasing the cost of sales as percentage of net sales. Due to a rapid ramp up in production required to meet delivery commitments we were unable to capitalize on inherent manufacturing efficiencies resulting from larger volumes. In addition, we added a manufacturing facility equipped with state-of-the-art automated manufacturing equipment. During 2018, we also increased our direct labor force by 45% to meet production demands. In the short term implementing these initiatives negatively affected our labor efficiencies, resulting in increased direct labor cost. During the fourth quarter of 2018, we saw modest gains in labor efficiencies and output as we trained our new direct labor force.

Gross Profit. Our gross profit during 2018 increased by $2,670,612 to $7,431,780, as compared to $4,761,168 during 2017. Gross profit as a percentage of net sales decreased to 31% in 2018, as compared to 33% in 2017. The decrease in gross profit as a percentage of net sales during 2018 was primarily due a combination of sales discounts offered for large volume orders from Tier-1 customers and lower labor efficiencies resulting from a ramp up in production. In addition, we also recognized a modest increase in raw material costs resulting from tariffs placed on aluminum and other commodities purchased from international suppliers. During the second half of 2018, we were able to substantially reduce our engine costs to offset these material cost increases.

Sales and Marketing Expenses. Sales and marketing expenses increased to $2,579,457 during 2018, as compared to $1,348,455 during 2017. The increase in 2018 of $1,231,002 is attributable to a combination of the expansion of our international sales and service infrastructure and an increase in marketing activities for our DC power systems to key telecommunications customers globally. In addition, we made significant investments in expanding our service network to support the installation, service and maintenance of our products. These initiatives resulted in new purchase orders from customers in Sri Lanka, Namibia, Thailand, and Australia.

Research and Development Expenses. During 2018, research and development expenses increased by $573,173 to $1,907,810, as compared to $1,334,637 during 2017. The increase was primarily due to increased investments in several research and development projects, including customized designs for our new Tier-1 telecommunications customer, the development of a 20kW gas generator, the development of a liquid-cooled light weight DC power system for the SMET military program, the development of our next generation BMS, and the development of new hybrid power systems for off-grid international markets. The increase in costs also reflects direct labor costs associated with manufacturing of prototypes, tooling and associated certification cost. During 2019, we plan to continue investing in research and development, as we introduce new products as part of our strategy to diversify our product lines.

General and Administrative Expenses. Our general and administrative expenses increased by $1,163,265, to $4,043,301 during 2018, as compared to $2,880,036 during 2017. The increase was primarily due to the addition of administrative support personnel, the addition of office space in our newest facility, and stock compensation expense related to stock options issued to executives in April 2018. We anticipate our general and administrative costs to remain flat or slightly lower as percentage of net sales during 2019.

Interest Expense. During 2018, our interest expense was $20,170, as compared to $17,822 during 2017, an increase of $2,348. Our interest expense is primarily attributable to interest paid for financing of production equipment. The increase in interest expense in 2018 is primarily attributable to an increase of equipment financing on new manufacturing equipment.

Interest income. During 2018, our interest income was $55,706, as compared to $54,791 during 2017, an increase of $915. Our interest income is primarily derived from liquid interest-bearing bank accounts.

Income Tax Benefit. During 2018, we recognized a benefit from income taxes of $215,000 attributable to refundable federal and state income taxes. In 2017, the Company did not recognize any benefit from income taxes as carry back claims of income taxes were applied.

Net Loss. As a result of the factors identified above, we generated a net loss of $848,252 for 2018, as compared to net loss of $757,416 for 2017, an increase of $90,836. A significant portion of the increase in net loss can be attributed to an increase in sales and marketing expenses and general administrative expenses to expand sales, service, and to better serve our current business developments, and in preparation of new business opportunities in the upcoming year.

Liquidity and Capital Resources

Sources of Liquidity

During the year ended December 31, 2018, we funded our operations primarily from cash on hand, which was substantially generated from the net proceeds of $16,957,334 from our initial public offering in December 2016. These funds were also used to make capital expenditures and to increase inventory to support a higher level of production. As of December 31, 2018, we had working capital of $21,089,802, as compared to working capital of $22,118,048 at December 31, 2017. This $1,028,246 decrease in working capital is primarily attributable to a $8,561,085 decrease in cash and cash equivalents resulting from net cash of $7,847,693 used in operating activities, net cash of $574,990 used in acquiring manufacturing equipment, and net cash of $138,402 used in securing new equipment financing.

On December 31, 2018 and December 31, 2017, our trade receivables totaled $7,726,919 and $3,058,266, respectively. In 2018, $3,457,433 (45%) and $3,220,907 (42%) represented customer account balances of our two largest customers, as compared to $1,789,868 (59%) and $927,019 (30%) represented customer account balances of our two largest customers in 2017.

Our available capital resources on December 31, 2018 consisted primarily of $5,640,078 in cash and cash equivalents. We expect our future capital resources will consist primarily of cash on hand, cash generated by operations, if any, and future debt or equity financings, if any.

Credit Facility

On March 21, 2017, we entered into a Credit Agreement and related documents with Citibank, N.A. for a revolving credit facility for an aggregate amount of up to $1,000,000. The credit facility will expire at such time the parties mutually agree to terminate the credit facility or at the election of the lender. Interest accrues on the principal amount of revolving loans outstanding under the credit facility at a rate equal to the greater of (i) the prime rate of interest as published by Citibank, or (ii) the one-month London Interbank Offered Rate plus 2%. Amounts outstanding from time to time under the credit facility are due and payable monthly in an amount equal to the greater of 2% of the outstanding principal balance or $100, plus accrued interest. Upon the termination of the credit facility, any amounts owed under the credit facility will be payable by us in 48 equal consecutive monthly installments of principal, together with accrued monthly interest and any other charges beginning the first calendar month after the date of cancellation. The credit facility is also subject to an annual finance charge of $2,500, which amount has been waived for the first year. The credit facility is secured by a Certificate of Deposit (restricted cash) account opened by us with Citibank in the amount of $1,000,000.

Our credit facility contains negative covenants prohibiting us from (i) creating or permitting to exist any liens, security interests or other encumbrances on our assets, (ii) engaging in any business activities substantially different than those in which we are presently engaged, (iii) ceasing operations, liquidating, merging, transferring, acquiring or consolidating with any other entity, changing our name, dissolving or transferring or selling collateral out of the ordinary course of business, or (iv) paying dividends on our capital stock (other than dividends payable in stock).

As of December 31, 2018, we had not borrowed any funds under the credit facility and thus had availability of $1,000,000.

Future Capital Requirements

We believe that our current and future available capital resources, revenues from operations and other sources of liquidity will enable us to fund our operating expenses and capital expenditure requirements for at least the next twelve months.

We plan to terminate the current credit facility before it renews in March 2019 and source a revolving credit facility offering a significantly larger aggregate amount better suited to support our growing needs.

Cash Flow

The following table sets forth the significant sources and uses of cash for the periods set forth below:

	Year Ended December 31, 2018	Year Ended December 31, 2017
Net Cash Provided By (Used In):		
Operating Activities	$ (7,847,693)	$ (1,587,130)
Investing Activities	$ (574,990)	$ (342,121)
Financing Activities	$ (138,402)	$ (111,744)
Net decrease in cash	$ (8,561,085)	$ (2,040,995)

Operating Activities

Net cash used in operating activities for 2018 was $7,847,693, as compared to net cash used in operating activities of $1,587,130 for 2017. This increased use of net cash in 2018 was primarily due to a net loss of $848,252, an increase accounts receivable of $4,668,653, and an increase in inventories of $2,984,716 resulting from increased sales of our DC power systems during 2018.

Investing Activities

Net cash used in investing activities for 2018 totaled $574,990, as compared to $342,121 for 2017, an increase of $232,869. The net cash used in investing activities in 2018 was attributable to acquisitions of new manufacturing equipment.

Financing Activities

Net cash used in financing activities totaled $138,402 for 2018, as compared to net cash used in financing activities of $111,744 during 2017, an increase of $26,658. This increase was primarily due to additional monthly payments for the new equipment financing in 2018.

Backlog

As of December 31, 2018, we had a backlog of $15,971,158. The amount of backlog represents revenue that we anticipate recognizing in the future, as evidenced by purchase orders and other purchase commitments received from customers, but on which work has not yet been initiated or with respect to which work is currently in progress. Our backlog consists of 92% in purchases of our DC power systems by telecommunications customers, 4% in purchases from military contractors, and 4% from miscellaneous customers. We believe the majority of the backlog will be shipped within the next six months. However, there can be no assurance that we will be successful in fulfilling such orders and commitments in a timely manner or that we will ultimately recognize as revenue the amounts reflected in our backlog.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.

Item 8. Financial Statements and Supplementary Data.

Reference is made to the financial statements, which begin at page F-1 of this Annual Report on Form 10-K.

Item 9. Changes and Disagreements with Accountants on Accounting and Finance Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and our principal financial officer, evaluated, as of the end of the period covered by this Annual Report on Form 10-K, the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act). Based on that evaluation, our principal executive officer and principal financial officer have concluded that as of December 31, 2018, our disclosure controls and procedures were effective at the reasonable assurance level. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Rule 13a-15(f) under the Exchange Act. Internal control over financial reporting is a process designed under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, 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 internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, (b) our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (c) regarding the prevention or timely detection of the unauthorized acquisition, use or disposition of assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As of December 31, 2018, our management conducted an evaluation of the effectiveness of our internal control over financial reporting using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework (2013). Based on this evaluation, our management concluded that, as of December 31, 2018, our internal control over financial reporting was effective.

This Annual Report on Form 10-K does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit us to provide only management's report in this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Executive Officers and Directors

The following table sets forth the names, ages and positions of our executive officer and directors as of the date of this Annual Report on Form 10-K.

Name	Age	Positions Held
Executive Officers		
Arthur D. Sams	66	Chairman of the Board, President, Chief Executive Officer and Secretary
Rajesh Masina	35	Chief Operating Officer
Luis Zavala	49	Chief Financial Officer
Non-Employee Directors		
Keith Albrecht	66	Director
Matthew Goldman	40	Director
Peter Gross	67	Director

Executive Officers and Employee Director

Arthur D. Sams has served as our President, Chief Executive Officer and Chairman of our board of directors since August 1991 and as our Secretary since October 2016. Under his leadership, we have grown to be a leading brand name in the design and manufacturing of DC power systems for the telecommunications, military, automotive, marine and industrial markets. He specializes in the design of thermodynamics and power generation systems. During his early career, he gained vast industry experience while working as a machinist, engineer, project manager, chief technical officer and consultant for various Fortune 500 companies and the U.S. Department of Defense and the U.S. Department of Energy. Mr. Sams studied at California State Polytechnic University Pomona and the University California at Irvine with a dual major in biology and engineering.

In nominating Mr. Sams, our board of directors considered his diverse and global experience in engineering and manufacturing combined with a successful entrepreneurial career as a key attribute in his selection. The board of directors believes that through his experience in product development and international operations over the past two decades he can provide our company with particular insight into global opportunities and new markets for our current and planned future product lines.

Rajesh Masina has served as our Chief Operating Officer since April 2018 and previously served as our Vice President Operations from August 2009 to April 2018. Prior to joining us, Mr. Masina served as a supply chain consultant to International Game Technology, a large gaming equipment company in Reno, Nevada, from December 2008 to June 2009. Mr. Masina worked as the Assistant Manager for Applied Photonics Worldwide Inc., an engineering services company, from January 2006 to January 2008. From July 2001 to May 2003, Mr. Masina worked as the Business Development Manager in his family business, which provided consulting services to a regional telecommunications provider in India with respect to the acquisition of telecommunications sites. We believe Mr. Masina has a unique combination of technical and business knowledge that is vital to our growth strategy. Mr. Masina's key strengths include business analytics, supply chain management, make vs. buy decision making, production scheduling, client relations, and strategic planning. Mr. Masina is a minority investor in a startup equipment rental company, Smartgen Solutions, Inc., serving the Southern California telecommunications equipment market. Smartgen Solutions, Inc. provides installation and maintenance service for various telecommunications tower companies and also is an authorized service dealer for Polar products. Mr. Masina has a Master's Degree in Electrical Engineering from the University of Nevada Reno and an MBA from the University of Nevada Reno's Supply Chain Program.

Luis Zavala has served as our Chief Financial Officer since April 2018 and previously served as our Vice President Finance from August 2009 to April 2018 and as our Acting Chief Financial Officer from March 2016 to March 2018. Prior to that, Mr. Zavala served as the President of Sky Limited Enterprises, a general contractor, from June 2006 to August 2009. Prior thereto, Mr. Zavala worked as Director of Finance for Legacy Long Distance International, a telecommunications operator service provider company, from March 2001 to May 2006. Mr. Zavala also has over 20 years of experience managing accounting and finance departments in various industries, including banking and telecommunications. Mr. Zavala earned his Bachelor's Degree in Business Administration from the California State University of Northridge and his MBA at Keller Graduate School of Management, Long Beach.

Non-Employee Directors

Keith Albrecht has served as a member of our board of directors since May 2016 and serves as a member of each of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee. Mr. Albrecht has extensive experience as a commercial real estate appraiser for commercial banks and local governments. Mr. Albrecht was an appraiser for commercial buildings for the County of Orange, California, from 1996 to 2007, where he was responsible for the assessment of property values of shopping malls, office buildings, hotels and apartment buildings. Prior thereto, Mr. Albrecht was an appraiser for Security Pacific and Bank of America, from 1985 to 1996. Mr. Albrecht is currently retired and invests in startups and small cap companies. In nominating Mr. Albrecht, our board of directors considered his commercial real estate appraisal experience, which our board of directors believes gives him particular insight into analysis of income statements and balance sheets, debt analysis and audits of large commercial institutions.

Matthew Goldman has served as a member of our board of directors since August 2014 and serves as a member of each of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee. Mr. Goldman is the co-founder of High Tide Capital, a global macro hedge fund manager in the process of launching its first investment product, and has been its Fund Manager since February 2015. Prior thereto, Mr. Goldman founded Polaris Capital, LLC, a private equity and investment business engaged in investing and advisory services for startup and small cap companies in 2010. Mr. Goldman currently serves on the board of directors and/or advisory boards of two privately-held Polaris portfolio companies. Mr. Goldman began his career in 2006 at Blackrock, a financial planning and investment management firm, where he worked in the financial modeling group as a programmer, developing proprietary bond calculation engine. Mr. Goldman holds a Bachelor of Science degree in electrical engineering and computer science, with a minor in psychology, from Massachusetts Institute of Technology. In nominating Mr. Goldman, our board of directors considered his private equity and hedge fund experience, which our board of directors believes gives him particular insight into investments in, and the development of, early stage companies, as well as his high level of financial literacy and expertise regarding mergers, acquisitions, investments and other strategic transactions.

Peter Gross has served as a member of our board of directors since December 2017 and serves as a member of our Audit Committee. Since 2012, Mr. Gross has served as the Vice President Mission Critical Systems at Bloom Energy, a fuel cell power systems company located in Sunnyvale, California. Mr. Gross holds a Master's Degree in Electrical Engineering from Polytechnic Institute of Bucharest and a Master's in Business Administration degree from California State University at Dominguez Hills. Mr. Gross is also a member of the Advisory Board of UCLA's Institute of Environment and Sustainability and a member of Southern Methodist University's Data Center System Engineering Board of Advisors. In nominating Mr. Gross, our board of directors considered his significant engineering experience in the power systems industry, especially for data center and telecommunications applications. Our board of directors believes that Mr. Gross will provide critical leadership as we expand our DC power systems within the data and military markets.

Election of Officers; Family Relationships

Our executive officers are appointed by, and serve at the discretion of, our board of directors. There are no family relationships among any of our directors or executive officers.

Board Composition

Our board of directors currently consists of four members; Arthur D. Sams, Matthew Goldman, Keith Albrecht, and Peter Gross. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal.

Our certificate of incorporation and bylaws provide that the authorized number of directors may be changed only by resolution of the board of directors. Our certificate of incorporation and bylaws also provide that any vacancy on our board of directors, including a vacancy resulting from an expansion of our board of directors, may be filled only by vote of a majority of our directors then in office, although less than a quorum or by a sole remaining director.

We recognize the value of diversity on the board of directors. Currently, however, all members of the board of directors are male. Although our priority in selection of board members is identification of members who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business and understanding of the competitive landscape, we are currently focusing on female candidates in order to meet the requirements of California SB 826. SB 826 requires public companies headquartered in California to maintain minimum female representation on their boards of directors as follows: by the end of 2019, at least one woman on its board, by the end of 2020, public company boards with five members will be required to have at least two female directors, and public company boards with six or more members will be required to have at least three female directors.

Independence of our Board of Directors and Board Committees

Rule 5605 of the NASDAQ Listing Rules requires a majority of a listed company's board of directors to be comprised of "independent directors," as defined in such rule, subject to specified exceptions. In addition, the NASDAQ Listing Rules require that, subject to specified exceptions: each member of a listed company's audit, compensation and nominating committees be independent as defined under the NASDAQ Listing Rules; audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act; and compensation committee members also satisfy an additional independence test for compensation committee members under the NASDAQ Listing Rules.

Our board of directors has evaluated the independence of its members based upon the rules of the NASDAQ Stock Market and the SEC. Applying these standards, our board of directors determined that none of the directors, other than Mr. Sams, have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of those directors is "independent" as that term is defined under Rule 5605(a)(2) of the NASDAQ Listing Rules. Mr. Sams is not considered independent because he is an officer of Polar. As such, a majority of our board of directors is comprised of "independent directors" as defined under the NASDAQ Listing Rules.

Controlled Company Exemption

Mr. Sams, our Chairman, President and Chief Executive Officer, controls a majority of our common stock. As a result, we are a "controlled company" within the meaning of the NASDAQ Listing Rules. Under these rules, a company of which more than 50% of the voting power for the election of directors is held by an individual, a group or another company is a "controlled company" and may elect not to comply with certain NASDAQ corporate governance requirements. We do not currently intend to rely on those exemptions afforded to a "controlled company;" nonetheless, we could potentially seek to rely on certain of those exemptions afforded to a "controlled company" in the future. See "Risk Factors–We are a "controlled company" within the meaning of the NASDAQ Listing Rules. Although we do not currently intend to rely on the exemptions from certain corporate governance requirements afforded to a "controlled company" under the NASDAQ Listing Rules, we could potentially seek to rely on such exemptions in the future."

Board Committees

Our board of directors has established standing committees in connection with the discharge of its responsibilities. These committees include an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The composition and responsibilities of each committee are described below. Members serve on committees until their resignation or until otherwise determined by our board of directors. Each of these committees has adopted a written charter that satisfies the applicable standards of the SEC and the NASDAQ Listing Rules, which we have posted on the investor relations section of our website.

Audit Committee

The members of our Audit Committee are Mr. Goldman, Mr. Albrecht and Mr. Gross. Mr. Albrecht is the chair of the Audit Committee. Messrs. Goldman, Albrecht and Gross satisfy the heightened audit committee independence requirements under the NASDAQ Listing Rules and Rule 10A-3 of the Exchange Act. In addition, our board of directors has determined that Mr. Albrecht qualifies as an audit committee financial expert, as that term is defined under SEC rules, and possesses the requisite financial sophistication, as defined under the NASDAQ Listing Rules. Our Audit Committee assists our board of directors in its oversight of our accounting and financial reporting process and the audits of our financial statements. Under its charter, our Audit Committee is responsible for, among other things:

- overseeing accounting and financial reporting process;
- selecting, retaining and replacing independent auditors and evaluating their qualifications, independence and performance;
- reviewing and approving scope of the annual audit and audit fees;
- discussing with management and independent auditors the results of annual audit and review of quarterly financial statements;
- reviewing adequacy and effectiveness of internal control policies and procedures;
- approving retention of independent auditors to perform any proposed permissible non-audit services;
- overseeing internal audit functions and annually reviewing audit committee charter and committee performance;
- preparing the audit committee report that the SEC requires in our annual proxy statement; and
- reviewing and evaluating the performance of the Audit Committee, including compliance with its charter.

Compensation Committee

The members of our Compensation Committee are Mr. Goldman and Mr. Albrecht. Mr. Goldman is the chair of the Compensation Committee. Each member of our Compensation Committee is independent as defined under the NASDAQ Listing Rules and satisfies NASDAQ's additional independence standards for compensation committee members. Messrs. Goldman and Albrecht are non-employee directors within the meaning of Rule 16b-3 under the Exchange Act and outside directors as defined by Section 162(m) of the Internal Revenue Code. Our Compensation Committee assists our board of directors in the discharge of its responsibilities relating to the compensation of our executive officers. Under its charter, our Compensation Committee is responsible for, among other things:

- developing and maintaining an executive compensation policy and monitor the results of that policy;
- recommending to our board of directors for approval compensation and benefit plans;

- reviewing and approving annually corporate and personal goals and objectives to serve as the basis for the CEO’s compensation, evaluating the CEO’s performance in light of those goals and objectives and determining the CEO’s compensation based on that evaluation;
- determining and approving the annual compensation for other executive officers;
- retaining or obtaining the advice of a compensation consultant, outside legal counsel or other advisor;
- approving any grants of stock options, restricted stock, performance shares, stock appreciation rights, and other equity-based incentives to the extent provided under our equity compensation plans;
- reviewing and making recommendations to our board of directors regarding the compensation of non-employee directors; and
- reviewing and evaluating the performance of the Compensation Committee, including compliance with its charter.

Nominating and Corporate Governance Committee

The members of our Nominating and Corporate Governance Committee are Messrs. Goldman and Albrecht. Mr. Goldman is the chair of the Nominating and Corporate Governance Committee. Each member of our Nominating and Corporate Governance Committee is independent as defined under the NASDAQ Listing Rules. Under its charter, our Nominating and Corporate Governance Committee is responsible for, among other things:

- considering and reviewing periodically the desired composition of our board of directors;
- establishing any qualifications and standards for individual directors;
- identifying, evaluating and nominating candidates for election to our board of directors;
- ensuring that the members of our board of directors satisfy SEC and NASDAQ independence and other requirements relating to membership on our board of directors and committees;
- making recommendations to our board of directors regarding the size of the board of directors, the tenure and classifications of directors, and the composition of the committees of the board of directors;
- considering other corporate governance and related matters as requested by our board of directors; and
- reviewing and evaluating the performance of the Nominating and Corporate Governance Committee, including compliance with its charter.

Compensation Committee Interlocks and Insider Participation

Since July 2016, all officer compensation and bonuses for executive officers has been determined by our Compensation Committee which is comprised of two independent directors.

None of our executive officers serves, or in the past has served, as a member of the board of directors or Compensation Committee, or other committee serving an equivalent function, of any entity that has one or more executive officers serving as members of our board of directors or our Compensation Committee. None of the members of our Compensation Committee is or has been an officer or employee of Polar.

Code of Business Conduct and Ethics

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A copy of the code is available on the investor relations section of our website, which is located at www.polarpower.com. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who beneficially own more than 10% of a registered class of our common stock, to file initial reports of ownership and reports of changes in ownership with the Securities and Exchange Commission. These officers, directors and stockholders are required by Securities and Exchange Commission regulations to furnish us with copies of all reports that they file.

Based solely upon a review of copies of the reports furnished to us during the year ended December 31, 2018 and thereafter, or any written representations received by us from directors, officers and beneficial owners of more than 10% of our common stock ("reporting persons") that no other reports were required, except as set forth below, we believe that all reporting persons filed on a timely basis all reports required by Section 16(a) of the Exchange Act during the year ended December 31, 2018 or prior fiscal years.

Arthur D. Sams did not timely file one Form 4 to report one sales transaction of 1500 shares of our common stock. Mr. Sams has prepared and subsequently filed his required Form 4 to report his transaction.

Item 11. Executive Compensation.

For 2018, compensation of our executive officers was comprised of base salary, non-equity incentives in the form of cash bonuses, and long-term equity incentives. The cash bonus amounts paid to our executive officers during 2018, as set forth below in "– Summary Compensation Table," were approved by our Compensation Committee and were based on a variety of factors regarding our performance during 2018.

For 2019, our Compensation Committee has established an executive compensation plan for our President and Chief Executive Officer, Chief Financial Officer and Chief Operating Officer, whom we refer to collectively as our "executive officers," that is intended to achieve the following objectives:

- attract, retain, motivate and reward our executive officers who are responsible for our success;
- align and strengthen the mutual interests of our executive officers, our company and our stockholders;
- deliver compensation that reflects our financial and operational performance, while at the same time providing the opportunity for our executive officers to earn above-targeted total compensation for exceptional individual and company performance; and
- provide total compensation to each executive officer that is internally equitable, competitive and influenced by company and individual performance.

Compensation Philosophy

Our compensation philosophy and objectives are as follows:

- to align the interests of our executive officers with those of our stockholders and incent our executive officers to attain our short- and long-term financial and business goals;

- to ensure that our executive compensation structure and total compensation is fair, reasonable and competitive in the marketplace so that we can attract and retain highly qualified personnel in key positions; and

- to provide an executive compensation structure and total compensation that are internally equitable based upon each executive officer's role and responsibilities.

Our Compensation Committee seeks to make executive compensation decisions that embody this philosophy and that are directed towards attaining these objectives.

In implementing our compensation philosophy and objectives, our Compensation Committee reviews and analyzes each executive position, including the importance and scope of the role and how the position compares to other Polar Power executive officers. With respect to setting base salaries, our Compensation Committee also compares these positions to similar positions at a number of publicly traded companies listed on the New York Stock Exchange and NASDAQ that are engaged in the power manufacturing and design industry.

We believe that structuring our executive officer compensation program to align the interests of our executive officers with our interests and those of our stockholders, and properly incenting our executive officers to attain our short- and long-term business goals, best serves the interests of our stockholders and creates stockholder value. We believe this occurs through motivating our executive officers to attain our short- and long-term business goals and retaining these executive officers by providing compensation opportunities that are competitive in the marketplace.

Compensation Governance Practices

Listed below are some key examples of our compensation governance practices that are intended to align the interests of our executive officers with our stockholders, incent the attainment of short- and long-term business objectives and retain highly qualified executive officers:

- *Pay for performance.* A substantial portion of our compensation is tied to meeting specified company and individual objectives. We structure total compensation with significant annual cash incentives and a long-term equity component, thereby making a substantial portion of each executive officer's targeted total compensation dependent upon company and individual performance as well as the performance of our stock price.

- *Retention through long-term equity awards*. We employ long-term equity awards through grants of options that vest in the future. These equity awards are designed to aid in our retention of key personnel in important positions and align the interests of our executive officers with those of our stockholders.

- *Long vesting periods*. Our equity awards to our executive officers generally vest in annual installments over a three-year period.

- *Linkage of annual cash incentive compensation plan to our performance*. Our annual cash incentive compensation plan links a majority of targeted and potential payouts to our financial performance.

- *Prohibition on hedging and pledging common stock*. Our executive officers, together with all our employees, are prohibited from engaging in hedging, pledging or similar transactions with respect to our common stock.

- *No perquisites*. Our executive officers are not provided with any perquisites or special benefits other than benefits such as healthcare, vacation and sick days available to other full-time employees of Polar Power.

- *Change in control.* All executive officers' unvested equity grants accelerate upon any change in control of Polar Power.

- *No option re-pricing.* Our 2016 Plan does not permit options or stock appreciation rights to be repriced to a lower exercise price without the approval of our stockholders, except in connection with certain changes to our capital structure.

- *Clawback policy* If we are required as the result of misconduct to restate our financial results due to our material noncompliance with any financial reporting requirements under the federal securities laws, our Chief Executive Officer and Chief Financial Officer may be legally required to reimburse us for any bonus or incentive-based or equity-based compensation they receive.

Role of our Compensation Committee

Our Compensation Committee, with input from our management and one or more independent compensation consultants, establishes, updates and administers our executive compensation program. Our Compensation Committee establishes our compensation philosophy and objectives; oversees the design and administration of our executive compensation program; establishes the elements and mix of total compensation; sets the parameters and specific target metrics of our performance-based incentive compensation plan; and determines the target compensation of our executive officers. Our Compensation Committee has the authority to retain independent counsel, advisors and other experts to assist it in the compensation-setting process and receives adequate funding to engage those service providers.

Role of Management

Our Chief Executive Officer and other executive officers attend Compensation Committee meetings as requested by the Compensation Committee. These individuals are not present during executive sessions of Compensation Committee meetings except at the invitation of the Compensation Committee.

Comparable Company Analysis

Our Compensation Committee sets base salary compensation of our executive officers using compensation market data as a reference to assist it in understanding the competitive pay positioning of total compensation and each element of compensation. For 2018, the target for base salary compensation for our executive officers was based on data collected from our peer group of companies. The peer group of companies selected and used for compensation comparisons is comprised of NASDAQ or NYSE traded power manufacturing and design companies with revenues below $100 million. The overall composition of the peer group reflects companies of similar complexity and size to us. As such, we believe that these peer group of companies are reflective of our market for executive talent. Set forth below is the list of the peer group of companies for 2018:

Company Name	Description
Espey Manufacturing – ESP (NYSE)	Power electronics design and manufacturing company, products include power supplies, power converters, power distribution equipment.
Wireless Telecommunications– WTT (NYSE)	Designs and manufactures radio frequency and microwave-based products for wireless and advance telecommunications industry
Ballard Power Systems – BLDP (NASDAQ)	Developer and manufacturer of fuel cell products for material handling and portable power applications
Plug Power – PLUG (NASDAQ)	Design and manufactures hydrogen fuel cell systems for mobile and stationary power applications
Fuel Cell Energy – FCEL(NASDAQ)	Designs and manufactures power generation systems for mobile and stationary power applications.

The Compensation Committee reviews the appropriateness of the comparison group used for assessing the compensation of our executive officers on an annual basis. The data used from our peer group was collected directly from filings made by the peer group of companies with the SEC.

Elements of Total Compensation

During 2018, our executive officers' compensation program included three major elements:

- Base Salary
- Non-Equity Incentives
- Long-term Equity Incentives

Base Salary

Our Compensation Committee reviews the base salary levels for our executive officers annually and makes such adjustments as it deems appropriate after taking into account the officer's level and scope of responsibility and experience, company and individual performance, competitive market data, and internal pay equity considerations.

Outlined below is the base salary data of the peer group of companies outlined above. For 2018, the Compensation Committee eliminated the highest and lowest base salary data to avoid skewing the results (e.g., in one case, the subject company paid a very low base salary while awarding very high equity awards). The remaining amounts were then tabulated to provide the average base salary for the executive officers in the peer group of companies.

In reviewing the personal performance of each of our executive officers during 2017 and the average base salaries paid by our peer group of companies, the Compensation Committee concluded that the base salaries of our executive officers are significantly below that of our competition. The Compensation Committee determined on April 2, 2018 that, commencing April 1, 2018, the base salary of our President and Chief Executive officer be set at approximately 70% of the average base salaries of the peer group of companies and that the base salaries for our Chief Financial Officer and the Chief Operating Officer be set at approximately 60% of the average base salaries of the peer group of companies, all of which is reflected in the table set forth below:

Executive	Min	Max	Average	2018 Actual	2018 to Avg.
CEO (in $,000)	248	600	386	275	71%
CFO/COO (in $,000)	220	391	290	175	60%

Non-Equity Incentives

Annual non-equity incentive compensation for our executive officers consists of cash awards. Participants are eligible for annual cash incentive compensation based upon our attainment of pre-established financial and business performance goals. The Compensation Committee believes that these goals will best incent our executive officers to attain our short- and long-term financial and other business goals.

For 2018, the Compensation Committee determined that each executive officer could earn up to 100% of such executive officer's base salary based upon the attainment by the Company of the seven financial and other business performance goals set forth below. The minimum and maximum payout for each performance goal (measured as a percentage of base salary) are set forth immediately below. The specific pre-established performance goals are set forth in the table following the table set forth immediately below. Participants were eligible to receive awards at each level of participation (i.e., Minimum Level, Target Level and Maximum Level) to the extent we achieved such level. In the event our performance fell short of a specific performance level, participants were not be eligible to receive an award at that level. For example, since our revenues equaled $24 million in 2018, thereby satisfying the Minimum Level of $22 million but not satisfying the Target Level of $26 million, each executive officer was eligible to receive an award equal to 15% of his base salary rather than receiving an award that was proportional to the higher Target Level award amount.

Company Performance Element	Minimum Level	Target Level	Maximum Level
Revenue	15%	25%	35%
Gross Margin	3%	5%	10%
EBITDA	5%	8%	10%
Warranty	2%	4%	5%
Customer Concentration	15%	18%	20%
International Sales	5%	7%	10%
Inventory Turnover	5%	8%	10%
Total	**50%**	**75%**	**100%**

Company Performance Element	Minimum Level	Target Level	Maximum Level	2017 Actual
Revenue ($ million)	$ 22	$ 26	$ 30	$ 14.4
Gross Margin (% of revenue)	34%	36%	38%	34%
EBITDA (% of revenue)	3%	4%	5%	(5)%
Warranty (% of revenue)	2%	1.8%	1.6%	2.5%
Customer Concentration (% of total sales)	65%	55%	45%	71%
International Sales (% of total sales)	5%	10%	15%	0%
Inventory Turnover (sales/inventory)	2.0	2.2	2.4	1.7

Long-term Equity Incentives

Long-term equity incentive compensation for our executive officers, generally consists of awards of stock options under our 2016 Plan. We believe that these equity awards offer a balanced and competitive equity compensation arrangement for our executive officers.

The Compensation Committee approves equity awards for our executive officers in connection with the annual review of their individual performance and overall compensation. The annual awards are typically made near the end of the first quarter of the following year. Each award is designed primarily as a retention tool, typically requiring the executive to remain with Polar Power for at least one year to receive the benefit of one-third of the award on partial vesting and at least three years to receive the full benefit of the award on full vesting. We believe our equity incentive compensation aligns the interests of our executive officers with those of our stockholders and provides each executive officer with a significant incentive to manage Polar Power from the perspective of an owner with an equity stake in the business by tying significant portions of the recipients' compensation to the market price of our common stock.

In making long-term equity incentive awards, our Compensation Committee sets a target value for the award for each executive officer based on its judgment about the factors used in setting executive officer total compensation described under "Compensation Philosophy" above as well as our Compensation Committee's judgment regarding the desired mix of base salary, annual non-equity incentives and long-term equity incentives. Our Compensation Committee also considers outstanding vested and unvested equity awards to executive officers, the stock ownership levels of executive officers and the potential dilutive effect on our stockholders.

On April 2, 2018, the Compensation Committee approved the grant of incentive stock options to purchase shares of our common stock under our 2016 Plan to Arthur D. Sams, our President, Chief Executive Officer and Secretary, Mr. Masina, our Chief Operating Officer and Mr. Zavala, our Chief Financial Officer, in the following amounts:

- Arthur D. Sams – 150,000 shares

- Rajesh Masina – 90,000 shares
- Luis Zavala – 90,000 shares

The options have a term of 10 years, vest as to one-third of the shares on the first, second and third anniversaries of the date of grant and, with respect to Mr. Masina and Mr. Zavala, have an exercise price per share equal to $4.97, which exercise price equals the closing sale price of one share of our common stock on April 2, 2018. Because Mr. Sams is a greater than 10% stockholder of Polar Power, the exercise price per share of his option is equal to $5.47, which exercise price equals 110% of the closing sale price of one share of our common stock on April 2, 2018.

Summary Compensation Table

The table and discussion below present compensation information for our following executive officers, which we refer to as our "named executive officers":

- Arthur D. Sams, our President, Chief Executive Officer, Secretary and Chairman of the Board;
- Rajesh Masina, our Chief Operating Officer; and
- Luis Zavala, our Chief Financial Officer.

Name and Principal Position	Year	Salary ($)	Option Awards ($)	Bonus ($)	Total ($)
Arthur D. Sams, President,	2018	275,000	421,555	104,500	801,055
Chief Executive Officer and Secretary	2017	200,000	-	90,000	290,000
Rajesh Masina, Chief Operating Officer	2018	175,000	262,881	66,500	504,381
	2017	120,000	-	60,000	180,000
Luis Zavala,	2018	175,000	262,881	66,500	504,381
Chief Financial Officer	2017	120,000	-	60,000	180,000

Employment Agreements

Arthur D. Sams

Our Amended and Restated Executive Employment Agreement with Arthur D. Sams, dated as of July 8, 2016, provides for at-will employment of Mr. Sams as our President and Chief Executive Officer, at an annual base salary of $200,000. On April 2, 2018, we increased Mr. Sams' annual base salary to $275,000 effective as of April 1, 2018. Mr. Sams is eligible to receive an annual discretionary cash bonus to be paid based upon performance criteria set by our Compensation Committee, as more fully described above, and is eligible to participate in all of our employee benefit programs including our 2016 Plan.

Upon termination by Polar without cause or resignation by Mr. Sams for good reason, Mr. Sams is entitled to receive (i) a lump sum cash payment equal to 200% of his then-current base salary, (ii) a lump sum cash payment equal to 200% of the amount of average incentive bonus paid to Mr. Sams during the two calendar years preceding the termination, and (iii) continued health insurance coverage for eighteen months. If Mr. Sams is terminated without cause or resigns for good reason within three months before or twelve months after a change in control, Mr. Sams is entitled to (a) a lump sum cash payment equal to 200% of his then-current base salary, (b) a lump sum cash payment equal to 200% of the amount of average incentive bonus paid to Mr. Sams during the two calendar years preceding the termination, and (c) continued health insurance coverage for eighteen months. If Mr. Sams becomes disabled, Mr. Sams is entitled to receive a lump sum cash payment equal to 100% of his then-current base salary and continued health coverage for twelve months.

The term “for good reason” is defined in the Amended and Restated Executive Employment Agreement as (i) the assignment to Mr. Sams of any duties or responsibilities that result in the material diminution of Mr. Sams’ authority, duties or responsibility, (ii) a material reduction by Polar in Mr. Sams’ annual base salary, except to the extent the base salaries of all other executive officers of Polar are accordingly reduced, (iii) a relocation of Mr. Sams’ place of work, or Polar’s principal executive offices if Mr. Sams’ principal office is at these offices, to a location that increases Mr. Sams’ daily one-way commute by more than fifty miles, or (iv) any material breach by Polar of any material provision of the Amended and Restated Executive Employment Agreement.

The term “cause” is defined in the Amended and Restated Executive Employment Agreement as (i) Mr. Sams’ indictment or conviction of any felony or of any crime involving dishonesty, (ii) Mr. Sams’ participation in any fraud or other act of willful misconduct against Polar, (iii) Mr. Sams’ refusal to comply with any lawful directive of Polar, (iv) Mr. Sams’ material breach of his fiduciary, statutory, contractual, or common law duties to Polar, or (v) conduct by Mr. Sams which, in the good faith and reasonable determination of our board of directors, demonstrates gross unfitness to serve; provided, however, that in the event that any of the foregoing events is reasonably capable of being cured, Polar shall, within twenty days after the discovery of the event, provide written notice to Mr. Sams describing the nature of the event and Mr. Sams shall thereafter have ten business days to cure the event.

A “change in control” of Polar is deemed to have occurred if, in a single transaction or series of related transactions (i) any person (as the term is used in Section 13(d) and 14(d) of the Exchange Act), or persons acting as a group, other than a trustee or fiduciary holding securities under an employee benefit program, is or becomes a “beneficial owner” (as defined in Rule 13-3 under the Exchange Act), directly or indirectly of securities of Polar representing a majority of the combined voting power of Polar, (ii) there is a merger, consolidation or other business combination transaction of Polar with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of Polar outstanding immediately prior to the transaction continue to hold (either by the shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of Polar (or the surviving entity) outstanding immediately after the transaction, or (iii) all or substantially all of our assets are sold.

Rajesh Masina

Our Executive Employment Agreement with Rajesh Masina, dated as of July 8, 2016, provides for at-will employment as our Vice President Operations at an annual base salary is $120,000. On April 2, 2018, we appointed Mr. Masina as our Chief Operating Officer and increased his annual base salary to $175,000 effective as of April 1, 2018. Mr. Masina is eligible to receive an annual discretionary cash bonus to be paid based upon performance criteria set by our Compensation Committee, as more fully described above, and is eligible to participate in all of our employee benefit programs including our 2016 Plan.

Upon termination by Polar without cause, resignation by Mr. Masina for good reason or upon Mr. Masina's disability, Mr. Masina is entitled to receive (i) a lump sum cash payment equal to 50% of his then-current base salary, and (ii) continued health insurance coverage for six months. If Mr. Masina is terminated without cause or resigns for good reason within three months before or twelve months after a change in control, Mr. Masina is entitled to (a) a lump sum cash payment equal to 50% of his then-current base salary, and (b) continued health insurance coverage for six months.

The terms "for good reason," "cause" and "change in control in Mr. Masina's Executive Employment Agreement are identical to the definitions contained in Mr. Sams' Amended and Restated Executive Employment Agreement.

Luis Zavala

Our Executive Employment Agreement with Luis Zavala, dated as of July 8, 2016, provides for at-will employment as our Vice President Finance at an annual base salary of $120,000. On April 2, 2018, we appointed Mr. Zavala as our Chief Financial Officer and increased his annual base salary to $175,000 effective as of April 1, 2018. Mr. Zavala is eligible to receive an annual discretionary cash bonus to be paid based upon performance criteria set by our Compensation Committee, as more fully described above, and is eligible to participate in all of our employee benefit programs including our 2016 Plan. The general terms of Mr. Zavala's Executive Employment Agreement are identical to the terms of Mr. Masina's Executive Employment Agreement.

2016 Omnibus Incentive Plan

On July 8, 2016 our board of directors and stockholders adopted the 2016 Plan. The material terms of the 2016 Plan, as amended, are summarized below.

Summary of the Material Terms of the 2016 Plan

Purpose. We established the 2016 Plan to attract, retain and motivate our employees, officers and directors, to promote the success of our business by linking the personal interests of our employees, officers, consultants, advisors and directors to those of our stockholders and to encourage stock ownership on the part of management. The 2016 Plan is intended to permit the grant of stock options (both incentive stock options, or ISOs and non-qualified stock options, or NQSOs or, collectively, Options), stock appreciation rights, or SARS, restricted stock awards, or Restricted Stock Awards, restricted stock units, or RSUs, incentive awards, or Incentive Awards, other stock-based awards, or Stock Based Awards, dividend equivalents, or Dividend Equivalents, and cash awards, or Cash Awards.

Administration. The 2016 Plan is administered by our Compensation Committee. Our Compensation Committee may act through subcommittees or, with respect to awards granted to individuals who are not subject to the reporting and other provisions of Section 16 of the Exchange Act and who are not members of our board of directors or the board of directors of our Affiliates (as defined by the 2016 Plan), delegate to one or more officers all or part of its duties with respect to such awards. Our Compensation Committee may, at its discretion, accelerate the time at which any award may be exercised, become transferable or nonforfeitable or become earned and settled including without limitation (i) in the event of the participant's death, disability, retirement or involuntary termination of employment or service (including a voluntary termination of employment or service for good reason) or (ii) in connection with a Change in Control (as defined in the 2016 Plan).

Authorized Shares. Under the 2016 Plan, we may issue a maximum aggregate of 1,754,385 shares of common stock, all of which may be issued pursuant to Options, SARs, Restricted Stock Awards, RSUs, Incentive Awards, Stock-Based Awards or Dividend Equivalents. Each share issued in connection with an award will reduce the number of shares available under the 2016 Plan by one, and each share covered under a SAR will reduce the number of shares available under the 2016 Plan by one, even though the share is not actually issued upon settlement of the SAR. Shares relating to awards that are terminated by expiration, forfeiture, cancellation or otherwise without issuance of shares of common stock, settled in cash in lieu of shares, or exchanged prior to the issuance of shares for awards not involving shares, will again be available for issuance under the 2016 Plan. Shares not issued as a result of net settlement of an award, tendered or withheld to pay the exercise price, purchase price or withholding taxes of an award or shares purchased on the open market with the proceeds of the exercise price of an award will not again be available for issuance under the 2016 Plan.

Award Limits. In any calendar year, no participant may be granted awards that relate to more than 350,877shares of our common stock. For these purposes, an Option and its corresponding SAR will be counted as a single award. For any Cash Awards that are intended to constitute annual incentive awards, the maximum amount payable to any one participant with respect to any 12-month period is $5,000,000. Award limits that are expressed as a number of shares are subject to the adjustment provisions of the 2016 Plan as described below.

A non-employee director may not be granted awards during any single calendar year that, taken together with any cash fees paid to such non-employee director during such calendar year in respect of the non-employee director's service as a member of the board during such year, exceeds $750,000 in total value (calculating the value of any such awards based on the grant date fair value of such awards for financial accounting purposes). Notwithstanding the foregoing, the board may make exceptions to the foregoing limit (up to twice such limit) for a non-executive chair of the board or, in extraordinary circumstances, for other individual non-employee directors, as the board may determine, provided that the non-employee director, receiving such awards may not participate in the decision to make such awards.

Written Agreements. All awards granted under the 2016 Plan will be governed by separate written agreements between the participants and us. The written agreements will specify the terms of the particular awards.

Transferability. Generally, an award is non-transferable except by will or the laws of descent and distribution, and during the lifetime of the participant to whom the award is granted, the award may only be exercised by, or payable to, the participant. However, the Compensation Committee may provide that awards, other than ISOs or a Corresponding SAR that is related to an ISO, may be transferred by a participant to immediate family members or trust or other entities on behalf of the Participant and/or family members for charitable donations. Any such transfer will be permitted only if (i) the participant does not receive any consideration for the transfer and (ii) the Compensation Committee expressly approves the transfer. The holder of the transferred award will be bound by the same terms and conditions that governed the award during the period that it was held by the participant, except that such transferee may only transfer the award by will or the laws of descent and distribution.

Maximum Award Period. No award shall be exercisable or become vested or payable more than ten years after the date of grant.

Compliance With Applicable Law. No award shall be exercisable, vested or payable except in compliance with all applicable federal and state laws and regulations (including, without limitation, tax and securities laws), any listing agreement with any stock exchange to which we are a party, and the rules of all domestic stock exchanges on which our shares may be listed.

Payment. The exercise or purchase price of an award, and any taxes required to be withheld with respect to an award, may be paid in cash or, if the written agreement so provides, the Compensation Committee may allow a participant to pay all or part of the exercise or purchase price, and any required withholding taxes, by tendering shares of common stock, through a broker-assisted cashless exercise, by means of “net exercise” procedure, or any other specified medium of payment.

Stockholder Rights. No participant shall have any rights as our stockholder as a result of issuance of an award until the award is settled by the issuance of common stock (other than a Restricted Stock Award or RSUs for which certain stockholder rights may be granted).

Forfeiture Provisions. Awards do not confer upon any individual any right to continue in our employ or service or in the employ or service of our Affiliates. All rights to any award that a participant has will be immediately forfeited if the participant is discharged from employment or service for "Cause" (as defined in the 2016 Plan).

Types of awards

Options. Both ISOs and NQSOs may be granted under the 2016 Plan. Our Compensation Committee will determine the eligible individuals to whom grants of Options will be made, the number of shares subject to each option, the exercise price per share, the time or times at which the option may be exercised, whether any performance or other conditions must be satisfied before a participant may exercise an option, the method of payment by the participant, the method of delivery of shares to a participant, whether the Option is an ISO or a NQSO, and all other terms and conditions of the award. However, the exercise price of an Option may not be less than the fair market value of a share of common stock on the date the Option is granted. No participant may be granted ISOs that are first exercisable in any calendar year for shares of common stock having an aggregate fair value (determined on the date of grant) that exceeds $100,000. With respect to an ISO granted to a participant who is a Ten Percent Shareholder (as defined in the 2016 Plan), the exercise price per share may not be less than 110% of the fair market value of the common stock on the date the Option is granted. At the Compensation Committee's discretion, an Option may be granted with or without a Corresponding SAR (as defined below).

SARs. A SAR entitles the participant to receive, upon exercise, the excess of the fair market value on that date of each share of common stock subject to the exercised portion of the SAR over the fair market value of each such share on the date of the grant of the SAR. A SAR can be granted alone or in tandem with an Option. A SAR granted in tandem with an Option is called a Corresponding SAR and entitles the participant to exercise the Option or the SAR, at which time the other tandem award expires with respect to the number of shares being exercised. The Compensation Committee is authorized to determine the eligible individuals to whom grants of SARs will be made, the number of shares of common stock covered by the grant, the time or times at which a SAR may be exercised and all other terms and conditions of the SAR. However, no participant may be granted Corresponding SARs that are related to ISOs which are first exercisable in any calendar year for shares of common stock having an aggregate fair market value (determined on the date of grant) that exceeds $100,000.

Restricted Stock Awards and RSUs. A Restricted Stock Award is the grant or sale of shares of common stock, which may be subject to forfeiture for a period of time or subject to certain conditions. A RSU entitles the participant to receive, upon vesting, shares of our common stock. We will deliver to the participant one share of common stock for each RSU that becomes earned and payable. With regard to Restricted Stock Awards, the Compensation Committee is authorized to determine the eligible individuals to whom grants will be made, the number of shares subject to such grants, the purchase price, if any, to be paid for each share subject to the award of restricted stock, the time or times at which the restrictions will terminate, and all other terms and conditions of the restricted stock. With regard to RSUs, the Compensation Committee is authorized to determine the eligible individuals to whom grants will be made, the number of shares subject to such grants and the vesting conditions entitling a participant to settlement of the RSUs.

Incentive Awards. An Incentive Award entitles the participant to receive cash or common stock when certain conditions are met. The Compensation Committee has the authority to determine the eligible individuals to whom grants will be made and all other terms and conditions of the Incentive Award.

Stock-Based Awards. Stock-Based Awards may be denominated or payable in, valued by reference to or otherwise based on shares of common stock, including awards convertible or exchangeable into shares of common stock (or the cash value thereof) and common stock purchase rights and awards valued by reference to the fair market value of the common stock. The Compensation Committee has the authority to determine the eligible individuals to whom grants will be made and all other terms and conditions of Stock-Based Awards. However, the purchase price for the common stock under any Stock-Based Award in the nature of a purchase right may not be less than the fair market value of a share of common stock as of the date the award is granted. Cash awards, as an element of or supplement to any other award under the 2016 Plan, may also be granted.

Our Compensation Committee is authorized under the 2016 Plan to grant shares of common stock as a bonus, or to grant shares of common stock or other awards in lieu of any of our obligations or of our affiliates to pay cash or to deliver other property under the 2016 Plan or under any other of our plans or compensatory arrangements or any of our affiliates.

Dividend Equivalents. Our Compensation Committee may also grant Dividend Equivalents under the 2016 Plan. A Dividend Equivalent is an award that entitles the participant to receive cash, shares of common stock, other awards or other property equal in value to all or a specified portion of dividends paid with respect to shares of our common stock. The Compensation Committee is authorized to determine the eligible individuals to whom grants will be made and all other terms and conditions of the Dividend Equivalents. However, no Dividend Equivalents may be awarded with an Option, SAR or Stock-Based Award in the nature of purchase rights.

Cash Awards. Cash Awards will also be authorized under the 2016 Plan. Cash Awards may be granted as an element of or a supplement to any other award under the 2016 Plan or as a stand-alone Cash Award. The Compensation Committee will determine the terms and conditions of any such Cash Awards.

Performance Criteria. Our Compensation Committee has the discretion to establish objectively determinable performance conditions for when awards will become vested, exercisable and payable. These performance conditions may be based on one or any combination of metrics related to our financial, market or business performance. The form of the performance conditions also may be measured on a company, affiliate, division, business unit or geographic basis, individually, alternatively or in any combination, subset or component thereof. Performance goals may reflect absolute entity performance or a relative comparison of entity performance to the performance of a peer group of entities or other external measure of the selected performance conditions. Profits, earnings and revenues used for any performance condition measurement may exclude any extraordinary or nonrecurring items. The performance conditions may, but need not, be based upon an increase or positive result under the aforementioned business criteria and could include, for example and not by way of limitation, maintaining the status quo or limiting the economic losses (measured, in each case, by reference to the specific business criteria). An award that is intended to become exercisable, vested or payable on the achievement of performance conditions means that the award will not become exercisable, vested or payable solely on mere continued employment or service. However, such an award, in addition to performance conditions, may be subject to continued employment or service by the participant. The performance conditions may include any or any combination of the following: (a) revenue, (b) earnings before interest, taxes, depreciation and amortization, or EBITDA, (c) cash earnings (earnings before amortization of intangibles), (d) operating income, (e) pre-or after-tax income, (f) earnings per share, (g) net cash flow, (h) net cash flow per share, (i) net earnings, (j) return on equity, (k) return on total capital, (l) return on sales, (m) return on net assets employed, (n) return on assets or net assets, (o) share price performance, (p) total stockholder return, (q) improvement in or attainment of expense levels, (r) improvement in or attainment of working capital levels, (s) net sales, (t) revenue growth or product revenue growth, (u) operating income (before or after taxes), (v) pre-or after-tax income (before or after allocation of corporate overhead and bonus), (w) earnings per share; (x) return on equity, (y) appreciation in and/or maintenance of the price of the shares of common stock, (z) market share, (aa) gross profits, (bb) comparisons with various stock market indices; (cc) reductions in cost, (dd) cash flow or cash flow per share (before or after dividends), (ee) return on capital (including return on total capital or return on invested capital), (ff) cash flow return on investments; (gg) improvement in or attainment of expense levels or working capital levels, (hh) stockholder equity and/or (ii) other criteria selected by the Compensation Committee.

Our Compensation Committee has the discretion to select one or more periods of time over which the attainment of one or more of the foregoing performance conditions will be measured for the purpose of determining when an award will become vested, exercisable or payable. The Compensation Committee has the authority to adjust goals and awards in the manner set forth in the 2016 Plan.

Change in Control. In the event of a "Change in Control" (as defined in the 2016 Plan) and, with respect to awards that are subject to Section 409A of the Internal Revenue Code of 1986, as amended, or the Code, and such awards, 409A Awards, only to the extent permitted by Section 409A of the Code, our Compensation Committee in its discretion may, on a participant-by-participant basis (a) accelerate the vesting of all unvested and unexercised Options, SARs or Stock-Based Awards in the nature of purchase rights and/or terminate such awards, without any payment therefore, immediately prior to the date of any such transaction after giving the participant at least seven days written notice of such actions; (b) fully vest and/or accelerate settlement of any awards; (c) terminate any outstanding Options, SARs or Stock-Based Awards in the nature of purchase rights after giving the participant notice and a chance to exercise such awards (to the extent then exercisable or exercisable upon the change in control); (d) cancel any portion of an outstanding award that remains unexercised or is subject to restriction or forfeiture in exchange for a cash payment to the participant of the value of the award; or (e) require that the award be assumed by the successor corporation or replaced with interests of an equal value in the successor corporation.

Amendment and Termination. The 2016 Plan will expire 10 years after its effective date, unless terminated earlier by our board of directors. Any award that is outstanding as of the date the 2016 Plan expires will continue in force according to the terms set out in the award agreement. Our board of directors may terminate, amend or modify the 2016 Plan at any time. However, stockholder approval may be required for certain types of amendments under applicable law or regulatory authority. Except as may be provided in an award agreement or the 2016 Plan, no amendment to the 2016 Plan may adversely affect the terms and conditions of any existing award in any material way without the participant's consent.

An amendment will be contingent on approval of our stockholders, to the extent required by law, by the rules of any stock exchange on which our securities are then traded or if the amendment would (i) increase the benefits accruing to participants under the 2016 Plan, including without limitation, any amendment to the 2016 Plan or any agreement to permit a re-pricing or decrease in the exercise price of any outstanding awards, (ii) increase the aggregate number of shares of common stock that may be issued under the 2016 Plan, or (iii) modify the requirements as to eligibility for participation in the 2016 Plan.

Material U.S. federal income tax consequences of awards under the 2016 Plan

The following discussion summarizes the principal federal income tax consequences associated with awards under the 2016 Plan. The discussion is based on laws, regulations, rulings and court decisions currently in effect, all of which are subject to change.

ISOs. A participant will not recognize taxable income on the grant or exercise of an ISO (although the excess of the fair market value of the common stock over the exercise price will be included for alternative minimum tax purposes). A participant will recognize taxable income when he or she disposes of the shares of common stock acquired under the ISO. If the disposition occurs more than two years after the grant of the ISO and more than one year after its exercise, the participant will recognize long-term capital gain (or loss) to the extent the amount realized from the disposition exceeds (or is less than) the participant's tax basis in the shares of common stock. A participant's tax basis in the common stock generally will be the amount the participant paid for the stock. If common stock acquired under an ISO is disposed of before the expiration of the ISO holding period described above, the participant will recognize as ordinary income in the year of the disposition the excess of the fair market value of the common stock on the date of exercise of the ISO over the exercise price. Any additional gain will be treated as long-term or short-term capital gain, depending on the length of time the participant held the shares. Special rules apply if a participant pays the exercise price by delivery of common stock. We will not be entitled to a federal income tax deduction with respect to the grant or exercise of an ISO. However, in the event a participant disposes of common stock acquired under an ISO before the expiration of the ISO holding period described above, we generally will be entitled to a federal income tax deduction equal to the amount of ordinary income the participant recognizes.

NQSOs. A participant will not recognize any taxable income on the grant of a NQSO. On the exercise of a NQSO, the participant will recognize as ordinary income the excess of the fair market value of the common stock acquired over the exercise price. A participant's tax basis in the common stock is the amount paid plus any amounts included in income on exercise. Special rules apply if a participant pays the exercise price by delivery of common stock. The exercise of a NQSO generally will entitle us to claim a federal income tax deduction equal to the amount of ordinary income the participant recognizes.

SARs. A participant will not recognize any taxable income at the time SARs are granted. The participant at the time of receipt will recognize as ordinary income the amount of cash and the fair market value of the common stock that he or she receives. We generally will be entitled to a federal income tax deduction equal to the amount of ordinary income the participant recognizes.

Restricted Stock Awards and RSUs. With regard to Restricted Stock Awards, a participant will recognize ordinary income on account of a Restricted Stock Award on the first day that the shares are either transferable or not subject to a substantial risk of forfeiture. The ordinary income recognized will equal the excess of the fair market value of the common stock on such date over the price, if any, paid for the stock. However, even if the shares under a Restricted Stock Award are both nontransferable and subject to a substantial risk of forfeiture, the participant may make a special "83(b) election" to recognize income, and have his or her tax consequences determined, as of the date the Restricted Stock Award is made. The participant's tax basis in the shares received will equal the income recognized plus the price, if any, paid for the Restricted Stock Award. We generally will be entitled to a federal income tax deduction equal to the ordinary income the participant recognizes. With regard to RSUs, the participant will not recognize any taxable income at the time RSUs are granted. When the terms and conditions to which the RSUs are subject have been satisfied and the RSUs are paid, the participant will recognize as ordinary income the fair market value of the common stock he or she receives. We generally will be entitled to a federal income tax deduction equal to the ordinary income the participant recognizes.

Incentive Awards. A participant will not recognize any taxable income at the time an Incentive Award is granted. When the terms and conditions to which an Incentive Award is subject have been satisfied and the award is paid, the participant will recognize as ordinary income the amount of cash and the fair market value of the common stock he or she receives. We generally will be entitled to a federal income tax deduction equal to the amount of ordinary income the participant recognizes.

Stock-Based Awards. A participant will recognize ordinary income on receipt of cash or shares of common stock paid with respect to a Stock-Based Award. We generally will be entitled to a federal tax deduction equal to the amount of ordinary income the participant recognizes.

Dividend Equivalents. A participant will recognize as ordinary income the amount of cash and the fair market value of any common stock he or she receives on payment of the Dividend Equivalents. To the extent the Dividend Equivalents are paid in the form of other awards, the participant will recognize income as otherwise described herein.

Limitation on Deductions. The deduction for a publicly-held corporation for otherwise deductible compensation to a "covered employee" generally is limited to $1,000,000 per year. An individual is a covered employee if he or she is the chief executive officer or one of the three highest compensated officers for the year (other than the chief executive officer or chief financial officer) or was a covered employee for any preceding year beginning after December 31, 2016.

Other Tax Rules. The 2016 Plan is designed to enable our Compensation Committee to structure awards that will not be subject to Section 409A of the Code, which imposes certain restrictions and requirements on deferred compensation. However, our Compensation Committee may grant awards that are subject to Section 409A of the Code. In that case, the terms of such 409A Award will be (a) subject to the deferral election requirements of Section 409A of the Code; and (b) may only be paid upon a separation from service, a set time, death, disability, a change in control or an unforeseeable emergency, each within the meanings of Section 409A of the Code. Our Compensation Committee shall not have the authority to accelerate or defer a 409A Award other than as permitted by Section 409A of the Code. Moreover, any payment on a separation from service of a "Specified Employee" (as defined in the 2016 Plan) will not be made until six months following the participant's separation from service (or upon the participant's death, if earlier) as required by Section 409A of the Code.

Non-Employee Director Compensation

Our non-employee directors received a quarterly cash retainer of $7,500 during 2018. In addition, we reimburse all non-employee directors for travel and other necessary business expenses incurred in the performance of director services and extend coverage to them under our directors' and officers' indemnity insurance policies.

Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law, or the DGCL, provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent to the corporation. The DGCL provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise. Sections of our certificate of incorporation and our bylaws provide for indemnification by us of our directors, officers, employees and agents to the fullest extent permitted by the DGCL.

Article X of our certification of incorporation eliminates the liability of a director or stockholder for monetary damages for breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under Delaware law. Under Section 102(b)(7) of the DGCL, a director shall not be exempt from liability for monetary damages for any liabilities arising (i) from any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) from acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

We have entered into agreements to indemnify our directors and officers as determined by our board of directors. These agreements provide for indemnification of related expenses including attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our certificate of incorporation and our bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons under the foregoing provisions of our certificate of incorporation or our bylaws, or otherwise, we have been informed that in the opinion of the SEC, this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The following table sets forth information regarding beneficial ownership of our common stock as of April 1, 2019 by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our shares of common stock;
- each of our directors;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

The table is based on information provided to us by our directors, executive officers and principal stockholders. Beneficial ownership is determined in accordance with the rules of the SEC, and generally means that a person has beneficial ownership of a security if he, she or it possesses sole or shared voting or investment power of that security, including stock options and warrants that are exercisable within 60 days of April 1, 2019. To our knowledge, except as indicated by footnote, and subject to community property laws where applicable, the persons named in the table below have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. Shares of common stock underlying derivative securities, if any, that are currently exercisable or exercisable within 60 days after April 1, 2019 are deemed to be outstanding in calculating the percentage ownership of the applicable person or group, but are not deemed to be outstanding as to any other person or group. Percentage of beneficial ownership is based on 10,143,158 shares of common stock outstanding as of the date of the table.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Polar Power, Inc., 249 E. Gardena Boulevard, Gardena, California 90248.

Name and Address of Beneficial Owner(1)	Title of Class	Amount and Nature of Beneficial Ownership	Percent of Class
Arthur D. Sams(2)	Common	5,626,676	54.7%
Rajesh Masina (3)	Common	135,264	1.3%
Luis Zavala (4)	Common	77,369	*
Keith Albrecht (5)	Common	33,334	*
Matthew Goldman (6)	Common	476,667	4.6%
Peter Gross (7)	Common	10,000	*
Smartgen Solutions, Inc. (8)	Common	506,150	4.9%
Polaris Capital, LLC (9)	Common	466,667	4.5%
All directors and executive officers as a group (6 persons)(10)	Common	6,359,310	61.8%

* Less than 1%.

(1) Messrs. Sams, Albrecht, Goldman and Gross are directors of Polar. Messrs. Sams, Masina and Zavala are named executive officers of Polar.

(2) Includes 50,000 shares of common stock issuable upon exercise of options.

(3) Includes 30,000 shares of common stock issuable upon exercise of options.

(4) Includes 30,000 shares of common stock issuable upon exercise of options.

(5) Includes 10,000 shares of common stock issuable upon exercise of options.

(6) Includes 10,000 shares of common stock issuable to Mr. Goldman upon exercise of options and 466,667 shares of common stock held by Polaris Capital, LLC. Mr. Goldman, the managing member and sole beneficial owner of Polaris Capital, LLC, has voting and investment power over such shares of common stock.

(7) Includes 10,000 shares of common stock issuable upon exercise of options.

(8) Mr. Masina owns 40% of the share capital of Smartgen Solutions, Inc. Mr. Masina disclaims beneficial ownership over the shares of common stock of Polar held by Smartgen Solutions, Inc. Jayamadhuri Penumarthi, the President and Secretary of Smartgen Solutions, Inc., has voting and investment power over such shares of common stock. The address of Smartgen Solutions, Inc. is: 10324 Chestnut Ridge Rd., Austin, TX. 78726.

(9) Excludes 10,000 shares of common stock issuable to Mr. Goldman upon exercise of options.

(10) Includes 110,000 shares issuable upon exercise of options.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The following is a summary of transactions since January 1, 2017 to which we have been a participant, in which:

- the amount involved exceeded or will exceed $120,000; and
- any of our directors (and director nominees), executive officers, or holders of more than 5% of our voting securities, or immediate family member or affiliate of such persons, had or will have a direct or indirect material interest, other than compensation and other arrangements that are described under “Executive Compensation” above, or that were approved by our Compensation Committee.

All of the related person transactions described below have been approved by a majority of the independent and disinterested members of our board of directors. We believe that each of the transactions described below were on terms no less favorable to us than terms we would have obtained from unaffiliated third parties.

It is our intention to ensure that all future transactions, if any, between us and related persons are approved by our audit committee or a majority of the independent and disinterested members of our board of directors (except for compensation arrangements, which are approved by our compensation committee), and are on terms no less favorable to us than those that we could obtain from unaffiliated third parties. See “Policies and Procedures for Related Person Transactions” below.

Transactions with Stockholders, Officers and Directors

On March 1, 2014, we entered into a Subcontractor Installer Agreement with Smartgen Solutions, Inc., or Smartgen, a company engaged in business of equipment rental and providing maintenance, repair and installation services to mobile telecommunications towers in California. Rajesh Masina, our Vice President of Operations, owns 40% of the share capital of Smartgen and 30% is owned by his brother. On July 8, 2016, our board of directors reviewed the terms and conditions of, and ratified, the Subcontractor Installer Agreement.

Under the terms of the agreement, Smartgen has been appointed as a non-exclusive, authorized service provider for the installation, repair and service of Polar products in Southern California. The agreement has a term of three years from the date of execution and automatically renews for additional one-year periods if not terminated. Once we have completed this offering and established an audit committee, all transactions involving this agreement will be monitored by our audit committee.

During 2018 and 2017, Smartgen performed $174,290 and $186,392, respectively, in field services for us.

During 2018 and 2017, Smartgen purchased $496 and $1,136, respectively, in goods, parts and services from us.

Employment Agreements

We have entered into amended employment agreement with each of Arthur D. Sams, our President, Chief Executive Officer and Secretary; Rajesh Masina, our Chief Operating Officer; and Luis Zavala, our Chief Financial Officer; providing for, without limitation, certain payments upon termination and change in control. See “Executive and Director Compensation–Employment Agreements” in this Annual Report on Form 10-K for a further discussion of these agreements.

Indemnification of Officers and Directors

Our certificate of incorporation and our bylaws provide that we will indemnify our directors and officers with respect to certain liabilities, expenses and other accounts imposed upon them because of having been a director or officer, except in the case of willful misconduct or a knowing violation of criminal law.

Policies and Procedures for Related Person Transactions

Our board of directors has adopted a written policy with respect to related person transactions. This policy governs the review, approval or ratification of covered related person transactions. The Audit Committee of our board of directors manages this policy.

For purposes of the policy, a “related person transaction” is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we were, are or will be a participant, and the amount involved exceeds the applicable dollar threshold set forth under Item 404 of Regulation S-K and in which any related person had, has or will have a direct or indirect material interest. As defined in Item 404 of Regulation S-K, “related person” generally includes our directors (and director nominees), executive officers, holders of more than 5% of our voting securities, and immediate family members or affiliates of such persons.

The policy generally provides that we may enter into a related person transaction only if:

- the Audit Committee pre-approves such transaction in accordance with the guidelines set forth in the policy,

- the transaction is on terms comparable to those that could be obtained in arm's length dealings with an unrelated third party and the Audit Committee (or the chairperson of the Audit Committee) approves or ratifies such transaction in accordance with the guidelines set forth in the policy,
- the transaction is approved by the disinterested members of the board of directors, or
- the transaction involves compensation approved by the Compensation Committee of the board of directors.

In the event a related person transaction is not pre-approved by the Audit Committee and our management determines to recommend such related person transaction to the Audit Committee, such transaction must be reviewed by the Audit Committee. After review, the Audit Committee will approve or disapprove such transaction. If our Chief Executive Officer, in consultation with our Audit Committee, determines that it is not practicable or desirable for us to wait until the next Audit Committee meeting, the chairperson of the Audit Committee will possess delegated authority to act on behalf of the Audit Committee. The Audit Committee (or the chairperson of the Audit Committee) may approve only those related person transactions that are in, or not inconsistent with, our best interests and the best interests of our stockholders, as the Audit Committee (or the chairperson of the Audit Committee) determines in good faith. All approvals made by chairperson of the Audit Committee will be ratified by the full Audit Committee at the next regularly scheduled meeting or within 120 days from approval by chairperson.

Our Audit Committee has determined that the following transactions, even if the amount exceeds the applicable dollar threshold set forth under Item 404 of Regulation S-K in the aggregate, will be deemed to be pre-approved by the Audit Committee:

- any employment of certain named executive officers that would be publicly disclosed;
- director compensation that would be publicly disclosed;
- transactions with other companies where the related person's only relationship is as a director or owner of less than ten percent of such company (other than a general partnership), if the aggregate amount involved does not exceed the greater of $200,000 or five percent of that company's consolidated gross revenues
- transactions where all stockholders receive proportional benefits;
- transactions involving competitive bids;
- transactions with a related person involving the rendering of services at rates or charges fixed in conformity with law or governmental authority; and
- transactions with a related person involving services as a bank depositary of funds, transfer agent, registrar, trustee under a trust indenture or similar services.

In addition, the Audit Committee will review the policy at least annually and recommend amendments to the policy to the board of directors from time to time.

The policy provides that all related person transactions will be disclosed to the Audit Committee, and all material related person transactions will be disclosed to the board of directors. Additionally, all related person transactions requiring public disclosure will be properly disclosed, as applicable, on our various public filings.

The Audit Committee will review all relevant information available to it about the related person transaction. The policy will provide that the Audit Committee may approve or ratify the related person transaction only if the Audit Committee determines that, under all of the circumstances, the transaction is in, or is not inconsistent with, our best interests and the best interests of our stockholders. The policy will also provide that the Audit Committee may, in its sole discretion, impose such conditions as it deems appropriate on us or the related person in connection with approval of the related person transaction.

Item 14. Principal Accounting Fees and Expenses.

The following table presents fees for professional audit services rendered by Weinberg & Company, P.A. for 2018 and 2017.

	2018	2017
Audit Fees	$ 133,854	$ 174,110
Audit-Related Fees	820	2,634
Tax Fees	43,325	60,226
Total	$ 177,999	$ 236,970

Audit Fees. Consist of amounts billed for professional services rendered for the audit of our annual consolidated financial statements included in this Annual Report on Form 10-K.

Audit-Related Fees. Audit-Related Fees consist of fees billed for professional services that are reasonably related to the performance of the audit or review of our consolidated financial statements but are not reported under "Audit Fees."

Tax Fees. Tax Fees consist of fees for professional services for tax compliance activities, including the preparation of federal and state tax returns and related compliance matters.

All Other Fees. Consists of amounts billed for services other than those noted above.

Our Audit Committee considered all non-audit services provided by Weinberg & Company, P.A. and determined that the provision of such services was compatible with maintaining such firm's audit independence.

Audit Committee Pre-Approval Policy

Our Audit Committee is responsible for approving all audit, audit-related, tax and other services. The Audit Committee pre-approves all auditing services and permitted non-audit services, including all fees and terms to be performed for us by our independent auditor at the beginning of the fiscal year. Non-audit services are reviewed and pre-approved by project at the beginning of the fiscal year. Any additional non-audit services contemplated by us after the beginning of the fiscal year are submitted to the Chairman of our Audit Committee for pre- approval prior to engaging our independent auditor for such services. These interim pre-approvals are reviewed with the full Audit Committee at its next meeting for ratification.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a)(1) Financial Statements

Reference is made to the financial statements listed on and attached following the Index to Financial Statements contained on page F-1 of this report.

(a)(2) Financial Statement Schedules

None.

(a)(3) Exhibits

Reference is made to the exhibits listed on the Index to Exhibits immediately preceding the signature page of this report.

Item 16. Form 10-K Summary.

None.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED ACCOUNTING FIRM

To the Stockholders and the Board of Directors
Polar Power, Inc.
Gardena, California

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Polar Power, Inc. (the "Company") as of December 31, 2018 and 2017, the related statements of operations, stockholders' equity, and cash flows for the years then ended, 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 the years then ended, in conformity with accounting principles generally accepted in the United States of America.

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.

We have served as the Company's auditor since 2016.

/s/ Weinberg & Company, P.A.

Los Angeles, California
April 1, 2019

POLAR POWER, INC.
BALANCE SHEETS

		December 31, 2018		December 31, 2017
ASSETS				
Current assets				
Cash and cash equivalents (including restricted cash of $1,002,683 and $1,001,180 at December 31, 2018 and December 31, 2017, respectively)	$	5,640,078	$	14,201,163
Accounts receivable		7,726,919		3,058,266
Inventories, net		8,471,769		5,487,053
Prepaid expenses		468,666		236,670
Refundable income taxes		715,916		629,316
Total current assets		23,023,348		23,612,468
Other assets:				
Property and equipment, net		2,122,757		824,076
Deposits		94,001		87,496
Total assets	$	25,240,106	$	24,524,040
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Accounts payable	$	1,066,415	$	757,753
Customer deposits		79,184		40,039
Accrued liabilities and other current liabilities		504,559		586,391
Current portion of notes payable		283,388		110,237
Total current liabilities		1,933,546		1,494,420
Notes payable, net of current portion		924,539		126,818
Total liabilities		2,858,085		1,621,238
Commitments and Contingencies				
Stockholders' Equity				
Preferred stock, $0.0001 par value, 5,000,000 shares authorized, no shares issued and outstanding		—		—
Common stock, $0.0001 par value, 50,000,000 shares authorized, 10,143,158 and, 10,143,158, shares issued and outstanding, respectively		1,014		1,014
Additional paid-in capital		19,578,426		19,250,955
Retained earnings		2,802,581		3,650,833
Total stockholders' equity		22,382,021		22,902,802
Total liabilities and stockholders' equity	$	25,240,106	$	24,524,040

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

POLAR POWER, INC.
STATEMENTS OF OPERATIONS

	Years Ended December 31, 2018	Years Ended December 31, 2017
Net sales	$ 24,046,354	$ 14,418,726
Cost of sales	16,614,574	9,657,558
Gross profit	7,431,780	4,761,168
Operating Expenses		
Sales and Marketing	2,579,457	1,348,455
Research and development	1,907,810	1,334,637
General and administrative	4,043,301	2,880,036
Total operating expenses	8,530,568	5,563,128
Loss from operations	(1,098,788)	(801,960)
Other income (expenses)		
Interest expenses	(20,170)	(17,822)
Interest income	55,706	54,791
Other income (expenses)	—	7,575
Total other income (expense)	35,536	44,544
Loss before income taxes	(1,063,252)	(757,416)
Income tax benefit	215,000	—
Net Loss	$ (848,252)	$ (757,416)
Net loss per share, basic and diluted	$ (0.08)	$ (0.07)
Weighted average shares outstanding, basic and diluted	10,143,158	10,143,158

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

POLAR POWER, INC.
STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock, Number	Common Stock, Amount	Additional paid-in capital	Retained Earnings	Total Stockholders' Equity
Balances, December 31, 2016	10,143,158	$ 1,014	$ 19,242,715	$ 4,408,249	$ 23,651,978
Fair value of vested stock options	—	—	8,240	—	8,240
Net loss	—	—	—	(757,416)	(757,416)
Balances, December 31, 2017	10,143,158	1,014	19,250,955	3,650,833	22,902,802
Fair value of vested stock options	—	—	327,471	—	327,471
Net loss	—	—	—	(848,252)	(848,252)
Balances, December 31, 2018	10,143,158	$ 1,014	$ 19,578,426	$ 2,802,581	$ 22,382,021

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

POLAR POWER, INC.
STATEMENTS OF CASH FLOWS

	Years Ended December 31, 2018	2017
Cash flows from operating activities:		
Net loss	$ (848,252)	$ (757,416)
Adjustments to reconcile net loss to net cash used in operating activities:		
Fair value of vested stock options	327,471	8,240
Depreciation and amortization	385,583	255,631
Changes in operating assets and liabilities		
Accounts receivable	(4,668,653)	1,345,680
Inventories	(2,984,716)	(647,462)
Prepaid expenses	(231,996)	(58,101)
Deposits	(6,505)	(20,700)
Refundable income taxes	(86,600)	(629,316)
Deferred tax assets	—	160,637
Accounts payable	308,662	98,398
Income taxes payable	—	(1,227,308)
Customer deposits	39,145	(31,915)
Accrued expenses and other current liabilities	(81,832)	(83,498)
Net cash used in operating activities	(7,847,693)	(1,587,130)
Cash flows from investing activities:		
Acquisition of property and equipment	(574,990)	(342,121)
Net cash used in investing activities	(574,990)	(342,121)
Cash flows from financing activities:		
Repayment of notes	(138,402)	(111,744)
Net cash used in financing activities	(138,402)	(111,744)
Decrease in cash and cash equivalents	(8,561,085)	(2,040,995)
Cash and cash equivalents, beginning of period	14,201,163	16,242,158
Cash and cash equivalents, end of period	$ 5,640,078	$ 14,201,163
Supplemental Cash Flow Information:		
Interest paid	$ 20,170	$ 10,193
Taxes Paid	—	2,424,417
Supplemental non-cash investing and financing activities:		
Assets acquired under notes payable	$ 1,109,275	$ —

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

POLAR POWER, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2018 AND 2017

NOTE 1 – ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company

Polar Power, Inc. was incorporated in 1979 in the State of Washington as Polar Products Inc., and in 1991 reincorporated in the State of California under the name Polar Power, Inc. In December 2016, Polar Power, Inc. reincorporated in the State of Delaware (the "Company"). The Company designs, manufactures and sells direct current, or DC, power systems to supply reliable and low-cost energy to off-grid, bad-grid and backup power applications. The Company's products integrate DC generator and proprietary automated controls, lithium batteries and solar systems to provide low operating cost and lower emissions alternative power needs in telecommunications, defense, automotive and industrial markets.

Estimates

The preparation of financial statements in conformity with GAAP requires management to make 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 revenue and expenses during the reporting period. Material estimates relate to the assumptions made in determining reserves for uncollectible receivables, inventory reserves and returns, impairment analysis of long term assets and deferred tax assets, income tax accruals, accruals for potential liabilities and assumptions made in valuing the fair market value of equity transactions. Actual results may differ from those estimates.

Revenue

During 2017, the Company recognized revenue from the sale of completed production units and parts when there is persuasive evidence that an arrangement exists, delivery of the product has occurred and title has passed, the selling price is both fixed and determinable, and collectability is reasonably assured, all of which occurs upon shipment of our product or delivery of the product to the destination specified by the customer. Once a product is delivered, the Company does not have a post-delivery obligation to provide additional services to the customer.

On January 1, 2018, the Company adopted ASU 2014-09, Revenue from Contracts with Customers (Topic 606), (ASC 606). The underlying principle of ASC 606 is to recognize revenue to depict the transfer of goods or services to customers at the amount expected to be collected. ASC 606 creates a five-step model that requires entities to exercise judgment when considering the terms of contract(s), which includes (1) identifying the contract(s) or agreement(s) with a customer, (2) identifying the Company's performance obligations in the contract or agreement, (3) determining the transaction price, (4) allocating the transaction price to the separate performance obligations, and (5) recognizing revenue as each performance obligation is satisfied.

Under ASC 606, revenue is recognized when performance obligations under the terms of a contract are satisfied, which occurs for the Company upon shipment or delivery of products or services to the Company's customers based on written sales terms, which is also when control is transferred. Revenue is measured as the amount of consideration the Company expects to receive in exchange for transferring the products or services to a customer.

The implementation of ASC 606 had no impact on the Company's financial statements and no cumulative effect adjustment was recognized.

Disaggregation of Net Sales

The following table shows the Company's disaggregated net sales by product type:

	Years End December 31, 2018	2017
DC power systems	$ 22,528,268	$ 13,798,841
Accessories	1,518,086	619,885
Total net sales	**$ 24,046,354**	**$ 14,418,726**

The following table shows the Company's disaggregated net sales by customer type:

	Years End December 31, 2018	2017
Telecom	$ 21,552,950	$ 12,714,164
Government/Military	1,477,121	1,244,267
Marine	177,909	278,254
Other (backup DC power to various industries)	838,374	182,041
Total net sales	**$ 24,046,354**	**$ 14,418,726**

Cash and cash equivalents

The Company considers all highly liquid investments with an original maturity of 90 days or less when purchased to be cash equivalents. The carrying amounts reported in the Balance Sheets for cash and cash equivalents are valued at cost, which approximates their fair value.

Accounts Receivable

Trade receivables are recorded at net realizable value consisting of the carrying amount less an allowance for uncollectible accounts, as needed. The Company uses the allowance method to account for uncollectible trade receivable balances. Under the allowance method, if needed, an estimate of uncollectible customer balances is made based upon specific account balances that are considered uncollectible. Factors used to establish an allowance include the credit quality and payment history of the customer. The Company did not deem it necessary to provide an allowance for doubtful accounts as of as of December 31, 2018 and 2017.

Inventories

Inventories consist of raw materials and finished goods and are stated at the lower of cost or market. Cost is determined principally on a first-in-first-out average cost basis. Inventory quantities on hand are reviewed regularly and write-downs for obsolete inventory is recorded based on an estimated forecast of the inventory item demand in the near future. As of December 31, 2018 and 2017, the Company has established inventory reserves of $330,000 and $330,000, respectively, for obsolete and slow-moving inventory. As of December 31, 2018 and 2017, the components of inventories were as follows:

	Years End December 31, 2018	2017
Raw materials	$ 6,060,448	$ 2,716,392
Finished goods	2,741,321	3,100,661
	8,801,769	5,817,053
Less: Inventory reserve	(330,000)	(330,000)
Total Inventories, net	**$ 8,471,769**	**$ 5,487,053**

Product Warranties

The Company provides limited warranties for parts and labor at no cost to its customers within a specified time period after the sale. The warranty terms are typically from one to five years. Provisions for estimated expenses related to product warranties are made at the time products are sold. These estimates are established using historical information about the nature, frequency and average cost of warranty claim settlements as well as product manufacturing and recovery from suppliers. Management actively studies trends of warranty claims and takes action to improve product quality and minimize warranty costs. The Company estimates the actual historical warranty claims coupled with an analysis of unfulfilled claims to record a liability for specific warranty purposes. The Company's product warranty obligations are included in other accrued liabilities in the balance sheets. As of December 31, 2018 and 2017, the Company had accrued a liability for warranty reserve of $175,000 and $175,000, respectively. Management believes that the warranty accrual is appropriate; however, actual claims incurred could differ from original estimates, requiring adjustments to the accrual. The product warranty accrual is included in current liabilities in the accompanying balance sheets.

The following is a tabular reconciliation of the product warranty liability, excluding the deferred revenue related to the Company's warranty coverage:

	Years End December 31, 2018	2017
Changes in estimates for warranties		
Balance at beginning of the period	$ 175,000	$ 175,000
Payments	(244,454)	(364,163)
Provision for warranties	244,454	364,163
Balance at end of the period	**$ 175,000**	**$ 175,000**

Property and Equipment

Property and equipment are stated at historical cost less accumulated depreciation and amortization. Depreciation and amortization of property and equipment is computed using the straight-line method over the estimated useful life. Maintenance and repairs that do not improve or extend the useful life of the respective assets are expensed. Estimated useful lives of the principal classes of assets are as follows:

	Estimated life
Production tooling, jigs, fixtures	3-5 years
Shop equipment and machinery	5 years
Vehicles	3-5 years
Leasehold improvements	Shorter of the lease term or estimated useful life
Office equipment	5 years
Software	5 years

Management regularly reviews property, equipment and other long-lived assets for possible impairment. This review occurs annually or more frequently if events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. Based upon management's annual assessment, there were no indicators of impairment of the Company's property and equipment and other long-lived assets as of December 31, 2018 or December 31, 2017.

Income Taxes

The Company accounts for income taxes using the asset and liability method whereby deferred tax assets are recognized for deductible temporary differences, and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized before the Company is able to realize their benefits, or that future deductibility is uncertain.

Tax benefits from an uncertain tax position are recognized only if it more likely than not that the tax position will be sustained on examination by the taxing authorities based on 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 greater than 50 percent likelihood of being realized upon ultimate resolution. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

Financial Assets and Liabilities Measured at Fair Value

The Company uses various inputs in determining the fair value of its investments and measures these assets on a recurring basis. Financial assets recorded at fair value in the balance sheets are categorized by the level of objectivity associated with the inputs used to measure their fair value.

Authoritative guidance provided by the Financial Accounting Standards Board ("FASB") defines the following levels directly related to the amount of subjectivity associated with the inputs to fair valuation of these financial assets:

Level 1 Quoted prices in active markets for identical assets or liabilities.

Level 2 Inputs, other than the quoted prices in active markets, that is observable either directly or indirectly.

Level 3 Unobservable inputs based on the Company's assumptions.

The carrying amounts of financial assets and liabilities, such as cash and cash equivalents, accounts receivable and accounts payable, approximate their fair values because of the short maturity of these instruments. The carrying values of the line of credit, notes payable approximate their fair values due to the fact that the interest rates on these obligations are based on prevailing market interest rates.

Segments

The Company operates in one segment for the manufacture and distribution of its products. In accordance with the "Segment Reporting" Topic of the ASC, the Company's chief operating decision maker has been identified as the Chief Executive Officer and President, who reviews operating results to make decisions about allocating resources and assessing performance for the entire Company. Existing guidance, which is based on a management approach to segment reporting, establishes requirements to report selected segment information quarterly and to report annually entity-wide disclosures about products and services, major customers, and the countries in which the entity holds material assets and reports revenue. All material operating units qualify for aggregation under "Segment Reporting" due to their similar customer base and similarities in: economic characteristics; nature of products and services; and procurement, manufacturing and distribution processes. Since the Company operates in one segment, all financial information required by "Segment Reporting" can be found in the accompanying financial statements.

Concentrations

Cash. The Company maintains cash balances at three banks, with the majority held at one bank located in the U.S. At times, the amount on deposit exceeds the federally insured limits. Management believes that the financial institutions that hold the Company's cash are financially sound and, accordingly, minimal credit risk exists.

Cash denominated in Australian Dollar with a U.S. Dollar equivalent of $152,254 and $20,000 at December 31, 2018 and 2017, respectively, was held in an account at a financial institution located in Australia. Cash denominated in Romanian Leu with a U.S. Dollar equivalent of $9,368 and nil at December 31, 2018 and 2017, respectively, was held in an account at a financial institution located in Romania.

Revenues. For the years ended December 31, 2018, 53% and 22% of revenue were generated from the company's two largest customers, which were Tier-1 telecommunications wireless carriers. In 2017, 71% and 15% of revenue were generated from the Company's two largest customers, both Tier-1 telecommunication wireless carriers. In 2018 and 2017, sales to telecommunications customers accounted for 90% and 88% of total revenue, respectively. In 2018 and 2017, sales to international customers accounted for 6% and 2%, of total revenue, respectively.

Accounts receivable. At December 31, 2018, 45% and 42% of the Company's accounts receivable were from the Company's two largest customers. At December 31, 2017, 59% and 30% of the Company's accounts receivable were from the Company's two largest customers.

Accounts payable. On December 31, 2018, accounts payable to the Company's largest vendor represented 71% while the other two largest vendors represented 3% each. On December 31, 2017, accounts payable to the Company's largest vendor represented 75%, while the other two largest vendors represented 3% each.

Net Income (Loss) Per Share

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding for the period. Diluted earnings per share is computed by dividing the net income applicable to common stock holders by the weighted average number of common shares outstanding plus the number of additional common shares that would have been outstanding if all dilutive potential common shares had been issued using the treasury stock method. Potential common shares are excluded from the computation when their effect is antidilutive. The dilutive effect of potentially dilutive securities is reflected in diluted net income per share if the exercise prices were lower than the average fair market value of common shares during the reporting period.

The following potentially dilutive shares were excluded from the shares used to calculate diluted earnings per share as their inclusion would be anti-dilutive:

	December 31,	
	2018	2017
Options	360,000	30,000
Warrants	115,000	115,000
Total	475,000	145,000

Recent Accounting Pronouncements

In February 2016, the FASB issued Accounting Standards Update (ASU) No. 2016-02, *Leases*. ASU 2016-02 requires a lessee to record a right of use asset and a corresponding lease liability on the balance sheet for all leases with terms longer than 12 months. ASU 2016-02 is effective for all interim and annual reporting periods beginning after December 15, 2018. Early adoption is permitted. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The Company is currently evaluating the expected impact that the standard could have on its financial statements and related disclosures.

Other recent accounting pronouncements issued by the FASB, including its Emerging Issues Task Force, the American Institute of Certified Public Accountants, and the SEC did not or are not believed by management to have a material impact on the Company's present or future consolidated financial statements.

NOTE 2 – RESTRICTED CASH

As of December 31, 2018 and 2017, the Company's cash balance included restricted cash of $1,002,683 and $1,001,180, respectively. The restricted cash serves as a collateral to the line of credit (see Note 5) opened with a bank in March 2017.

NOTE 3 – PROPERTY AND EQUIPMENT

Property and equipment consist of the following:

	December 31, 2018	December 31, 2017
Production tooling, jigs, fixtures	$ 70,749	$ 70,749
Shop equipment and machinery	2,808,928	1,451,423
Vehicles	188,597	122,264
Leasehold improvements	276,901	42,173
Office equipment	134,995	114,454
Software	102,690	97,533
Total property and equipment, cost	3,582,860	1,898,596
Less: accumulated depreciation and amortization	(1,460,103)	(1,074,520)
Property and equipment, net	$ 2,122,757	$ 824,076

Depreciation and amortization expense on property and equipment for the years ended December 31, 2018 and 2017 was $385,583 and $255,631, respectively. During the years ended December 31, 2018 and 2017, $349,750 and $224,535, respectively, of the depreciation expense were included in the balance of cost of sales for the years then ended.

NOTE 4 – NOTES PAYABLE

Notes payable consist of the following:

	December 31, 2018	December 31, 2017
Total Equipment Notes Payable	$ 1,207,927	$ 237,055
Current Portion	283,388	110,237
Notes Payable, Long term	$ 924,539	$ 126,818

The Company has entered into several financing agreements for the purchase of equipment. The terms of these financing arrangements are for a term of 2 years to 5 years, with interest rates ranging from 1.9% to 6.9% per annum, secured by the purchased equipment.

As of December 31, 2017, the balance of notes payable was $237,055. During 2018, the Company acquired additional equipment under financing agreements for a total of $1,109,275 with terms of 5 years, interest rate of 5% per annum, and secured by the purchased equipment. During 2018, the Company also made repayments on the notes payable totalling about $138,000. As of December 31, 2018, the balance of notes payable was $1,207,927. The aggregate monthly payments of principal and interest of the outstanding notes payable as of December 31, 2018 is approximately $29,000 are due through 2023.

Annual future principal payments under the outstanding note agreements as of December 31, 2018 are as follows:

Years ending December 31:	
2019	292,800
2020	263,193
2021	228,528
2022	234,092
2023	189,314
Total	$ 1,207,927

NOTE 5 – LINE OF CREDIT

On March 21, 2017, the Company entered into a Credit Agreement and related documents with Citibank, N.A. for a revolving credit facility for an aggregate amount of up to $1,000,000. The credit facility will expire at such time the parties mutually agree to terminate the credit facility or at the election of the lender. Interest accrues on the principal amount of revolving loans outstanding under the credit facility at a rate equal to the greater of (i) the prime rate of interest as published by Citibank, or (ii) the one-month London Interbank Offered Rate plus 2%. Amounts outstanding from time to time under the credit facility are due and payable monthly in an amount equal to the greater of 2% of the outstanding principal balance or $100, plus accrued interest. Upon the termination of the credit facility, any amounts owed under the credit facility will be payable by the Company in 48 equal consecutive monthly installments of principal, together with accrued monthly interest and any other charges beginning the first calendar month after the date of cancellation. The credit facility is also subject to an annual finance charge of $2,500, which amount has been waived for the first year. The credit facility is secured by a Certificate of Deposit (restricted cash) account opened by the Company with Citibank in the amount of $1,000,000 (see Note 2).

The Company's credit facility contains negative covenants prohibiting it from (i) creating or permitting to exist any liens, security interests or other encumbrances on the Company's assets, (ii) engaging in any business activities substantially different than those in which the Company is presently engaged, (iii) ceasing operations, liquidating, merging, transferring, acquiring or consolidating with any other entity, changing its name, dissolving or transferring or selling collateral out of the ordinary course of business, or (iv) paying dividends on the Company's capital stock (other than dividends payable in stock).

As of December 31, 2018, the Company had not borrowed any funds under the credit facility and had borrowing availability of $1,000,000.

NOTE 6 – STOCKHOLDERS' EQUITY

Common Stock

The Company is authorized to issue up to a total of 50,000,000 shares of common stock, $0.0001 par value per share. Holders of common stock are entitled to one vote for each share held on all matters submitted to a vote of shareholders. Holders of common stock do not have cumulative voting rights. Further, holders of common stock have no preemptive, conversion, redemption or subscription rights and there are no sinking fund provisions applicable to the Company's common stock. Upon the liquidation, dissolution or winding-up of the Company, holders of common stock are entitled to share ratably in all assets remaining after payment of all liabilities and the liquidation preferences of any outstanding shares of preferred stock. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive dividends, if any, as may be declared from time to time by the Company's board of directors, out of the Company's assets which are legally available.

Preferred Stock

The Company's board of directors is authorized to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges, qualifications, limitations and restrictions thereof, including dividend rights and rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or the designation of such series, without any vote or action by the Company's stockholders. Any preferred stock to be issued could rank prior to the Company's common stock with respect to dividend rights and rights on liquidation. The Company's board of directors, without stockholder approval, may issue preferred stock with voting and conversion rights which could adversely affect the voting power of holders of common stock and discourage, delay or prevent a change in control of the Company.

NOTE 7 – STOCK OPTIONS

The following table summarizes stock option activity:

	Number of Options	Weighted Average Exercise Price
Outstanding, December 31, 2016	-	$
Granted	30,000	4.84
Exercised	—	—
Outstanding, December 31, 2017	30,000	$ 4.84
Granted	330,000	5.32
Exercised	—	—
Outstanding, December 31, 2018	360,000	$ 5.28
Exercisable, December 31, 2018	—	—

Effective July 8, 2016 the Company's board of directors approved the Polar Power 2016 Omnibus Incentive Plan (the "2016 Plan"), authorizing the issuance of up to 1,754,385 shares of common stock as incentives to employees and consultants to the Company with awards limited to a maximum of 350,877 shares to any one participant in any calendar year.

In December 2017, the Company granted to members of its board of directors, options to purchase an aggregate of 30,000 shares of the Company's common stock that expire ten years from the date of grant, and vesting 1 year from issuance date. The fair value of each option award was estimated on the date of grant using the Black-Scholes option pricing model based on the following assumptions: (i) volatility rate of 57.71%, (ii) discount rate of 2.42%, (iii) zero expected dividend yield, and (iv) expected life of 6 years, which is the average of the term of the options and their vesting periods. The total fair value of the option grants at their grant date was approximately $98,000.

In April 2018, the Company granted options to purchase an aggregate of 330,000 shares of the Company's common stock to three of its executive officers, with exercise prices ranging from $5.09 to $5.60 per share, that expire ten years from the date of grant, and with one-third of the total options granted vesting on each of the first, second, and third anniversaries of the grant date. The fair value of each of the option award was estimated on the date of grant using the Black-Scholes option pricing model based on the following assumptions: (i) volatility rate of 57.71%, (ii) discount rate of 2.42%, (iii) zero expected dividend yield, and (iv) expected life of 6.5 years, which is the average of the term of the options and their vesting periods. The total fair value of these options at their grant dates was approximately $948,000.

During the year ended December 31, 2018, the Company expensed total stock-based compensation related to the vested options of $327,471, and the remaining unamortized cost of the outstanding options at December 31, 2018 was approximately $710,000. This cost will be amortized on a straight-line basis over the weighted average remaining vesting period of 3 years.

There was no intrinsic value of the outstanding and exercisable options at December 31, 2018.

NOTE 8 – WARRANTS

The following table summarizes warrant activity:

	Number of Warrants	Weighted Average Exercise Price
Outstanding, December 31, 2016	115,000	$ 8.75
Issued	—	—
Exercised	—	—
Outstanding, December 31, 2017	115,000	$ 8.75
Issued	—	—
Exercised	—	—
Outstanding and exercisable, December 31, 2018	115,000	$ 8.75

In connection with the Company's underwritten initial public offering in December 2016, the Company issued warrants to the underwriters to purchase up to 115,000 shares of its common stock with an exercise price of $8.75 per share, which warrants expire five years from the date of issuance.

There was no intrinsic value of the outstanding and exercisable warrants at December 31, 2018.

NOTE 9 – DISTRIBUTION AGREEMENT WITH A RELATED ENTITY

On March 1, 2014, the Company entered into a subcontractor installer agreement with Smartgen, a related entity that is engaged in business of equipment rental and provider of maintenance, repair and installation services to mobile telecommunications towers in California. Under the terms of the agreement, Smartgen has been appointed as a non-exclusive, authorized service provider for the installation, repair and service of the Company's products in Southern California. The agreement has a term of three years from the date of execution and automatically renews for additional one-year periods if not terminated.

During the years ended December 31, 2018 and 2017, Smartgen performed $174,290 and $186,392, respectfully, in field services.

NOTE 10 – INCOME TAXES

During 2018, the Company had no current tax liabilities, however, the Company was able to recover $215,000 of taxes previously paid from utilization of its net operating loss carry forwards. The Company has no provision for income taxes during the year ended December 31, 2017.

	Years Ended December 31,	
	2018	2017
Current		
Federal	$ —	$ —
State	—	—
Deferred		
Federal	195,000	—
State	20,000	—
Income tax benefit	$ 215,000	$ —

The reconciliation of the effective income tax rate to the federal statutory rate is as follows:

	Years Ended December 31,	
	2018	2017
Federal income tax rate	(21)%	(34)%
State tax, net of federal benefit	(8)%	(8)%
Change in accrued liabilities	2%	9%
Change in valuation allowances	27%	33%
Effective income tax rate	—%	—%

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial statement purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities at December 31, 2018 and 2017 are as follows:

	December 31, 2018	December 31, 2017
Deferred tax assets:		
Inventory reserves	$ 210,283	$ 221,053
Accrued liabilities	120,251	138,160
Net operating loss carryover	326,515	—
Deferred tax liability:		
Accumulated depreciation	(86,562)	(145,935)
Net deferred tax assets	570,487	213,278
Valuation allowance	(570,487)	(213,278)
Net deferred tax assets, net of valuation allowances	$ —	$ —

Effective January 1, 2007, the Company adopted FASB guidelines that address the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under this guidance, the Company may recognize the tax benefit from an uncertain tax position 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 should be measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. This guidance also provides guidance on derecognition, classification, interest and penalties on income taxes, accounting in interim periods and requires increased disclosures. At the date of adoption, and as of December 31, 2018 and 2017, the Company did not have a liability for unrecognized tax benefits, and no adjustment was required at adoption.

The Company files income tax returns in the U.S. federal jurisdiction and various states. The Company is subject to U.S. federal or state income tax examinations by tax authorities for tax years after 2010.

The Company's policy is to record interest and penalties on uncertain tax provisions as income tax expense. As of December 31, 2018 and 2017, the Company had no accrued interest or penalties related to uncertain tax positions. Additionally, tax years 2010 through 2018 remain open to examination by the major taxing jurisdictions to which the Company is subject.

Authoritative guidance issued by the ASC Topic 740 – Income Taxes requires that a valuation allowance be established when it is more likely than not that all or a portion of deferred tax assets will not be realized. The Company considers all evidence available when determining whether deferred tax assets are more likely-than-not to be realized, including projected future taxable income, scheduled reversals of deferred tax liabilities, prudent tax planning strategies, and recent financial operations. The evaluation of this evidence requires significant judgement about the forecast of future taxable income is consistent with the plans and estimates we are using to manage the underlying business. Based on their evaluation, the Company determined that the net deferred tax assets of approximately $570,000 during 2018, do not meet the requirements to be realized, and as such, the Company has provided a full valuation allowance against them.

As of December 31, 2018 and 2017, the Company had refundable (federal and state) income taxes in the accompanying balance sheet, which consisted of refunds of income taxes paid during the first half of 2017, and carry back claims of income taxes in two consecutive prior years. At December 31, 2017, balance of the Company's refundable income taxes was $629,316. During 2018, the Company received the $128,400 refundable state income taxes. The Company also calculated additional refundable income taxes based on the results of its operations during the year ended December 31, 2018 of $215,000. As such, balance of refundable income taxes at December 31, 2018 was $715,916. Subsequently in March 2019, the Company received the refundable federal income taxes for 2017 of approximately $500,000.

NOTE 11 – COMMITMENT AND CONTINGENCIES

Leases

The Company entered into a non-cancellable operating lease of a manufacturing facility located in Gardena, CA, which commenced on January 1, 2015 with initial term of 4 years. The base rent of the facility at the commencement date was $29,648 per month, which annually increased by 3%. In March 2019, the lease was amended to extend the lease term for another 4 years through February 2023 ("extension agreement"). The base rent of the extension agreement lease will be $31,652 in the first year, $34,457 the second, $35,835 the third, and 37,261 in the fourth year. The extension agreement is a "Net Lease" requiring the Company to pay real property taxes associated to this facility.

On July 20, 2017, the Company entered into a three-month lease agreement of a warehouse facility located in Gardena, CA with a monthly rent of $10,200. The agreement renews on a month-to-month basis and may be terminated upon providing 30-day written notice. Commencing in October 2017, the Company is under a month-to-month lease term under this lease agreement.

The Company entered into a non-cancellable operating lease of a manufacturing facility located in 400 W. Gardena Blvd., Gardena, CA commencing July 1, 2018 and ending on September 30, 2023. Possession of the property was delayed to August 21, 2018 due to the landlord requiring more time to vacate the property. The base rent of the facility at the commencement date is $22,838 per month, which annually increases by 3%.

Rent expense for the years ended December 31, 2018 and 2017 was $388,766 and $377,443, respectively.

The future minimum annual rental payments required under the non-cancelable operating leases described above as of January 1, 2019 are as follows:

Years ending December 31,	
2019	$ 657,314
2020	699,291
2021	724,405
2022	750,354
2023	254,457
Total	$ 3,085,821

Legal Proceedings

From time to time, the Company may be involved in general commercial disputes arising in the ordinary course of our business. The Company is not currently involved in legal proceedings that could reasonably be expected to have material adverse effect on its business, prospects, financial condition or results of operations.

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 on this 1st day of April, 2019.

POLAR POWER, INC.

By: /s/ Arthur D. Sams
Arthur D. Sams,
President, Chief Executive Officer and Secretary

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

Signature	Title	Date
/s/ Arthur D. Sams Arthur D. Sams	Chief Executive Officer, President, Secretary and Chairman of the Board of Directors (principal executive officer)	April 1, 2019
/s/ Luis Zavala Luis Zavala	Chief Financial Officer (principal financial and accounting officer)	April 1, 2019
/s/ Matthew Goldman Matthew Goldman	Director	April 1, 2019
/s/ Keith Albrecht Keith Albrecht	Director	April 1, 2019
/s/ Peter Gross Peter Gross	Director	April 1, 2019

INDEX TO EXHIBITS

Exhibit Number	Description*	Where Located				Filed Herewith
		Form	File Number	Exhibit Number	Filing Date	
3.1	Certificate of Incorporation	10-K	001-37960	3.1	3/10/17	
3.2	Bylaws	10-K	001-37960	3.2	3/10/17	
10.1	Polar Power, Inc. 2016 Omnibus Incentive Plan and forms of agreements thereunder#	S-1	333-213572	10.1	9/9/2016	
10.2	Amended and Restated Executive Employment Agreement dated July 8, 2016 between the Registrant and Arthur D. Sams#	S-1	333-213572	10.2	9/9/2016	
10.3	Amended and Restated Executive Employment Agreement dated July 8, 2016 between the Registrant and Rajesh Masina#	S-1	333-213572	10.3	9/9/2016	
10.4	Amended and Restated Executive Employment Agreement dated July 8, 2016 between the Registrant and Luis Zavala#	S-1	333-213572	10.4	9/9/2016	
10.5	Form of Indemnification Agreement between the Registrant and each of its Executive Officers and Directors#	S-1	333-213572	10.5	11/18/2016	
10. 6	Loan and Security Agreement dated as of August 14, 2015 between the Registrant and Gibraltar Business Capital	S-1	333-213572	10.6	9/9/2016	
10. 7	Memorandum of Understanding dated as of December 30, 2014 between the Registrant and Richard J. Ulinski	S-1	333-213572	10.7	9/9/2016	
10.8	Lease Agreement dated November 7, 2014 between the Registrant and Two Bros L.P.	S-1	333-213572	10.8	9/9/2016	
10.9	Form of Representative's Warrant	10-K	001-37960	10.9	3/10/17	
10.10	Amendment No. 1 to Polar Power, Inc. 2016 Omnibus Incentive Plan					X
14.1	Code of Ethics	10-K	001-37960	14.1	3/10/17	
21.1	Subsidiaries of the Registrant	10-K	001-37960	21.1	3/10/17	
23.1	Consent of Independent Registered Public Accounting Firm					X

Exhibit Number	Description*	Where Located Form	File Number	Exhibit Number	Filing Date	Filed Herewith
31.1	Certification Required by Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification Required by Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X

(#) A contract, compensatory plan or arrangement to which a director or executive officer is a party or in which one or more directors or executive officers are eligible to participate.

(*) Certain of the agreements filed as exhibits contain representations and warranties made by the parties thereto. The assertions embodied in such representations and warranties are not necessarily assertions of fact, but a mechanism for the parties to allocate risk. Accordingly, investors should not rely on the representations and warranties as characterizations of the actual state of facts or for any other purpose at the time they were made or otherwise.

Exhibit 10.10

AMENDMENT NO. 1 TO POLAR POWER, INC.
2016 OMNIBUS INCENTIVE PLAN

This Amendment No. 1 to Polar Power, Inc. 2016 Omnibus Incentive Plan (the "**Plan**") is made by Polar Power, Inc., a Delaware corporation (the "**Company**"), effective as of January 1, 2018.

WHEREAS, the board of directors (the "**Board**") of the Company and the compensation committee of the Board have deemed it to be in the best interests of the Company to amend the Plan to reflect certain changes to Section 162(m) of the Internal Revenue Code of 1986, as amended;

WHEREAS, Section 21.01 of the Plan permits the Board to amend the Plan at any time except in those instances, among other things, in which doing so would adversely impact the rights of a Participant (as defined therein) with respect to outstanding awards without the Participant's consent; and

WHEREAS, the Board desires to amend the Plan as set forth below.

NOW, THEREFORE, the Plan is hereby amended, effective as of the date set forth above, as follows:

1. Amendment to Section 1.09. Section 1.09 of the Plan is hereby amended and restated to read in its entirety as follows:

"**1.09 Code**

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

2. Amendment to Section 1.10. Section 1.10 of the Plan is hereby amended and restated to read in its entirety as follows:

"**1.10 Committee**

"Committee" means the Compensation Committee of the Board or such other Committee as the Board may appoint from time to time to administer the Plan, or the Board itself if no Compensation Committee or other appointed Committee exists. If such Compensation Committee or other Committee exists, if and to the extent deemed necessary by the Board, such Committee shall consist of two or more directors, all of whom are (i) "non-employee directors" within the meaning of Rule 16b-3 under the Exchange Act and (ii) independent directors under the rules of the principal stock exchange on which the Company's securities are then traded."

3. Amendment to Section 1.11. Section 1.11 of the Plan is hereby amended and restated to read in its entirety as follows:

"**1.11 Common Stock**

"Common Stock" means the common stock of the Company, $0.0001 par value per share, or such other class or kind of shares or other securities resulting from the application of Article XVI, as applicable."

4. Amendment to Section 1.12. Section 1.12 of the Plan is hereby amended and restated to read in its entirety as follows:

"**1.12 Company**

"Company" means Polar Power, Inc., a Delaware corporation, and any successor thereto."

5. Amendment to Section 1.23. Section 1.23 of the Plan is hereby amended and restated to read in its entirety as follows:

"**1.23 [Intentionally Omitted]**"

6. Amendment to Section 1.31. Section 1.31 of the Plan is hereby amended and restated to read in its entirety as follows:

"**1.31 Restricted Stock Unit**

"Restricted Stock Unit" means an Award granted to a Participant under Article X, stated with respect to a specified number of shares of Common Stock, that entitles the Participant to receive one share of Common Stock (or, as otherwise determined by the Committee and set forth in the applicable Agreement, the equivalent Fair Market Value of one share of Common Stock in cash) with respect to each Restricted Stock Unit that becomes payable under the terms and conditions of the Plan and the applicable Agreement."

7. Amendment to Section 1.33. Section 1.33 of the Plan is hereby amended and restated to read in its entirety as follows:

"**1.33 SAR**

"SAR" means a stock appreciation right granted to a Participant under Article VIII that in accordance with the terms of an Agreement entitles the holder to receive cash or a number of shares of Common Stock, as determined by the Committee and set forth in the applicable Agreement, based on the increase in the Fair Market Value of the shares underlying the stock appreciation right during a stated period specified by the Committee over the Initial Value. References to "SARs" include both Corresponding SARs and SARs granted independently of Options, unless the context requires otherwise."

8. Amendment to Section 4.02. Section 4.02 of the Plan is hereby amended and restated to read in its entirety as follows:

"**4.02 Delegation of Authority**

The Committee may act through subcommittees, in which case the subcommittee shall be subject to and have the authority hereunder applicable to the Committee, and the acts of the subcommittee shall be deemed to be the acts of the Committee hereunder. Additionally, to the extent applicable law so permits, the Committee, in its discretion, may delegate to one or more officers of the Company all or part of the Committee's authority and duties with respect to Awards to be granted to individuals who are not subject to the reporting and other provisions of Section 16 of the Exchange Act and who are not members of the Board or the Board of Directors of an Affiliate. The Committee may revoke or amend the terms of any delegation at any time but such action shall not invalidate any prior actions of the Committee's delegate or delegates that were consistent with the terms of the Plan and the Committee's prior delegation. Notwithstanding the foregoing, however, if and to the extent deemed necessary by the Board, all Awards granted to any individual who is subject to the reporting and other provisions of Section 16 of the Exchange Act shall be made by a Committee comprised solely of two or more directors, all of whom are "non-employee directors" within the meaning of Rule 16b-3 under the Exchange Act, to the extent necessary to exempt the Award from the short-swing profit rules of Section 16(b) of the Exchange Act. However, (a) any Awards granted to any individual who is subject to the reporting and other provisions of Section 16 of the Exchange Act shall not fail to be valid if made other than by a committee comprised solely of two or more directors, all of whom are "non-employee directors" within the meaning of Rule 16b-3 under the Exchange Act. An Award granted to an individual who is a member of the Committee may be approved by the Committee in accordance with the applicable Committee charters then in effect and other applicable law except that the Committee member must abstain from any action with respect to the Committee member's own Awards."

9. Amendment to Section 6.02. Section 6.02 of the Plan is hereby amended and restated to read in its entirety as follows:

"**6.02 Aggregate Limit**

The maximum aggregate number (the "**Maximum Aggregate Number**") of shares of Common Stock which may be subject to Awards under this Plan is 1,754,385 shares of Common Stock.

The Maximum Aggregate Number of shares of Common Stock that may be subject to Awards under the Plan may be subject to Options. To the extent shares of Common Stock not issued under an Option must be counted against this limit as a condition to satisfying the rules applicable to incentive stock options, such rule shall apply to the limit on Options granted under the Plan.

The Maximum Aggregate Number of shares of Common Stock that may be subject to Awards under the Plan and the maximum number of shares of Common Stock that may be subject to Options under the Plan shall, in each instance, be subject to adjustment as provided in Article XVI, provided, however, that (i) substitute Awards granted under Section 16.03 shall not reduce the Maximum Aggregate Number of shares of Common Stock that may be subject to Awards under the Plan (to the extent permitted by applicable stock exchange rules) and (ii) available shares of stock under a stockholder-approved plan of an acquired company (as appropriately adjusted to reflect the transaction) also may be used for Awards under the Plan and shall not reduce the Maximum Aggregate Number of shares of Common Stock that may be subject to Awards under the Plan (subject to applicable stock exchange requirements)."

10. Amendment to Section 6.03. Section 6.03 of the Plan is hereby amended and restated to read in its entirety as follows:

"**6.03 Individual Limit**

The maximum number of shares of Common Stock that may be covered by Options, SARs or Other Stock-Based Awards in the nature of purchase rights granted to any one Participant during any calendar year shall be 350,877 shares of Common Stock; provided, however, that (i) if the Options, SARs or Other Stock-Based Awards in the nature of purchase rights are denominated in shares of Common Stock but an equivalent amount of cash is delivered in lieu of delivery of shares of Common Stock, the foregoing limit shall be applied based on the methodology used by the Committee to convert the number of shares of Common Stock into cash and (ii) any adjustment in the number of shares of Common Stock or amount of cash delivered to reflect actual or deemed investment experience shall be disregarded. For purposes of the foregoing limit, an Option and its corresponding SAR shall be treated as a single Award. For any Cash Awards that are intended to constitute annual incentive awards, the maximum amount that may be earned and become payable to any one Participant with respect to any twelve (12)-month period shall equal $5,000,000; provided, however, that (i) if the Cash Award is denominated in cash but an equivalent amount of shares of Common Stock are delivered in lieu of delivery of cash, the foregoing limit shall be applied to the cash based on the methodology used by the Committee to convert the cash into shares of Common Stock and (ii) any adjustment in the number of shares of Common Stock or the amount of cash delivered to reflect actual or deemed investment experience shall be disregarded. The maximum number of shares that may be granted in any consecutive rolling thirty-six (36)-month period to any Participant shall be subject to adjustment as provided in Article XVI. In addition to the limits set forth herein, (i) the maximum number of shares of Common Stock that may be covered by Awards stated with reference to a specific number of shares of Common Stock and granted to any one Participant in connection with the Participant's service as a member of the Board during any twelve (12)-month period shall be 350,877 shares of Common Stock and (ii) for Awards stated with reference to a specific dollar amount, the maximum amount that may be earned and become payable to any one Participant in connection with the Participant's service as a member of the Board for any consecutive twelve (12)-month period shall equal $2,000,000 (prorated up or down for periods that are greater or lesser than twelve (12) months), in each case applied as described above for the other individual limitations.

A Non-Employee Director may not be granted Awards during any single calendar year that, taken together with any cash fees paid to such Non-Employee Director during such calendar year in respect of the Non-Employee Director's service as a member of the Board during such year, exceeds $500,000 in total value (calculating the value of any such Awards based on the grant date fair value of such Awards for financial accounting purposes). Notwithstanding the foregoing, the Board may make exceptions to the foregoing limit (up to twice such limit) for a non-executive chair of the Board or, in extraordinary circumstances, for other individual Non-Employee Directors, as the Board may determine, provided that the Non-Employee Director receiving such Awards may not participate in the decision to make such Awards."

11. Amendment to Section 9.02. Section 9.02 of the Plan is hereby amended and restated to read in its entirety as follows:

"**9.02 Payment**

Unless the Agreement provides otherwise, if the Participant must pay for a Restricted Stock Award, payment of the Award shall be made in cash or cash equivalent acceptable to the Committee. If the Agreement so provides, the Committee, in its discretion and provided applicable law so permits, may allow a Participant to pay all or part of the purchase price (a) by surrendering (actually or by attestation) shares of Common Stock to the Company the Participant already owns and, if necessary to avoid adverse accounting consequences, has held for at least six months, (b) by means of a "net exercise procedure" by the surrender of shares of Common Stock to which the Participant is otherwise entitled under the Restricted Stock Award, (c) by such other medium of payment as the Committee in its discretion shall authorize or (d) by any combination of the foregoing methods of payment. If Common Stock is used to pay all or part of the purchase price, the sum of cash and cash equivalent and other payments and the Fair Market Value (determined as of the day preceding the date of purchase) of the Common Stock surrendered must not be less than the purchase price of the Restricted Stock Award. A Participant's rights in a Restricted Stock Award may be subject to repurchase upon specified events as determined by the Committee and set forth in the applicable Agreement."

12. Amendment to Section 9.03. Section 9.03 of the Plan is hereby amended and restated to read in its entirety as follows:

"**9.03 Vesting**

The Committee, on the date of grant of the Restricted Stock Award, shall prescribe that the Restricted Stock Award will become nonforfeitable and transferable subject to such conditions as are set forth in the applicable Agreement. Notwithstanding any provision herein to the contrary, the Committee, in its sole discretion, may grant Restricted Stock Awards that are nonforfeitable and transferable immediately upon grant, including without limitation Restricted Stock Awards granted in payment of earned performance awards or other incentive compensation under the Plan or any other plans or compensatory arrangements of the Company or any Affiliate. A Restricted Stock Award can only become nonforfeitable and transferable during the Participant's lifetime in the hands of the Participant."

13. Amendment to Section 10.02. Section 10.02 of the Plan is hereby amended and restated to read in its entirety as follows:

"**10.02 Earning the Award**

The Committee, on the date of grant of the Restricted Stock Units, shall prescribe that the Restricted Stock Units will be earned and become payable subject to such conditions as are set forth in the applicable Agreement. Notwithstanding any provision herein to the contrary, the Committee, in its sole discretion, may grant Restricted Stock Units in payment of earned performance awards or other incentive compensation under the Plan or any other plans or compensatory arrangements of the Company or any Affiliate. If and to the extent deemed appropriate by the Committee, Restricted Stock Units shall become payable upon the satisfaction of objectively determinable performance conditions based on the criteria described in Article XV. Notwithstanding any provision herein to the contrary, the Committee, in its sole discretion, may grant Restricted Stock Units that are earned and payable immediately upon grant."

14. Amendment to Section 10.05. Section 10.05 of the Plan is hereby amended and restated to read in its entirety as follows:

“**10.05** **<u>Stockholder Rights</u>**

No Participant shall, as a result of receiving a grant of Restricted Stock Units, have any rights as a stockholder until and then only to the extent that the Restricted Stock Units are earned and settled in shares of Common Stock, nor shall any Participant receive Dividend Equivalents solely as a result of receiving a grant of Restricted Stock Units. However, notwithstanding the foregoing, the Committee, in its sole discretion, may grant Dividend Equivalents in the Agreement in connection with a grant of Restricted Stock Units. By way of example and not limitation, such Dividend Equivalents may provide that, for so long as the Participant holds any Restricted Stock Units, if the Company pays any cash dividends on its Common Stock, then (a) the Company may pay the Participant in cash for each outstanding Restricted Stock Unit covered by the Agreement as of the record date of such dividend, less any required withholdings, the per share amount of such dividend or (b) the number of outstanding Restricted Stock Units covered by the Agreement may be increased by the number of Restricted Stock Units, rounded down to the nearest whole number, equal to (i) the product of the number of the Participant’s outstanding Restricted Stock Units as of the record date for such dividend multiplied by the per share amount of the dividend divided by (ii) the Fair Market Value of a share of Common Stock on the payment date of such dividend. In the event additional Restricted Stock Units are awarded, such Restricted Stock Units shall be subject to the same terms and conditions set forth in the Plan and the Agreement as the outstanding Restricted Stock Units with respect to which they were granted. Notwithstanding the preceding sentences, but subject to <u>Section 14.07</u>, if and to the extent deemed necessary to the Committee, Dividend Equivalents payable with respect to Restricted Stock Units may accumulate (without interest) and become payable to the Participant at the time, and only to the extent that, the portion of the Restricted Stock Units to which the Dividend Equivalents relate has become earned and payable. The limitations set forth in the preceding sentences shall not apply after the Restricted Stock Units become earned and payable and shares are issued thereunder.”

15. <u>Amendment to Section 11.02</u>. Section 11.02 of the Plan is hereby amended and restated to read in its entirety as follows:

“**11.02** **<u>Earning the Award</u>**

Subject to the Plan, the Committee, on the date of grant of an Incentive Award, shall specify in the applicable Agreement the terms and conditions which govern the grant, including, without limitation, whether the Participant to be entitled to payment must be employed or providing services to the Company or an Affiliate at the time the Incentive Award is to be paid. If and to the extent deemed appropriate by the Committee, Incentive Awards shall be earned and become payable upon the satisfaction of objectively determinable performance conditions based on the criteria described in <u>Article XV</u>.”

16. <u>Amendment to Section 13.02</u>. Section 13.02 of the Plan is hereby amended and restated to read in its entirety as follows:

“**13.02** **Cash Awards**

The Committee is authorized to grant to a Participant Cash Awards. The Committee shall determine the terms and conditions of any such Cash Awards. Cash Awards may be granted as an element of or a supplement to any other Award under the Plan or as a stand-alone Cash Award. The Committee, on the date of grant of Cash Awards, may prescribe that the Cash Awards will be earned and become payable subject to such conditions as are set forth in the applicable Agreement. By way of example and not of limitation, the Committee may prescribe that Cash Awards will be earned and become payable upon (a) the satisfaction of objectively determinable performance conditions based on the criteria described in Article XV, (b) the Participant’s completion of a specified period of employment or service with the Company or an Affiliate, (c) the Participant’s death, Disability or Retirement or (d) satisfaction of a combination of any of the foregoing factors. If and to the extent deemed appropriate by the Committee, Cash Awards shall become payable upon the satisfaction of objectively determinable performance conditions based on the criteria described in Article XV. Notwithstanding any provision herein to the contrary, the Committee, in its sole discretion, may grant Cash Awards in payment of earned performance awards and other incentive compensation payable under the Plan or any other plans or compensatory arrangements of the Company or any Affiliate. Unless the Committee or the Agreement provides otherwise, Cash Awards shall be vested and payable upon the date of grant.”

17. Amendment to Section 14.08. Section 14.08 of the Plan is hereby amended and restated to read in its entirety as follows:

“**14.08 Time and Method of Exercise**

The Committee shall determine and set forth in the applicable Agreement the time or times at which Awards granted under the Plan may be exercised or settled in whole or in part and shall set forth in the applicable Agreement the rules regarding the exercise, settlement and/or termination of Awards upon the Participant’s death, Disability, termination of employment or other service or ceasing to be a director. Unless the Agreement provides otherwise, an Award may be exercised by delivering notice to the Company’s principal office, to the attention of its Secretary (or the Secretary’s designee) no less than one (1) business day in advance of the effective date of the proposed exercise. Such notice shall be accompanied by the applicable Agreement, shall specify the number of shares of Common Stock with respect to which the Award is being exercised and the effective date of the proposed exercise and shall be signed by the Participant or other person then having the right to exercise the Award. Such notice may be withdrawn at any time prior to the close of business on the business day immediately preceding the effective date of the proposed exercise. Unless the Committee otherwise permits through the applicable Agreement or otherwise, no partial exercise of an Award shall be for an aggregate exercise or purchase price or a base value of less than One Thousand Dollars ($1,000). Notwithstanding any other provision of the Plan, however, if an Award is to become exercisable, nonforfeitable and transferable or earned and payable on the completion of a specified period of employment or service with the Company or any Affiliate, without the achievement of any performance conditions being required, and the Award is not being granted in lieu of any other cash compensation the Participant is to receive that would be payable over a shorter period of time, then unless the applicable Agreement provides otherwise, the Award shall become exercisable, non-forfeitable and transferable or earned and payable with respect to twenty-five percent (25%) of the underlying shares of Common Stock (or any amounts payable thereunder for Awards denoted in dollars) on each of the first, second, third and fourth anniversaries of the date of grant (subject to acceleration of vesting, to the extent permitted by the Plan and the Committee, in the event of a Change in Control or the Participant’s death, Disability, Retirement or involuntary termination of employment or service (including a voluntary termination of employment or service for good reason). Notwithstanding any provision of the Plan providing for the maximum term of an Award, in the event any Award would expire prior to exercise, vesting or settlement because trading in shares of Common Stock is prohibited by law or by any insider trading policy of the Company, the term of the Award shall automatically be extended until thirty (30) days after the expiration of any such prohibitions to permit the Participant to realize the value of the Award, provided such extension with respect to the applicable Award (a) is permitted by law, (b) does not result in a violation of Code Section 409A with respect to the Award and (c) does not otherwise adversely impact the tax consequences of the Award (such as for incentive stock options and related Awards). An Agreement may provide that the Award will be automatically, and without any action by the Participant, deemed exercised, by means of a “net exercise” procedure, immediately prior to the expiration of the Award if the then Fair Market Value of the underlying shares of Common Stock at that time exceeds the exercise or purchase price or base value of the Award, in order to permit the Participant to realize the value of the Award. With respect to an Option and its Corresponding SAR, the Agreement may provide which Award will be deemed exercised. If the Agreement does not so provide, the Option shall be deemed exercised and the Corresponding SAR shall expire unexercised.”

18. Amendment to ARTICLE XV. The title of ARTICLE XV is hereby amended and restated to read in its entirety as follows:

“**ARTICLE XV**
PERFORMANCE-BASED COMPENSATION”

19. Amendment to Section 15.01. Section 15.01 of the Plan is hereby amended and restated to read in its entirety as follows:

“**15.01 Performance Conditions**

In accordance with the Plan, the Committee may prescribe that Awards will become exercisable, nonforfeitable and transferable, and earned and payable, based on objectively determinable performance conditions. Objectively determinable performance conditions are performance conditions (i) that are established in writing and (ii) that are uncertain of achievement at the time they are established. The performance conditions may be stated with respect to (a) revenue, (b) earnings before interest, taxes, depreciation and amortization (“**EBITDA**”), (c) cash earnings (earnings before amortization of intangibles), (d) operating income, (e) pre-or after-tax income, (f) earnings per share, (g) net cash flow, (h) net cash flow per share, (i) net earnings, (j) return on equity, (k) return on total capital, (l) return on sales, (m) return on net assets employed, (n) return on assets or net assets, (o) share price performance, (p) total shareholder return, (q) improvement in or attainment of expense levels, (r) improvement in or attainment of working capital levels, (s) net sales, (t) revenue growth or product revenue growth, (u) operating income (before or after taxes), (v) pre-or after-tax income (before or after allocation of corporate overhead and bonus), (w) earnings per share; (x) return on equity, (y) appreciation in and/or maintenance of the price of the shares of Common, (z) market share, (aa) gross profits, (bb) comparisons with various stock market indices; (cc) reductions in cost, (dd) cash flow or cash flow per share (before or after dividends), (ee) return on capital (including return on total capital or return on invested capital), (ff) cash flow return on investments; (gg) improvement in or attainment of expense levels or working capital levels, (hh) shareholder equity or (ii) other criteria selected by the Committee. Any performance goals that are financial metrics may be determined in accordance with United States Generally Accepted Accounting Principles (“ **GAAP**”) or may be adjusted when established to include or exclude any items otherwise includable or excludable under GAAP. The business criteria above, may be related to a specific customer or group of customers or products or geographic region. The form of the performance conditions may be measured on a Company, Affiliate, product, division, business unit, service line, segment or geographic basis, individually, alternatively or in any combination, subset or component thereof. Performance goals may include one or more of the foregoing business criteria, either individually, alternatively or any combination, subset or component. Performance goals may reflect absolute performance or a relative comparison of the performance to the performance of a peer group or index or other external measure of the selected business criteria. Profits, earnings and revenues used for any performance condition measurement may exclude any extraordinary or non-recurring items. The performance conditions may, but need not, be based upon an increase or positive result under the aforementioned business criteria and could include, for example and not by way of limitation, maintaining the status quo or limiting the economic losses (measured, in each case, by reference to the specific business criteria). The performance conditions may not include solely the mere continued employment of the Participant. However, the Award may become exercisable, nonforfeitable and transferable or earned and payable contingent on the Participant’s continued employment or service, and/or employment or service at the time the Award becomes exercisable, nonforfeitable and transferable or earned and payable, in addition to the performance conditions described above. The Committee shall have the sole discretion to select one or more periods of time over which the attainment of one or more of the foregoing performance conditions will be measured for the purpose of determining a Participant’s right to, and the settlement of, an Award that will become exercisable, nonforfeitable and transferable or earned and payable based on performance conditions.”

20. Amendment to Section 15.02. Section 15.02 of the Plan is hereby amended and restated to read in its entirety as follows:

“**15.02 Establishing the Amount of the Award**

The Committee may, in its sole discretion, reduce the amount of the Award that will become exercisable, nonforfeitable and transferable or earned and payable, as applicable, if the Committee determines that such reduction is appropriate under the facts and circumstances. In no event shall the Committee have the discretion to increase the amount of the Award that will become exercisable, nonforfeitable and transferable or earned and payable.”

21. Amendment to Section 15.03. Section 15.03 of the Plan is hereby amended and restated to read in its entirety as follows:

“**15.03 Earning the Award**

In determining if the performance conditions have been achieved, the Committee may adjust the performance targets in the event of any unbudgeted acquisition, divestiture or other unexpected fundamental change in the business of the Company, an Affiliate or business unit or in any product that is material taken as a whole as appropriate to fairly and equitably determine if the Award is to become exercisable, nonforfeitable and transferable or earned and payable only pursuant to the conditions set forth in the Award. Additionally, in determining if such performance conditions have been achieved, the Committee also may adjust the performance targets in the event of any (a) unanticipated asset write-downs or impairment charges, (b) litigation or claim judgments or settlements thereof, (c) changes in tax laws, accounting principles or other laws or provisions affecting reported results, (d) costs and accruals for reorganization or restructuring programs, or extraordinary, unusual, infrequently occurring or non-recurring, (e) acquisitions or dispositions or (f) foreign exchange gains or losses.”

22. Amendment to Section 15.04. Section 15.04 of the Plan is hereby amended and restated to read in its entirety as follows:

“**15.04 [Intentionally Omitted]**”

23. Amendment to Section 16.03. Section 16.03 of the Plan is hereby amended and restated to read in its entirety as follows:

"**16.03** **Substitute Awards**

The Committee may grant Awards in substitution for Options, SARs, Restricted Stock Awards, Incentive Awards or similar Awards held by an individual who becomes an employee of the Company or an Affiliate in connection with a transaction described in Section 16.01. Notwithstanding any provision of the Plan (other than the limitation of Section 6.02), the terms of such substituted Awards shall be as the Committee, in its discretion, determines is appropriate."

24. Amendment to Section 16.04. Section 16.04 of the Plan is hereby amended and restated to read in its entirety as follows:

"**16.04** **Limitation on Adjustments**

Notwithstanding the foregoing, no adjustment hereunder shall be authorized or made if and to the extent the existence of such authority or action (a) would cause a Non-409A Award to be subject to Code Section 409A, (b) would violate Code Section 409A for a 409A Award, (c) would cause a modification of an incentive stock option under Code Section 424 and loss of treatment as an incentive stock option or (d) would adversely affect any exemption under Rule 16b-3 of the Exchange Act, unless the Committee determines that such adjustment is necessary and specifically acknowledges that the adjustment will be made notwithstanding any such result."

25. Amendment to Section 17.02. Section 17.02 of the Plan is hereby amended and restated to read in its entirety as follows:

"**17.02** **Postponement of Exercise or Payment**

The Committee may postpone any grant, exercise, vesting or payment of an Award for such time as the Committee in its sole discretion may deem necessary in order to permit the Company (a) to effect, amend or maintain any necessary registration of the Plan or the shares of Common Stock issuable pursuant to the Award under the securities laws; (b) to take any action in order to (i) list such shares of Common Stock or other shares of stock of the Company on a stock exchange if shares of Common Stock or other shares of stock of the Company are not then listed on such exchange or (ii) comply with restrictions or regulations incident to the maintenance of a public market for its shares of Common Stock or other shares of stock of the Company, including any rules or regulations of any stock exchange on which the shares of Common Stock or other shares of stock of the Company are listed; (c) to determine that such shares of Common Stock in the Plan are exempt from such registration or that no action of the kind referred to in (b)(ii) above needs to be taken; (d) to comply with any other applicable law, including without limitation, securities laws; (e) to comply with any legal or contractual requirements during any such time the Company or any Affiliate is prohibited from doing any of such acts under applicable law, including without limitation, during the course of an investigation of the Company or any Affiliate, or under any contract, loan agreement or covenant or other agreement to which the Company or any Affiliate is a party or (f) to otherwise comply with any prohibition on such acts or payments during any applicable blackout period; and the Company shall not be obligated by virtue of any terms and conditions of any Agreement or any provision of the Plan to recognize the grant, exercise, vesting or payment of an Award or to grant, sell or issue shares of Common Stock or make any such payments in violation of the securities laws or the laws of any government having jurisdiction thereof or any of the provisions hereof. Any such postponement shall not extend the term of the Award and neither the Company nor its directors and officers nor the Committee shall have any obligation or liability to any Participant or to any other person with respect to shares of Common Stock or payments as to which the Award shall lapse because of such postponement.

Additionally, the Committee may postpone any grant, exercise vesting or payment of an Award if the Company reasonably believes the Company's or any applicable Affiliate's deduction with respect to such Award would be limited or eliminated by application of Code Section 162(m) to the extent permitted by Code Section 409A; provided, however, that such delay will last only until the earliest date at which the Company reasonably anticipates that the deduction with respect to the Award will not be limited or eliminated by the application of Code Section 162(m)."

26. Amendment to Section 20.01. Section 20.01 of the Plan is hereby amended and restated to read in its entirety as follows:

"**20.01 Initial Claim**

If a Participant has exercised an Option or SAR or if shares of Restricted Stock have become vested or Restricted Stock Units, Incentive Awards, Other Stock-Based Awards or Dividend Equivalents have become payable, and the Participant has not received the benefits to which the Participant believes he or she is entitled under such Award, then the Participant must submit a written claim for such benefits to the Committee within ninety (90) days of the date the Participant tried to exercise the Option or SAR, the date the Participant contends the Restricted Stock vested or the date the Participant contends the Restricted Stock Units, Incentive Awards, Other Stock-Based Awards or Dividend Equivalents became payable or the claim will be forever barred."

27. Amendment to Section 20.02. Section 20.02 of the Plan is hereby amended and restated to read in its entirety as follows:

“**20.02 Appeal of Claim**

If a claim of a Participant is wholly or partially denied, the Participant or his duly authorized representative may appeal the denial of the claim to the Committee. Such appeal must be made at any time within thirty (30) days after the Participant receives written notice from the Company of the denial of the claim. In connection therewith, the Participant or his duly authorized representative may request a review of the denied claim, may review relevant documents and may submit issues and comments in writing. Upon receipt of an appeal, the Committee shall make a decision with respect to the appeal and, not later than sixty (60) days after receipt of such request for review, shall furnish the Participant with the decision on review in writing, including the specific reasons for the decision written in a manner calculated to be understood by the Participant, as well as specific references to the pertinent provisions of the Plan upon which the decision is based.”

28. Amendment to Section 21.01. Section 21.01 of the Plan is hereby amended and restated to read in its entirety as follows:

“**21.01 Amendment of Plan**

The Board may amend or terminate this Plan at any time; provided, however, that no amendment to the Plan may materially adversely impair the rights of a Participant with respect to outstanding Awards without the Participant’s consent. In addition, an amendment will be contingent on approval of the Company’s stockholders, to the extent required by law or any tax or regulatory requirement applicable to the Plan or by the rules of any stock exchange on which the Company’s securities are traded or if the amendment would (i) increase the benefits accruing to Participants under the Plan, including without limitation, any amendment to the Plan or any Agreement to permit a repricing of any outstanding Awards under Section 19.13, (ii) increase the aggregate number of shares of Common Stock that may be issued under the Plan or (iii) modify the requirements as to eligibility for participation in the Plan. Notwithstanding any other provision of the Plan, any termination of the Plan shall comply with the requirements of Code Section 409A with regard to any 409A Awards.”

29. Amendment to Section 21.02. Section 21.02 of the Plan is hereby amended and restated to read in its entirety as follows:

“**21.02 Amendment of Awards**

The Committee may amend any outstanding Awards to the extent it deems appropriate; provided, however, that no amendment to an outstanding Award may materially adversely impair the rights of a Participant without the Participant’s consent.”

30. Amendment to ARTICLE XXII. The title of ARTICLE XXII is hereby amended and restated to read in its entirety as follows:

“**ARTICLE XXII**
CODE SECTION 409A PROVISION”

WEINBERG & CO. LA, LLP
CERTIFIED PUBLIC ACCOUNTANTS

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement (No. 333-215056) on Form S-8 of Polar Power, Inc. of our report dated April 1, 2019 relating to our audit of the financial statements of Polar Power, Inc., which appear in this Annual Report on Form 10-K of Polar Power, Inc. for the year ended December 31, 2018.

/s/ WEINBERG & COMPANY P.A.

WEINBERG & COMPANY P.A.
Los Angeles, California
April 1, 2019

1925 Century Park East, Suite 1120
Los Angeles, California 90067
Telephone: 310.601.2200 Facsimile: 310.601.2201
www.weinbergla.com

Exhibit 31.1

CERTIFICATION

I, Arthur D. Sams, certify that:

1. I have reviewed this Annual Report on Form 10-K of Polar 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 and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) 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.

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or person 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/ Arthur D. Sams
Arthur D. Sams
President, Chief Executive Officer and Secretary
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Luis Zavala, certify that:

1. I have reviewed this Annual Report on Form 10-K of Polar 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 and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) 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.

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or person 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/ Luis Zavala
Luis Zavala
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Polar Power, Inc. (the “Company”) for the fiscal year ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), the undersigned hereby certify in their capacities as the Chief Executive Officer and the Chief Financial Officer of the Company, respectively, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: April 1, 2019

/s/ Arthur D. Sams	/s/ Luis Zavala
Arthur D. Sams	Luis Zavala
President and Chief Executive Officer	Chief Financial Officer
(Principal Executive Officer)	(Principal Financial Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signatures that appear in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.