

**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, 2024**

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

(State or other jurisdiction of
incorporation or organization)

33-0479020

(I.R.S. Employer
Identification Number)

249 E. Gardena Blvd., Gardena, California

(Address of principal executive offices)

90248

(Zip Code)

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

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

Title of each class

Common Stock, \$0.0001 par value

Trading Symbol

POLA

Name of exchange on which registered

The Nasdaq Stock Market LLC
(Nasdaq Capital Market)

Securities registered pursuant to Section 12(g) of the Act: None

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 such files). Yes No

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

Non-Accelerated Filer

Accelerated Filer

Smaller Reporting Company

Emerging Growth Company

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the 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 \$4,752,158.

The number of shares outstanding of the Registrant's common stock, \$0.0001 par value, as of March 31, 2025 was 2,511,532.

DOCUMENTS INCORPORATED BY REFERENCE

None

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FORWARD LOOKING AND CAUTIONARY STATEMENTS

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 within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. 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 our products; the effect and consequences of the novel coronavirus, or COVID-19, pandemic on matters including U.S., local and foreign economies, wars and international conflicts including the current military actions involving the Russian Federation and Ukraine, our business operations, the ability of financing and the health and productivity of our employees; 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.

References in this Annual Report on Form 10-K to "Polar," the "Company," "we," "us," and "our" refer to Polar Power, Inc., a Delaware corporation, and its consolidated subsidiaries.

FINANCIAL PRESENTATION

All dollar amounts in this Annual Report on Form 10-K are presented in thousands, except share and per share data and where otherwise noted. Share and share and per share data have been retroactively adjusted to reflect the decreased number of shares resulting from a 1 for 7 reverse stock split which took effect on November 18, 2024.

PART I

Item 1. Business

Overview

We design, manufacture, and sell DC power generators, renewable energy and cooling systems for applications primarily in the telecommunications market and, to a lesser extent, in other markets, including military, electric vehicle, marine and industrial. We are continuously diversifying our customer base and are selling our products into non-telecommunication markets and applications at an increasing rate. The changes in customer diversity are reported in the financial section.

Within the various markets we service, 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 and mobile applications) or have critical power needs and cannot be without power in the event of utility grid failure (i.e., back-up power applications) or charge batteries of various chemistries to be used in electric vehicle or renewable storage applications.

We believe it's more efficient to build power systems around the DC generator because it's more efficient to integrate with battery storage and solar photovoltaics which also operate on DC. Many applications in communications, water pumping, lighting, electric vehicle and vessel propulsion, security systems operate on DC power only. Many micro-grids and renewable energy storage systems use battery storage and therefore are DC based and use inverters to convert the DC to AC.

Serving these various markets, we offer the following configurations of our DC power systems, with output power ranging from 5 kW to 50 kW:

- **Base power systems.** These stationary systems integrate a DC generator with automated controls and remote monitoring, contained in an environmentally regulated enclosure.
- **Hybrid power systems.** These systems integrate lithium-ion batteries (or other advanced battery chemistries) storage and our standard DC power systems to provide power in both bad and off-grid applications.
- **DC solar hybrid power systems.** These stationary systems incorporate photovoltaic and other sources of renewable energy into our DC hybrid power systems.
- **Mobile power systems.** These are very light weight and compact power systems used for EV charging, robotics, communications, security.

Our DC power systems are available in diesel, natural gas, LPG / propane and renewable fuel formats, with diesel, natural gas and propane gas being the predominant formats.

We were incorporated in 1979 in the State of Washington as Polar Products, Inc., and in 1991 we reincorporated in the State of California under the name Polar Power, Inc. In December 2016, Polar Power, Inc. reincorporated in the State of Delaware. Our internet website address is <https://polarpower.com/>.

Recent Developments

On November 24, 2023, the Company received a deficiency letter from the Listing Qualifications Department of The Nasdaq Stock Market ("Nasdaq") indicating that the Company's common stock is subject to potential delisting from the Nasdaq because for a period of 30 consecutive business days, the bid price of the Company's common stock has closed below the minimum \$1.00 per share requirement for continued inclusion under Nasdaq Marketplace Rule 5550(a)(2) (the "Bid Price Rule"). The Nasdaq deficiency notice indicated that, in accordance with Nasdaq Marketplace Rule 5810(c)(3)(A), the Company will be provided 180 calendar days, or until May 22, 2024, to regain compliance. If the Company failed to regain compliance with the Bid Price Rule before May 22, 2024 but met all of the other applicable standards for initial listing on The Nasdaq Capital Market with the exception of the minimum bid price, then the Company may be eligible to have an additional 180 calendar days, or until November 18, 2024, to regain compliance with the Bid Price Rule. The Company did not regain compliance with the Bid Price Rule by the end of the initial compliance period but met all of the other applicable listing standards and requested an extension to regain compliance. On May 30, 2024, the Company received a letter from Nasdaq notifying the Company that, it had been granted an additional 180 days, or until November 18, 2024, to regain compliance with the minimum bid price requirement for continued listing on the Nasdaq Capital Market.

On November 18, 2024, the Company filed a Certificate of Amendment to Certificate of Incorporation with the Secretary of State of Delaware to effect a 1:7 Reverse Stock Split of its shares of common stock, either issued and outstanding or held by the Company as treasury stock, effective as of 4:05 p.m. (Delaware time) on November 18, 2024. The number of authorized shares of common stock under the certificate of incorporation remains unchanged at 50,000,000 shares. The common stock began trading on a reverse stock split-adjusted basis on The Nasdaq Capital Market November 19, 2024. The trading symbol for the common stock remains "POLA." The new CUSIP number for the common stock following the Reverse Stock Split is 73102V204.

On November 19, 2024, the Company received a new letter from Nasdaq notifying the Company that, as a result of the Company's failure to regain compliance with the Bid Price Rule by November 18, 2024, Nasdaq determined to delist the Company's common stock from the Nasdaq Capital Market. On November 26, 2024, the Company submitted a hearing request to a hearing panel to appeal Nasdaq's determination, and the hearing request stayed the suspension of the Company's common stock. The hearing was scheduled to occur on January 23, 2025.

On December 23, 2024, the Company received a letter from Nasdaq informing the Company that the Company regained compliance with the Bid Price Rule and that the Company was therefore in compliance with the Nasdaq's listing requirements. Accordingly, the hearing was cancelled and the Company's securities continue to be listed and traded on the Nasdaq Capital Market.

On December 27, 2024, the Company issued a press release announcing that it regained compliance with the Bid Price Rule.

On December 18, 2023, Peter Gross, a member of the Board of Directors of the Company, resigned as a member of the Board of Directors of the Company (the "Board"). Mr. Gross, an independent director, served as a member of the audit committee, chair of the compensation committee and chair of the nominating and corporate governance committee of the Board at the time of his resignation.

On January 5, 2024, the Company received a notification letter from Nasdaq that due to Mr. Gross' resignation, the Company is no longer in compliance with Nasdaq Listing Rule 5605. Pursuant to Nasdaq Listing Rule 5605(c)(4), the Company is entitled to a cure period to regain compliance (i) until the earlier of the Company's next annual shareholders' meeting or December 18, 2024; or (ii) if the next annual shareholders' meeting is held before June 17, 2024, then the Company must evidence compliance no later than June 17, 2024.

On July 25, 2024, the Company's remaining members of the Board appointed and ratified Mr. Michael G. Field, to serve as a member of the Board, and to assume the position of Mr. Gross as a member of the audit committee, chair of the compensation committee and chair of the nominating and corporate governance committee of the Board. On July 30, 2024, the Company issued a press release announcing the appointment of Mr. Field, filling the vacant board seat, and bringing the number of independent directors to three which brings the Company in compliance with Nasdaq Listing Rule 5605.

Recent Business Events

The COVID-19 pandemic and recovery, inflation, the impacts of war and other recent geopolitical events have negatively impacted business and industries all over the world. Delays and slowdown in customer programs have had a significant negative impact on our overall operations including revenues, productivity, gross margins, and liquidity. They have resulted in disruptions in the supply chain and higher material costs.

Delays in international projects has impacted our export markets temporarily, however, we continue to focus on our diversification strategy to expand our market share in the long term. During 2024 and 2023, sales to customers in international markets represented 13% and 21% of our total net sales, respectively. Between 2022 and 2024, we received purchase orders for DC power generators totaling \$7.3 million from telecommunications customers in the South Pacific Islands for off-grid applications. We completed shipping these orders in 2024. These orders are part of a growing program to develop broadband services in the South Pacific region.

During 2024, 48% of our total net sales were derived from our largest customer, compared to 50% in 2023. During 2024, 8% of our total net sales were derived from customers in the military market, as compared to 3% in 2023. We believe the increase in our military contracts resulted from geopolitical uncertainties primarily tied to the military actions of the Russian Federation and its invasion of Ukraine and conflicts between Israel and Hamas.

The implementation of 5G networks by Tier-1 telecommunication customers in the U.S. has also resulted in approximately 50% of our net sales during 2024 for our DC power systems while 54% of our sales backlog as of December 31, 2024 are purchase orders of DC power systems which provide backup power for 5G networks for our largest telecom customers in the U.S.

Our sales backlog as of December 31, 2024, was \$1,306, with 53% of that amount being attributable to our largest U.S. telecommunications customer, 3% to other telecommunications customers in the U.S., 35% represented purchases from customers in the military markets, and 9% from marine and other markets. The political turmoil during elections and the financial market losses of our largest customer caused a significant drop in purchases during the second half of the year. We believe customer decision to reduce in-house excess inventory accumulated during Covid-19 was a temporary correction that was needed in the long term.

For the three-year period prior to the pandemic, we experienced high double-digit sales growth. We made strategic investments in plant and equipment to grow production capacity to \$50 million annual revenue. However, the unanticipated drop in sales in the years following the pandemic caused a disproportionate distribution of fixed and semi-fixed overhead costs across much lower revenues. In 2024, our net sales to our largest customer were \$876 in the first quarter, \$1,851 in the second quarter, \$2,727 in the third quarter, and \$1,769 in the fourth quarter. We believe our customer inventories have reached normal levels after the significant increases during pandemic years, which is anticipated to bring our bookings closer to customer demand during first half of year 2025.

Going Concern

The Company's financial statements have been prepared under the assumption that the Company will continue as a going concern. For the year ended December 31, 2024, the Company recorded a net loss of \$4,677 and used cash in operations of \$536. These factors raise substantial doubt about the Company's ability to continue as a going concern within one year of the date that the financial statements are issued. In addition, the Company's independent registered public accounting firm, in their report on the Company's December 31, 2024, audited financial statements, raised substantial doubt about the Company's ability to continue as a going concern.

Our ability to continue as a going concern is dependent upon our ability to obtain additional financing, grow and diversify our revenue, improve operational efficiency, reduce overhead and fixed costs, to create a profitable operations. Our ability to obtain additional financing in the debt and equity capital markets is subject to several factors, including market and economic conditions, our performance and investor sentiment with respect to us and our industry. The Company has taken action to diversify its sales and reduce inventory to fund operations. In the event that the Company does not generate sufficient cash flows from operations and is unable to obtain funding, the Company will be forced to delay, reduce, or eliminate some or all of its discretionary spending, which could adversely affect the Company's business prospects, ability to meet long-term liquidity needs or ability to continue operations.

Markets

Our sales are primarily within the telecommunications market and, to a lesser extent, in military, electric vehicle charging, marine and industrial markets. We are investing into international markets, non-telecom markets to diversify our sales globally.

Telecommunications

We provide power generation equipment for the telecommunications markets. Our equipment provides backup power to grid connected tower sites during power outages resulting from severe weather like hurricanes, wildfires, and floods. Most telecommunications towers are equipped with battery backup for short term power outages. Our DC power generators are installed to address longer-term disruptions in power. We also deliver DC generators that provide prime power for off-grid telecommunications tower sites installed in remote and rural areas where reliability of the power grid is intermittent or not available. Since 2012, the telecommunications market is our largest market segment and contributed over 88% and 95% of our annual revenues in 2024 and 2023, respectively.

Since 2012, we developed products with key features like high fuel efficiency, light weight and compact design when compared to our competitors' products. These features allow our telecommunications customers to install equipment requiring a smaller footprint on building roof tops and compact commercial sites while also requiring less fuel storage due to the fuel efficiency of our products. In the past nine years, we have gained approval and certifications from four top Tier-1 telecommunications operators in the U.S. market. With over 90% of the world's telecommunication towers located in non-U.S. territories, we began to establish international offices in 2017 and currently have presence in Poland, Romania, Australia, and South Africa to provide long term growth.

In the U.S. market, over 95% of the telecommunications towers are connected to a power grid, thereby only requiring backup power generation in equipment in case of an emergency loss of power, while in the emerging markets of Africa and Asia, a significant percentage of telecommunications towers are off-grid and bad grid with frequent power interruptions requiring fuel-efficient prime power equipment to provide power by charging the batteries. Most prime power sites integrate with solar and storage batteries to utilize renewable solar energy during the day while generators and batteries provide power during nights and/or on cloudy days. In the U.S., telecommunications companies are requiring generators to provide backup power at existing sites, while in the international market telecommunications companies are adding new sites to provide coverage in rural and remote areas.

The advent of 5G technology has resulted in a digital revolution within both the commercial and consumer sectors leading to an exponential increase in data usage. We believe that the need for backup power equipment in the telecommunications services industry which consists of digital infrastructure (such as fiber, telecommunications towers, active networks and data centers), operators (such as mobile and fixed broadband, data centers and cloud computing) and applications (such as broadband connections, telephones, video streaming and e-commerce), holds promising growth opportunities as 5G use expands in the near and long term.

Wireless network capabilities continue to expand far beyond smart phones and mobile devices. The 5G mobile network is converging connectivity, intelligent edge and Internet of Things (IoT) technologies resulting in an increase in telecommunications tower sites in both the U.S. and abroad. The 5G network delivers broadband-like services such as high-definition streaming video to a cell phone. Businesses benefit from using 5G for data monitoring and cloud-native 5G networks to compute and store data locally. All of these applications dramatically scale up data usage which requires an increase in infrastructure and an increase in power and backup generators.

The pervasiveness of 5G, including reliance by users on, among other things, local weather, traffic conditions, self-driving vehicles, wearable health monitoring devices that automatically informs doctors, stores automatically ordering items sold on virtual carts, farmers automated irrigation system with tracking sensors, will require robust backup equipment at telecommunications sites. We believe higher data usage will require higher reliability backup systems that are fuel efficient and are located in proximity to the point of use. In urban environments, roof-top space, weight of the equipment and the amount of fuel storage are critical factors in the selection of backup equipment. As one of the leading providers of DC power generation equipment, we have demonstrated these benefits to telecommunications providers for decades and we are therefore encouraged with the prospect of infrastructure expansion in this space that requires fuel efficient and lower emission power generation equipment.

Military

Since 1979, we have been developing and marketing products to the U.S. military and large defense contractors in the U.S. and international markets. The need for light weight and compact DC power generation systems are vital for military operations and commonly used to charge storage batteries, provide backup emergency power, or provide startup power for aircrafts or weapon systems. During the past decade, digitization of the military accelerated exponentially to support modern information, communication, and weapon systems. The need to process information rapidly has led to digitization of command, control, communications, computers and intelligence across both combat support and service support. This expansion in data transfer and storage has led to an increase in energy needs, which requires efficient power generation equipment that can charge batteries or directly power these systems.

A digitized battlefield includes sensors, information processing, data distribution, electronic countermeasures, all requiring with few exceptions, DC power. Our DC generators designed for military applications provide:

- 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.

In 2016, the military began the Advanced Medium Mobile Power Sources, or AMMPS, a U.S. Department of Defense program to develop and deliver 5 kW-50 kW output ranging generators in either a skid, trailer mounted, or microgrid configurations to replace legacy standalone AC generators. The new generation of mobile power generators combined with solar and wind power can function as sustainable sources of DC and AC power in remote areas. The new generation of AMMPS power systems are required to provide 21% higher fuel efficiency, lower noise, weight, 90% reliability and be capable of performing in extreme environments. During 2020, we directly and jointly partnered with defense contractors, provided DC hybrid power systems, with integrated controls providing higher fuel efficiency than legacy AC generators currently in use.

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 during combat. In earlier combat vehicle designs, these surveillance systems were powered by the main auxiliary vehicle battery, which required the vehicle's main engine to continue operating to power auxiliary battery systems. A decade ago, we began delivering compact 3 kW – 15 kW DC power systems for communication and reconnaissance systems thereby improving fuel efficiency of the combat and vehicles when deployed. During the decade we have delivered several configurations of these auxiliary power units to the military, which vary in function from battery charging to supplying power to weapon systems.

We are working on our next-generation higher output power DC power system and plan to introduce a configuration of this product to the residential and commercial microgrid market in emerging markets. We believe a 50 kW standalone DC power system, powered by natural gas or LPG would be ideal for rural communities in emerging markets such as Africa and Asia. The capacity of 50 kW is sufficiently large enough to power a small rural hospital, dairy farm and a cluster of houses in a small village. The ease of connecting our DC power system with solar, battery packs or any other source of energy like wind can introduce a sustainable cost-effective solution in emerging markets.

The 50 kW generator can also provide roadside emergency charging services for electric vehicles.

Electric Vehicle Charging

According to Precedence Research, a market research company, the global electric vehicle market size accounted for USD 255.54 billion in 2023 and is expected to reach USD 2,108.80 billion by 2033, growing at a compound annual growth rate (CAGR) of 23.4% during the forecast period 2024 to 2033. The primary growth factors driven by significant number of government incentives such as tax rebates, subsidies, and grants. This increase will require a significant increase in charging stations globally to support the cumulative growth of electric vehicles. During 2023, the global electric vehicle charging station market size reached USD 34.59 billion and has a forecasted CAGR of 29.1% for the period of 2023 to 2032.

A 2018 article by McKinsey & Company entitled "*The potential impact of electric vehicles on global energy systems*" stated that although a modest increase in electric vehicle sales of 5% will not lead to a shortage in electricity since most new capacity can be delivered by renewables like solar, wind, and gas-powered generation. This modest increase in sales may have a significant impact on peak loads, especially in concentration points of electric vehicle charging and during the evening peak times when most electric vehicle users connect their vehicles for charging. The report claims unmanaged peak load increases due to electric vehicle charging will require increases in costly sub-station upgrades. We believe that the more cost-effective option will be investing into battery storage at the utility level to manage the peak loads or flexible electricity costs for electric vehicle charging to discourage peak load charging.

Regardless of how the peak charging issue is resolved, most homes have not been designed to allow for fast charging of electric vehicles. To address this issue, we are in the process of upgrading our CHAdeMO chargers to CCS natural gas-powered electric vehicle charger and combined heat and power generators. Our electric vehicle chargers, being independent of the grid, are designed to fast charge connected electric vehicles at home while providing backup power during power outages. In addition, the heat generated while charging is captured and delivered to heat the home, heat water for laundry, or heat the pool.

Our CHAdeMO style electric vehicle charger was initially designed in 2009 as a diesel-fueled mobile charger for EV manufacturers to aid in testing their vehicles in the field. We have supplied these mobile chargers to five of the leading automakers in the USA. We are presently improving this product using heavy duty 60,000-hour Toyota natural gas or propane engine. This product targets residential customers that own or are expected to own electric vehicles.

With the anticipated stress on utility grids due to an increase in the number of electric vehicles that require charging, combined with the fact that most homes are unable to provide fast charging, we believe that an independent natural gas-powered electric vehicle charger would be ideal and cost effective. Currently, many electric vehicle owners exceed the base power usage at home resulting in peak hour usage penalties which diminishes anticipated cost savings of using electric vehicles. Our residential natural gas-powered EV charger eliminates these costs while also providing backup power in case of emergencies.

The benefits of fast charging with a natural gas generator, as opposed to using the electric grid, includes avoids peak rate charges, a reduced carbon footprint and the opportunity to provide heating and air conditioning, through combined heat and power or CHP systems that utilize waste heat from the generator/charger which we believe is a compelling market opportunity for our new product.

Residential and Commercial Power – Mini-Grid

Increased use of electricity worldwide is directly related to humanity's improvement in the quality of life. Increased global urbanization has resulted in many governments investing in power plants and providing infrastructure to satisfy the growing demand for electricity. Similar needs of the rural populations have been largely ignored worldwide due to the isolation, low density and population spread over vast areas resulting in an increased cost of infrastructure. Even in rural areas where the infrastructure was built to deliver electricity, frequent blackout and infrastructure failures are commonplace and often not repaired for long periods.

According to recent World Bank data, approximately 733 million, 9%, of the world's population still lack electricity compared to 25% in 1994. While 42% of the world's population still lives in rural areas, about 12% of those living in rural areas lack electricity. Approximately 69% of the population living without electricity are in sub-Saharan Africa while approximately 29% are located in South Asia and 2% in other areas.

During the past decade, developments in renewable energy and battery storage have provided an alternate method to resolve this energy inequity between rural and urban populations worldwide. However, due to weather and costs of such systems and technologies are still at an early stage of mass adoption. We envision a hybrid system with natural gas or LPG integrated with a solar and battery system to generate power during peaks and valleys of demand that we believe would be more cost effective and reliable than the current systems in place. These "Mini-Grid" hybrid systems would generate between 5kW – 25kW of power on 24/7 basis and provide electricity for a small housing unit, commercial facility or a school building.

Our Mini-Grid system uses natural gas or LPG as primary fuel source, the same fuel as cooking fuel in rural and remote regions worldwide. For decades, many governments have been allocating resources to eliminate solid fuels like wood, solid waste as cooking fuels from rural and remote communities. Significant progress has been made by providing economic subsidies for use of natural gas or LPG as cooking fuel to reduce pollution. In 2017, we established offices in emerging markets like Poland, Australia, Romania and South Africa to develop strategic alliances with distributors to promote our residential solutions to communities living in bad-grid and off-grid areas.

Our Competitive Strengths

We have over a 45-year history and have developed a reputation as a proven supplier of reliable and advanced proprietary technology products to customers within the telecommunications, military, commercial, industrial and marine markets. We have invested significant capital and engineering expertise to develop power generation systems that are environmentally friendly and fuel-efficient. We further believe our success will be based on the following key competitive strengths:

- **Proprietary Technologies.** Our decades of research and development has led to the development of DC power systems with output ranging from 5 kW – 50 kW. Our DC power systems integrates our proprietary DC alternator with electronic controls to monitor and control the power being outputted to the equipment, which is then coupled to an engine assembly and cooling systems. Our DC power system output voltage can be configured between 12 V – 800 VDC to match the precise application needs (such as telecom equipment, robotic propulsion drives, electric drives for marine vessels, electric vehicle chargers, etc.). Over the past decades we have developed proprietary charge algorithms for most commercially available batteries and match charge algorithms to battery model or chemistry prior to initiating a charge cycle. Unlike AC power systems, our DC power systems are directly connected to the battery source and therefore optimized for efficiently and safely charging a particular battery chemistry. AC power systems are indirectly connected to commercially available battery chargers that convert the AC output to DC voltage making it less efficient, higher in cost, and require considerably more space.
- **Engineering Expertise.** Over the past four decades we have strategically constructed a product portfolio that focuses on improving energy efficiency by developing DC power output-based equipment where all major components and technologies are developed in-house, and proprietary manufacturing processes created in-house to ensure product reliability and long life. Our leading competitors approached the need for DC equipment in the telecom, military, and industrial markets by modifying legacy AC generators with conversion equipment resulting in significantly lower efficiency when compared to DC power systems. Being one of the first companies to develop DC generators for telecommunications, we developed proprietary components ranging from alternators, control systems and charging algorithms for various battery chemistries. We have focused on providing the lowest cost of ownership with demonstrated long life of our equipment during the past thirty years. Lowest cost of ownership is complemented with the best fuel economy, best in class weather resistance provided by aluminum enclosures and customized algorithms matching battery chemistries and operational profiles.
- **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 telecommunications customers.
- **Strong Customer Base.** Our customer base consists of large telecommunications companies, military sub-contractors and industrial companies. Tier-1 telecommunications customers have represented 62% to 91% of our aggregated sales for the past five years. Initial demand of our products by telecommunications customers was primarily based on the need to provide backup power during electricity outages and for off grid remote locations. While our competitors provided and continue to provide legacy AC generators with DC conversion devices, we elected to invest significant time and capital in the research and development of products with a lowest cost of ownership. Certification of our products by Tier-1 telecommunications customers was time intensive and takes upwards of three years of field trials to receive final product acceptance. This thorough approach to vendor selection reduces the number of vendors selected by our telecommunications customers and has dramatically reduced the number of competitors in the U.S. markets. Currently, a significant percentage of our U.S. sales are to national Tier-1 telecommunications providers with multiple facilities. Since 2021, we increased our efforts to diversify our sales efforts to include Tier-2 telecommunications customers, off-grid remote area products and residential charging. In the international markets, our customers are regional Tier-1 telecommunications providers. We have established offices in emerging markets and currently have presence in Australia, Poland, Romania, and South Africa. Our sales team directly markets to Tier-1 telecommunications companies in their regions.

- **Experienced Management Team.** Our Chief Executive Officer and key engineers combined have over 100 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 our management's abilities and our engineering aptitude can be found in our successful track record over the last 40 years of executing research, design and engineering contracts.

Business Strategy

For the past three decades we have been promoting the use of DC power systems where DC power is the primary power in use. The telecommunications tower application is the largest user of DC power, in both grid and off-grid connected sites. Furthermore, we believe that 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 over 40 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 sources within the telecommunications industry. Because of the increased power outages during emergencies and natural disasters, existing and new wireless installations need to be upgraded to provide reliable operations during times of emergency. The primary elements of our business strategy include:

- **Further develop U.S. mobile telecommunications market.** We continue to invest capital into our sales and marketing efforts to demonstrate our DC power systems to the top Tier-1 wireless telecommunications providers and more than 500 small wireless and cable operators in the U.S. Our goal is to further diversify our customer base. We believe the rapid expansion of 5G will result in an increase in demand for back-up power generators and that our new LPG / natural gas DC power systems will allow us to better compete on an economic basis with our competitors that provide AC power systems.
- **Expand global sales to bad-grid or off-grid markets.** The increase in telecommunications subscriber base in rural and remote areas in emerging countries has increased the deployment of telecommunications sites in off-grid and bad-grid areas. During 2024, approximately 78% of our DC power systems sales were to U.S. telecommunications customers, which in 2023 represented less than 25% of the total global telecommunications market according to an industry report by Grand View Research Inc. We believe that the lack of a stable electric infrastructure in rural regions of many developing nations provides significant opportunity for our products in both off-grid and bad-grid location.
- **Further develop our new LPG and natural gas DC power systems.** With the increased growth in off-grid and bad-grid telecommunications sites, emissions generated by telecommunications towers is beginning to be a major contributor of pollution and greenhouse gases. Since 2019, we have developed lower emission LPG and natural gas DC power generators for use in rural off-grid and bad-grid sites. We initiated this development by partnering with world's largest natural gas engine manufacturer, Toyota Engines, located in Japan. Subsequently, we integrated engine control systems utilizing control technology from Bosch, located in Germany, and concluded by receiving certification from the EPA in December 2019 to sell our new product in all 50 states in the U.S. Upon certification, we began marketing this low emission natural gas solution to telecommunications customers worldwide and in the midst of the COVID-19 pandemic we secured several orders for natural gas configured backup and prime power applications. During 2020, we began shipments of our DC natural gas generators to several domestic and international Tier-1 telecommunications customers. In 2024, we began to expand our sales and service network for our natural gas generators, targeting Tier-1 telecommunications customers in emerging nations with solar hybrid natural gas generators for off-grid markets.

- **Expand renewable solar energy product offerings.** Developing regions like Africa, Southeast Asia and Latin America lack an electric utility infrastructure to support the installation of grid connected telecommunications towers in remote areas. Due to these challenges, telecommunications companies are installing hybrid power generation systems that consist of solar panels, batteries and fossil fuel powered generators. Installing fuel inefficient generators combined with solar and batteries without any integration is proving to be cost prohibitive. Several local government programs to subsidize the adoption of solar and battery storage along with generators in off-grid telecommunications towers have failed due to lack of quality components and integration. We believe our hybrid systems using natural gas fuel powered generators integrated with solar and battery storage offer an ideal solution for this market.

Our Technologies

Starting in 1979, Polar began manufacturing and exporting solar PV vaccine refrigerator/freezers as part of the WHO Cold Chain projects. We developed solar refrigeration and air conditioning systems that operated directly with DC batteries, along with solar photovoltaic charge controls. Our DC power and refrigeration technologies drew the attention of various military projects. We manufactured packaged remote home power systems for Arizona Public Service who in turn provided them to remote customers. The use of remote home power systems drew our attention to the need for DC generator sets.

In the early 1990's, we began introducing DC generators 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, battlefield 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.

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.

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 incorporating either 6 or 3 phases. 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 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 battery management system, or 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 Southeast 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 2024, we plan to continue our research and development efforts to further enhance these integrations for remote telecommunications towers in Southeast 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.

In 2018, we introduced our Toyota natural gas / propane engine across our product line. The Toyota product is a more advanced engine used in heat pump applications. We have negotiated a supply agreement with Toyota for the engine and with Bosch for the ignition control. In December 2019, we received our certificate of conformity from the EPA. These new generators provide power outputs between 5 kW to 15 kW and incorporate a 60,000- to 90,000-hour life engine with our proprietary control system. We are presently marketing these stationary generators within the telecommunications, commercial and residential markets.

In 2021, we began development of a higher power natural gas-powered DC backup power system utilizing larger engines and improved emission control systems. The implementation of 5G networks by Tier-1 telecommunication customers currently have significantly higher power requirements at cell sites than the previous 4G networks. In addition, use of 5G technology in IoT, video streaming, and data analytics applications requires cell sites to be operational 100% of the time which, in turn, increases the demand for reliable and fuel-efficient power generation backup systems. We believe increased power usage of 5G networks and higher fuel prices enhances market opportunities for our fuel-efficient DC power systems as compared to lower efficiency AC power systems.

In March 2022, we received our EPA certification on our 4Y Toyota engine, which is a larger engine model for used on our 20 to 30 kW DC power systems. We believe being an approved supplier for the three largest Tier-1 telecommunication providers in the U.S. provides us with additional growth opportunities during the current rapid 5G expansion in the largest urban centers in the U.S.

In June 2024, we introduced MCS2020 a remote monitoring technology for our DC generators where we can remotely monitor generator performance, diagnose failures, monitor maintenance records and dispatch local technicians to maintain or repair. This proprietary technology also allows us to integrate other systems such as solar, wind, batteries, and additional DC generators into a single platform allowing operator to use the most efficient platform based on demand and environmental conditions. The MCS2020 allows us to connect multiple generators to a single platform where systems can be removed for refueling and maintenance without disrupting operations.

Products and Services

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 proprietary 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 4,300-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 telecommunications tower outdoor applications where DC loads and battery charging is required, generator fuel cost can account for more than 60% of the total operating costs. DC Hybrid systems typically include a DC generator and energy storage system to optimize operations.

In a remote prime power site fuel efficiency, maintenance cost and long life, are the competitive differentiators. Since 2018, we invested in testing and certifying LPG/NG engine manufactured by Toyota which provides over 90,000-hour life which is about four times longer than a non-Toyota equivalent diesel engine. In addition, this product has maintenance cycle every 4,500 hours where equivalent engines require maintenance every 200 to 500 hours.

Our Hybrid Systems include battery packs of varying chemistries; however, the market predominantly uses lithium batteries commonly used in electric vehicles. The ability to charge batteries at full power improves fuel efficiency, where charged batteries can then provide continuous or intermittent power without the need to power up the generator.

In 2024 we introduced a remote monitoring system MCS2020 that integrates our Supra controller, engine controller, battery management system and other ancillary components to optimize the fuel efficiency of the complete system. Remote off-grid and bad-grid used in continuous high load conditions also have redundant systems which allows operator to take primary system offline during maintenance and repairs. The MCS2020 control system provides ability to remotely monitor efficiency of each system, diagnose failures, optimize output where multiple redundant systems are available.

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 exceeding 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.

Our environmentally friendly solar hybrid power systems based on a combination of solar with LPG and propane power sources offer significant cost savings in capital expenditures and operating expenditures when compared to similar products offered by our competitors. Our solar hybrid power systems have been specifically designed to run in residential applications and provide power outputs between 5 kW to 22 kW and incorporate a 30,000- to 90,000-hour life engine with our proprietary control system. Our natural gas generators when integrated with battery storage and solar are ideal microgrids for off-grid and bad grid residential and commercial applications.

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 system MCS2020. 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.

Our MCS2020 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 utilize a nationwide network of dealers and service providers to perform installation and warranty services for our customers. Through our dealers 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. We use local regional sales managers in the U.S. market to demonstrate our products to Tier-1 telecommunications providers. 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.

The telecommunication market is our largest market generating 88% of annual sales of which a significant portion represents U.S. Tier-1 telecom operator. With over 75% of the telecommunications market outside U.S. we have concentrated our efforts in developing markets outside U.S. as long term strategy. Despite the lack of reliable electricity grid in international markets like Africa and Asia, telecom operators continue to build infrastructure using hybrid systems.

We established regional offices in Australia, Romania, South Africa and Poland to address global markets. During the past 3 years we have had some significant successes in international marketplace however capital constraints of customers have limited the scale of the deployment. Our DC Generators, Hybrid Generators are marketed directly to end customers, however the aftermarket parts in some regions are sold through dealers. 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. 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 service our products through various service partners that provide initial product installation and maintenance services. The promotion of our natural gas powered Mini-Grid product, targeting off-grid and bad grid rural areas, will be undertaken by certified independent dealers. We believe expansion of our dealer network will also provide additional opportunities for our DC power systems in the U.S. and other countries.

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, Romania, and South Africa to assist in regional training of technicians and also in product demonstrations.

Competition

Within the telecommunications power generation market, we compete with a few manufacturers of AC and DC generators that offer generators with an output power of 5 kW to 50 kW. In the U.S. market, our competitors are global manufacturers of AC generators designed primarily for the residential and industrial off-grid power markets. Internationally, our competitors include regional manufacturers of both AC and DC generators.

In the U.S. market, our competitors are large volume manufacturers of AC generators with a primary focus on emergency power backup generation for the residential marketplace. These AC generators are constructed using steel enclosures and are therefore heavier and can rust more easily in outdoor applications as compared to our products which generally have a smaller footprint and are constructed using aluminum enclosures. Due to the inherent design of AC motors, their units are approximately 40% larger in size than our DC generators. To monetize on our positives, we targeted telecommunications markets where generators are used to provide backup power during power outages. Due to the lighter weight and smaller size of our products as compared to AC products, we specifically target customers with the telecommunications towers located on rooftops in urban areas. We believe that the smaller size, lighter weight and higher fuel efficiency of our products are performance parameters that offset the lower price alternative of AC generators. In addition, we believe that our recently introduced long-life (90,000 hours), natural gas-powered DC generator product line significantly increases our competitive advantage in densely populated urban markets.

Micro-grids and electric vehicle charging in remote areas that lack utility grids is developing as a new market for our products. During the past two years we have been successful in delivering initial test and evaluation units to these customers demonstrating fuel efficiency and low maintenance. As part of our diversification strategy, we believe these new products can be significant percentage of our sales during the next twelve months. These products combined with battery storage deliver intermittent or continuous power to small housing units or provide charging infrastructure for electric vehicles in remote locations where connection to grid is not cost effective.

Increased digitization of our lives has resulted in the need for more power usage in both residential and commercial applications. In the telecommunications tower market, the majority of the outdoor power needs are DC power since most components are DC powered. Historically, AC generator companies have utilized conversion technologies to convert AC output to DC output. This conversion results in an approximately 40% loss in energy. Meanwhile, our DC generators supply DC power directly to the telecommunications tower systems increasing the system's overall efficiency. These efficiencies are further enhanced in off-grid and bad-grid applications where more power is being used from the generators due to the lack of grid power.

Below are our primary competitors across these applications:

DC Power: 3Tech Corporate Limited, Ascot Industrial srl, Ausonia srl, and Controllis.

AC Power: Generac Power Systems, Inc., Kohler Co., Onan, FG Wilson and many other companies.

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. The primary focus of our research and development activities is 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. Over the years, we have expended significant resources in enhancing our system controls like our Supra Controller™ and BMS.

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. 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 with current applicable UL standards.

Our research and development efforts are key to meeting customer demand and changing power requirements. In 2024, we invested significant engineering resources in development of remote monitoring MCS2020 to remotely monitor and optimize efficiency of our systems and integrate them with other systems such as solar, wind, energy storage systems. During the year significant work was performed to develop electric vehicle charging system for remote locations and roadside assistance. This system is in its final stage of development and upon completion will be marketed to regions that lack electric infrastructure. In 2025, we plan to gradually increase our team of engineers and continue investing into new product development as part of our strategy to diversify our product lines.

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 adverse effect of component shortages in our business through detail material planning and by qualifying multiple vendor sources for key components and outside processes. We conduct supplier audits of all major suppliers for initial qualification and to ensure reliability, quality, and sustainability of critical components. To meet our customer demands, we forecast the supply of our long lead time items such as engines, castings and electronic components through use of sales forecasting tools and ERP system.

Our suppliers are extensively surveyed and audited; and field or process generated non-conformities communicated with our Suppliers to continuously improve quality. To improve our costs and deliveries, our ERP system invites for all qualified suppliers to participate in relevant bids to ensure best proposals are selected.

We actively source the global supply chain for key components to avoid or reduce the risk of having parts shortages that may cause interruptions to our operations or our ability to service customers. We have also experienced price increases on certain materials and freight services. Although we believe we can mitigate a portion of material price increases by passing through some cost increases to our customers, we believe a fair portion can be mitigated through increases in efficiency.

Quality Control

Our quality control is established to maintain the highest level of quality in the manufacturing of our DC power systems, spare parts, and services. The foundation of our quality control was initially set 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

The Company provides limited warranties for parts and labor at no cost to its customers within a specified time period after the sale. 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. Our warranties are of an assurance-type and come standard with all of our products to cover repair or replacement should a product not perform as expected. 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.

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 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.

Human Capital

Our experienced employees and management team are our most valuable resources, and we are committed to attracting, motivating, and retaining top professionals to service our customers. As of March 31, 2025, we had 82 full time employees, which included 75 employees in the U.S. and 5 employees outside the U.S. During 2024, we had a relatively low turnover rate, some of which is related to uncertain employment market and economic conditions. None of our employees are represented by labor unions. 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.

We believe our success is directly related to the satisfaction, growth, and development of our employees. We strive to offer a work environment where employee unique characteristics and opinions are valued and one that provides our employees the opportunities to use and augment their professional skills. To achieve our human capital goals, we intend to remain focused on providing our personnel with career development opportunities to expand our business within their areas of expertise and continue to provide our personnel with personal and professional growth. In addition to salaries, we also provide a 401(k)-retirement plan, healthcare and insurance benefits, health savings accounts, paid time off, and various services and tools to support our employees' health and wellness. Our leaders, managers, and eligible employees are provided an opportunity to participate in our stock option plans. We emphasize a number of measures and objectives in managing our human capital assets, including, among others, employee safety and wellness, talent acquisition and retention, employee engagement, development, and training, diversity and inclusion, and compensation and pay equity.

Employee Engagement, Development, and Training. We provide all employees with the opportunity to share their opinions and feedback on our culture which helps enhance the employee experience, promote employee retention, drive change, and leverage the overall success of our organization. We provide all employees a wide range of professional development experiences, both formal and informal, at all stages in their careers.

Diversity and Inclusion and Ethical Business Practices. We are committed to fostering work environments that value and promote diversity and inclusion, including our Diversity and Inclusion Program which focuses on initiatives to increase the diversity of our workforce and promote an environment of trust where employees feel safe to express their opinions and perspectives without fear of repercussion. This commitment includes providing equal access to, and participation in, equal employment opportunities, programs, and services without regard to race, religion, color, national origin, disability, sex, sexual orientation, gender identity, stereotypes or assumptions based thereon. We pride ourselves in the development and fair treatment of our workforce, including healthcare and benefit programs for our employees, equal employment hiring practices and policies, anti-harassment, workforce safety, and anti-retaliation policies. We welcome and celebrate our teams' differences, experiences, and beliefs, and we are investing in a more engaged, diverse, and inclusive workforce.

We foster a strong corporate culture that promotes high standards of ethics and compliance for our businesses, including policies that set forth principles to guide employee, officer, director, and vendor conduct, such as our Code of Business Conduct and Ethics. We maintain a whistleblower policy and anonymous hotline for the confidential reporting of any suspected policy violations or unethical business conduct on the part of our businesses, employees, officers, directors, or vendors and provide training and education to our global workforce with respect to our Code of Business Conduct and Ethics and anti-corruption and anti-bribery policies.

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 20,000 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.

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 us, 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

Going Concern

The Company's financial statements have been prepared under the assumption that the Company will continue as a going concern. For the year ended December 31, 2024, the Company recorded a net loss of \$4,677 and used cash in operations of \$536. These factors raise substantial doubt about the Company's ability to continue as a going concern within one year of the date that the financial statements are issued. In addition, the Company's independent registered public accounting firm, in their report on the Company's December 31, 2024, audited financial statements, raised substantial doubt about the Company's ability to continue as a going concern.

Our ability to continue as a going concern is dependent upon our ability to obtain additional financing, grow sales, drive further operating efficiencies, reduce expenditures, and ultimately, create profitable operations. Our ability to obtain additional financing in the debt and equity capital markets is subject to several factors, including market and economic conditions, our performance and investor sentiment with respect to us and our industry. The Company has taken action to improve its margins, reduce inventory and reduce overhead expenses. In the event that the Company does not generate sufficient cash flows from operations and is unable to obtain funding, the Company will be forced to delay, reduce, or eliminate some or all of its discretionary spending, which could adversely affect the Company's business prospects, ability to meet long-term liquidity needs or ability to continue operations.

The COVID-19 pandemic and recovery had a significant negative impact on our business, sales, results of operations and financial condition in 2020 to 2022, but to a lesser extent in 2023 and 2024.

The COVID-19 pandemic and recovery has had a widespread and detrimental effect on the global economy, particularly in the U.S. since 2020, but to a lesser extent in 2023 and 2024. The repercussions of COVID-19 and recovery is likely to continue to have, a material and substantial adverse impact on our results of operations, including a decrease in our sales and delays in sourcing raw materials from suppliers.

In addition, the COVID-19 pandemic and recovery adversely affected the economies and financial markets of many countries, which may affect our level of indebtedness, our need to generate sufficient cash flows to service our indebtedness and our ability to comply with the covenants contained in the agreements that govern our indebtedness. In the event of a sustained market deterioration and continued declines in net sales, and other repercussions of the COVID-19 pandemic and recovery, we may need additional liquidity. The need for additional liquidity may also be affected by the federal government's potential failure to raise the debt ceiling or correct a prolonged banking or financial crisis. Such disruptions may impact the broader capital markets, and in turn, may impact our ability to access those markets. We cannot provide any assurance that we will be able to obtain additional sources of financing or liquidity on acceptable terms, or at all.

The ultimate impact of the COVID-19 pandemic and recovery on our business and results of operations remains unknown and will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration and potential resurgence of COVID-19, repeat or cyclical outbreaks and any additional preventative and protective actions that governments, or we, or our customers, or our suppliers may direct, which may result in an extended period of continued business disruption and reduced operations. Any resulting financial impact cannot be reasonably estimated at this time, but we expect it will continue to have a material impact on our business, financial condition and results of operations.

Rising inflation in the economies in which we operate may adversely affect our operating margins and our results of operation.

In general, we believe that our results of operations are not dependent on moderate changes in the inflation rate. Historically, we have been able to manage the impacts of more significant changes in inflation rates through our customer relationships, customer agreements that may provide for price increases and continued focus on improvements of operational productivity. However, the current inflationary environment, we believe, has impacted the Company's business in 2023, to a lesser extent in 2024, and may continue to impact its business in 2025, including as a result of increased energy costs, increase materials costs due to higher tariffs on key components which may not be able to pass to customers as well as increasing wages in the labor markets in which we compete. Inflation could continue to pressure our margins in future periods. Adverse economic conditions resulting from inflationary pressures, U.S. Federal Reserve actions, geopolitical issues or otherwise are difficult to predict and may have a material adverse impact on our business, results of operations and financial condition.

Terrorist attacks and threats of war may impact all aspects of our operations, revenues, costs and stock price in unpredictable ways.

The impacts of war and other geopolitical events, including but not limited to Russia's invasion of Ukraine and the Hamas-Israel conflict and the resulting war, are difficult to predict. The resulting geopolitical uncertainty are likely to have a significant impact on the European Union, the United Kingdom and other countries, including the U.S. The threat that these military operations may expand beyond Ukraine, Israel, and the Gaza Strip may have a negative impact as well. Significant increases in the price of oil and natural gas have occurred and are likely to continue putting additional inflationary pressures on central banks, including Federal Reserve System (the "FRB"). It is possible that interest rate hikes by the FRB will continue to occur in 2025, but the amount, timing, and frequency of such increases are not fully known at this time. As a result of these conflicts, the threat of cyberattacks has increased which could affect banks in the U.S. and their customers. Additionally, the United States and European nations have imposed very significant financial sanctions on the Russian Federation, including targeted sanctions on Russian banks and wealthy individuals as well as halting certification of the Nord Stream 2 gas pipeline. They have denied Russian banks access the Society for Worldwide Interbank Financial Telecommunications or SWIFT which is expected to slow international trade and make such transactions costlier to accomplish which could also negatively affect banks in the U.S. and their customers. In response to the Russian military actions, many businesses headquartered in the Eurozone and the United States have stopped doing business with Russia, which may negatively affect the profitability of those companies. The international turmoil has already had and may continue to have a negative impact on the stock market generally and, in turn, on our stock price.

The continuation or escalation of events like the war in Russia-Ukraine war or the Hamas-Israel conflict may also disrupt business operations of our suppliers and/or customers, causing supply chain constraints or delayed spending by our customers. The full impact of the such events are not known at this time, but they could have a material adverse impact on our business, financial condition, results of operations, and stock price.

We have incurred significant losses in the past and we may incur losses in the future, which may hamper our operations and impede us from expanding our business.

We have incurred significant losses in the past. For the years ended December 31, 2024 and 2023, we incurred net losses of approximately \$4.1 million and \$6.5 million, respectively. For the year ended December 31, 2024, we realized a gross profit of approximately \$1.9 million, and for the year ended December 31, 2023, we realized a gross profit of approximately \$0.7 million. We may incur net and gross losses in the future. We expect to rely on cash on hand, cash, if any, generated from our operations, borrowing availability under our line of credit and proceeds from our future financing activities, if any, to fund all of the cash requirements of our business. Additional losses may hamper our operations and impede us from expanding our business.

We are dependent on, and derive substantially all of our revenue from, sales of our DC base power systems to one customer within the U.S. telecommunications market. Our efforts to expand our customer base, 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 one Tier-1 customer within the telecommunications market. The volume of sales to them may vary significantly from year to year. Any factor adversely affecting sales of these power systems to this customer 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.

In addition, 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 our results of operation and financial condition. Our plans to invest in the development of electric vehicle chargers, residential and commercial power products and higher capacity DC hybrid solar systems 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, many of our customers often require a significant technical review, tests and evaluations over long periods of time (i.e., three to twenty-four months), 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 and the effects of the COVID-19 pandemic and recovery on our ability to demonstrate our products to current and potential customers 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 profits.

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 current high concentration of our sales within the telecommunications market could result in a significant reduction in sales and negatively affect our profitability if demand for our DC power systems declines within this market before we are able to make significant inroads with our diversification of markets and customers.

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

We face inventory risk and may be required to write-off additional inventory in the future.

We value inventories at the lower of cost or net realizable value. If the estimated net realizable value is determined to be less than the recorded cost of the inventory, a provision is made to reduce the carrying amount of the inventory item to the lower net realizable value determination. Determination of the net realizable value may be complex, and therefore, requires management to make assumptions and to apply a high degree of judgment. In order for management to make the appropriate determination of net realizable value, the following items are commonly considered: inventory turnover statistics, inventory quantities on hand in our facilities, unfilled customer order quantities, forecasted consumer demand, current prices, competitive pricing, seasonality factors, consumer trends and performance of similar products or accessories. Subsequent changes in facts or circumstances do not result in the reversal of previously recorded write-downs.

If our estimates regarding net realizable value are inaccurate, including our estimates regarding our inventory, or changes in customer demand for our products in an unforeseen manner, we may experience additional write-downs of our inventory.

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, engines, electronics, 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 or other reasons may significantly increase the timing of receipt of such materials and/or increase the material costs of our products. For example, 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 are disrupted or our lead times extended, our business, results of operations or financial condition could be materially adversely affected.

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 grow our revenues 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 AC power systems. If we are unable to fulfill the 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 impact of a global crisis such as the COVID-19 pandemic on the global markets;
- 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 that achieve market acceptance, our growth prospects, operating results and competitive position could be adversely affected.

Natural disasters and other events beyond our control could materially adversely affect us.

Natural disasters or other catastrophic events, including the COVID-19 pandemic and recovery, may cause damage or disruption to our operations, international commerce and the global economy, and thus could have a strong negative effect on us. Our business operations are subject to interruption by natural disasters, fire, power shortages, pandemics and other events beyond our control. Although we maintain crisis management and disaster response plans, such events could make it difficult or impossible for us to deliver our services to our customers and could decrease demand for our services.

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 key engine suppliers, Yanmar Engines Company, Perkins Engines Company Ltd, and Toyota Corporation. Engines from Yanmar, Perkins, and Toyota represented approximately 88%, 3%, and 1% of our total engines sold as a component of our DC power systems during 2024, respectively, and represented approximately 62%, 26%, and less than 2% of our total engines sold as components of our DC power systems during 2023, respectively. We also use engines from Isuzu, Kubota and, to a lesser extent, Volvo Penta. In March 2023, we received EPA certification on our 4Y Toyota engine, which is a larger engine model for used on our 20 to 30 kW DC power systems. 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, or the supply chain is interrupted or delayed as a result of a pandemic or unprecedented event, 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 two 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 two production facilities located in Gardena, California. Any prolonged disruption in the operations of our manufacturing and assembly facilities, whether due to the COVID-19 pandemic and recovery, equipment or information technology infrastructure failure, labor difficulties, destruction of or damage to one or both of these facilities 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. During 2024, and 2023, our sales to international customers accounted for 13% and 21%, respectively, of total revenue. We continue to expect that a significant portion of our future revenues will be from international sales to customers in less developed or developing countries. As a result, the occurrence of any international, political, economic, or geographic event including changes in trade policy, tariffs, and/or export/import laws and regulations could result in a significant increase in the cost of materials used in our production and/or a significant decline in revenue.

During the first quarter of 2025, the U.S. government imposed tariffs on many products imported from China, Canada, and Mexico. It has communicated to levy tariffs on additional countries in April 2025. Many of the countries on which tariffs have been levied have imposed retaliatory tariffs or threatened to impose tariffs on goods they import from the U.S. While we obtain most of our raw materials from domestic sources, many of our suppliers source materials from various countries and may pass tariffs they pay on to us. As of the date of this report, we have not been materially affected by tariffs, but it is difficult to determine the impact of these tariffs on our business for the rest of 2025 and beyond.

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:

- the impact of a global crisis such as the COVID-19 pandemic on the global markets and the power generation market within the international telecommunications markets;
- 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.

Cyberattacks through security vulnerabilities could lead to disruption of business, reduced revenue, increased costs, liability claims, or harm to our reputation or competitive position.

Security vulnerabilities may arise from our hardware, software, employees, contractors or policies we have deployed, which may result in external parties gaining access to our networks, data centers, cloud data centers, corporate computers, manufacturing systems, and/or access to accounts we have at our suppliers, vendors, and customers. External parties may gain access to our data or our customers' data, or attack the networks causing denial of service or attempt to hold our data or systems in ransom. The vulnerability could be caused by inadequate account security practices such as failure to timely remove employee access when terminated. To mitigate these security issues, we have implemented measures throughout our organization, including firewalls, backups, encryption, employee information technology policies and user account policies. However, there can be no assurance these measures will be sufficient to avoid cyberattacks. If any of these types of security breaches were to occur and we were unable to protect sensitive data, our relationships with our business partners and customers could be materially damaged, our reputation could be materially harmed, and we could be exposed to a risk of litigation and possible significant liability.

Further, if we fail to adequately maintain our information technology infrastructure, we may have outages and data loss. Excessive outages may affect our ability to timely and efficiently deliver products to customers or develop new products. Such disruptions and data loss may adversely impact our ability to fulfill orders and interrupt other processes. Delayed sales or lost customers resulting from these disruptions could adversely affect our financial results, stock price and reputation.

The State of California enacted the California Consumer Privacy Act of 2018, or CCPA, effective on January 1, 2020. Our and our business partners' or contractors' failure to fully comply with the CCPA and other laws could lead to significant fines and require onerous corrective action. In addition, data security breaches experienced by us or our business partners or contractors could result in the loss of trade secrets or other intellectual property, public disclosure of sensitive commercial data, and the exposure of personally identifiable information (including sensitive personal information) of our employees, customers, suppliers, contractors and others.

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

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 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 significant percentage 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 32% 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 may 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.

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 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.

A decline in the price of our common stock could affect our ability to raise further working capital, which could adversely impact our ability to continue operations.

A prolonged decline in the price of our common stock could result in a reduction in the liquidity of our common stock and a reduction in our ability to raise capital. We may attempt to acquire a significant portion of the funds we need in order to conduct our planned operations through the sale of equity securities; thus, a decline in the price of our common stock could be detrimental to our liquidity and our operations because the decline may adversely affect investors' desire to invest in our securities. If we are unable to raise the funds we require for all of our planned operations, we may be forced to reallocate funds from other planned uses and may suffer a significant negative effect on our business plan and operations, including our ability to develop new products or services and continue our current operations. As a result, our business may suffer, and we may be forced to reduce or discontinue operations. We also might not be able to meet our financial obligations if we cannot raise enough funds through the sale of our common stock and we may be forced to reduce or discontinue operations.

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.

Our failure to satisfy certain listing requirements may result in our common stock being delisted from the Nasdaq Capital Market, which may make it more difficult for our shareholders to sell shares of our common stock.

Our common stock is listed on Nasdaq. Nasdaq has several quantitative and qualitative requirements companies must comply with to maintain this listing, including a \$1.00 minimum bid price per share (the "Bid Price Rule"). On November 24, 2023, we received a deficiency letter from the Listing Qualifications Department of The Nasdaq Stock Market ("Nasdaq") indicating that our common stock is subject to potential delisting from the Nasdaq because for a period of 30 consecutive business days, the bid price of our common stock has closed below the minimum \$1.00 per share requirement for continued inclusion under Nasdaq Marketplace Rule 5550(a)(2) (the "Bid Price Rule"). The Nasdaq deficiency letter has no immediate effect on the listing of our common stock, and our common stock continues to trade on The Nasdaq Capital Market under the symbol "POLA" at this time.

The Nasdaq notice indicated that, in accordance with Nasdaq Marketplace Rule 5810(c)(3)(A), we will be provided 180 calendar days, or until May 22, 2024, to regain compliance. On May 17, 2024, we submitted a request for an extension of time to meet compliance, and on May 30, 2024, we received a Nasdaq extension letter granting us until November 18, 2024 to meet compliance.

On November 11, 2024, we held our annual meeting of stockholders. At the meeting, our stockholders approved an amendment to our Certificate of Incorporation, in substantially the form attached to the proxy statement as Appendix A to allow the Board of Directors to effect, in its discretion prior to December 31, 2024, a reverse stock split of all of our issued and outstanding common stock, par value \$0.0001 per share, at a specific ratio, ranging from one-for-three (1:3) to one-for-twenty (1:20), with the timing and ratio to be determined by the Board if effected. On November 11, 2024, our Board approved a reverse stock split at a ratio of one-for-seven (1:7) (the "Reverse Stock Split"). On November 18, 2024, the Company effected a 1:7 Reverse Stock Split of its shares of common stock.

On November 19, 2024, the Company received a new letter from Nasdaq notifying the Company that, as a result of the Company's failure to regain compliance with the Bid Price Rule by November 18, 2024, Nasdaq determined to delist the Company's common stock from the Nasdaq Capital Market. On November 26, 2024, the Company submitted a hearing request to a hearing panel to appeal Nasdaq's determination, and the hearing request stayed the suspension of the Company's common stock. The hearing was scheduled to occur on January 23, 2025.

On December 23, 2024, the Company received a letter from Nasdaq informing the Company that the Company regained compliance with the Bid Price Rule and that the Company is therefore in compliance with the Nasdaq's listing requirements. Accordingly, the hearing was cancelled and the Company's securities continue to be listed and traded on the Nasdaq Capital Market. On December 27, 2024, the Company issued a press release announcing that it regained compliance with the Bid Price Rule.

On December 18, 2023, Peter Gross, a member of the Board of Directors of the Company, resigned as a member of the Board of Directors of the Company. Mr. Gross, an independent director, served as a member of the audit committee, chair of the compensation committee and chair of the nominating and corporate governance committee of the Board at the time of his resignation. On January 5, 2024, the Company received a notification letter from Nasdaq that due to Mr. Gross' resignation, the Company is no longer in compliance with Nasdaq Listing Rule 5605. Pursuant to Nasdaq Listing Rule 5605(c)(4), the Company is entitled to a cure period to regain compliance (i) until the earlier of the Company's next annual shareholders' meeting or December 18, 2024; or (ii) if the next annual shareholders' meeting is held before June 17, 2024, then the Company must evidence compliance no later than June 17, 2024.

Effective July 25, 2024, we appointed Michael Field as a new member of the Board of Directors of the Company and appointed him, as an independent director, to serve as a member of the audit committee, chair of the compensation committee and chair of the nominating and corporate governance committee of the Board. By admitting Michael Field to the Board of Directors, we are back in compliance with Nasdaq Listing Rule 5605 effective July 25, 2024.

While we have been back in compliance with Nasdaq Listing Rules 5550(a)(2) and 5605, there can be no assurance that we will continue to be in compliance with Nasdaq Listing Rule 5550(a)(2), Rule 5605 or other Nasdaq listing rules. If the stock is delisted, we may trade on the over-the-counter market, or even in the pink sheets, which would significantly decrease the liquidity of an investment in our common stock.

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, as amended (the “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 32% 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 acquirers 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 us. 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.

For the avoidance of doubt, the exclusive forum provision described above does not apply to any claims arising under the Securities Act or the Exchange Act. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder, and Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder.

The choice of forum provision in our bylaws may limit our stockholders' ability to bring a claim in a judicial forum that they find favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents even though an action, if successful, might benefit our stockholders. The applicable courts may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to us than to our stockholders. With respect to the provision making the Delaware Court of Chancery the sole and exclusive forum for certain types of actions, stockholders who do bring a claim in the Delaware Court of Chancery could face additional litigation costs in pursuing any such claim, particularly if they do not reside in or near Delaware. Finally, if a court were to find this provision of our bylaws 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 have a material adverse effect on us.

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 a "non-accelerated filer" under SEC rules, 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. 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 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 250,627 shares of our common stock. As of December 31, 2024, we had granted options to purchase an aggregate of 20,002 shares of common stock and issued 23,049 shares of common stock as stock-based compensation to officers, employees and consultants under the 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.

Item 1B. Unresolved Staff Comments.

None.

Item 1C. Cybersecurity.

It is crucial for our business to have precise equipment and open lines of communication. A data breach can disrupt both of these factors, which can result in significant disruptions across of our operations. While we have not had a material cybersecurity incident impact our operations, we face various cyber and other security threats, including attempts to gain unauthorized access to sensitive information and networks; employee threats; virtual and cyber threats to our directors, officers, and employees; threats to the security of our facilities and infrastructure; and threats from terrorist acts or other acts of aggression. Our customers and vendors face similar threats. We utilize internal and external independent controls to monitor and mitigate the risk of these threats, including an outside independent Cybersecurity and Information Technology consultant. We also have a training system in place for our employees.

The impact of potential cybersecurity threats is difficult to predict, but one or more of them could result in the loss of information or capabilities, harm to individuals or property, damage to our reputation, loss of business, regulatory actions, and potential liability, any of which could have a material adverse effect on our financial position, results of operations and/or cash flows. These threats could lead to losses of sensitive information or capabilities, harm to personnel, infrastructure, or products, and/or damage to our reputation as well as our vendor's ability to perform on our contracts.

Effective incident response involves every part of our organization, including IT teams, legal, technical support, human resources, corporate communications, and business operations. Our Board of Directors and executive management oversee all business, property and affairs of the Company, including cybersecurity risks. Our management keep the members of the Board informed of our business through discussions at Board meetings.

Item 2. Properties.

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 manufacturing facility and a 20,000 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.”

As of March 31, 2025, we had 2,511,532 shares of common stock outstanding held of record by approximately 22 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.

Recent Sales of Unregistered Securities

None.

Item 6. [RESERVED].

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 generators, renewable energy and cooling systems for applications primarily in the telecommunications market and, to a lesser extent, in other markets, including military, electric vehicle charging, marine and industrial. We are continuously diversifying our customer base and are selling our products into non-telecommunication markets and applications at an increasing rate.

Within the various markets we service, 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).

Serving these various markets, we offer the following three configurations of our DC power systems, with output power ranging from 5 kW to 50 kW:

- **DC base power systems.** These stationary 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 battery management system into our standard DC power systems.
- **DC solar hybrid power systems.** These stationary systems incorporate photovoltaic and other sources of renewable energy into our DC hybrid power system.
- **Mobile power systems.** These stationary 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, LPG / propane and renewable formats, with diesel, natural gas and propane gas being the predominate formats.

During the years ended December 31, 2024 and 2023, 88% and 95%, respectively, of our total net sales were within the telecommunications market. In 2024, our two largest customers represented 48% and 14% of our total net sales, respectively, one being a Tier-1 telecommunications customer in the U.S. and one being a telecommunications customer outside the U.S. In 2023, our two largest customers represented 50% and 18% of our total net sales, respectively, one being a Tier-1 telecommunications customer in the U.S. and one being a telecommunications customer outside the U.S. There was no other revenue from customers in excess of 10% of total net sales in either period. During those periods, the majority of our sales were of our DC base powers systems. During 2024 and 2023, sales to international customers accounted for 13% and 21% of total revenue, respectively. Sales to military customers during 2024 and 2023 accounted for 8% and 3% of total revenues, respectively. During 2024 and 2023, sales to the marine and other markets accounted for 4% and 2% of total revenue, respectively.

We launched our prime power DC generators incorporating the Toyota IKS engines optimized for propane, natural gas, and extremely long operational life. We believe that with the increasing installation restrictions on small diesel engines along with their limited availability due to stringent EPA regulations will force a change to natural gas and propane (LPG) generators. LPG and natural gas are lower in cost than diesel fuel in many areas throughout the world. Our new LPG and natural gas generators will provide strong opportunities for growth and diversification in line with our long-term plan.

At the international level, we have several telecommunications customers in the south pacific region purchasing our DC generators to develop the telecommunications infrastructure in this region. We believe the implementation and ongoing development of 5G networks along with programs to develop the telecommunications infrastructure in rural and underdeveloped countries will continue to fuel our growth in the telecommunications market over the next five to ten years.

In May 2023, we announced plans to expand our mobile offerings by upgrading our mobile CHAdeMO EV chargers to the universal combined charging system standard to reach the mobile EV charging market. Mobile EV chargers are used for emergency roadside service providing a fast-charging solution for EVs that have run out of charge before reaching a stationary charging facility. During second half of 2024, we have successfully tested our demonstrator model on several platforms and made appropriate improvements and changes. We believe this configuration of remote mobile electric vehicle charger is just an initial model and based on power and fuel needs will result in various additional configurations.

We also continue to market our DC generators for the military, advanced mobility and marine markets as part of our ongoing customer diversification strategy. The military's increasing use of robotics, drones, and computerization in the field is driving the demand for battery charging with DC generators. Military sales are advantageous because of their long-term contracts and they tend to cover the cost of product development.

We expect that opportunities in the bad-grid (i.e., areas where wireless towers are connected to an electrical grid that loses power for more than eight hours), and off-grid (i.e., areas where wireless towers are not connected to an electrical grid) applications, which include telecommunications towers, commercial and residential backup power, electric vehicle charging, "mini-grid" and various other power applications, will help to expand the market for our natural gas/LPG (propane) product lines domestically and internationally. In 2024, we demonstrated a microgrid product that can provide 24/7 electric power to a commercial facility. This project was funded by UNHCR a United Nations organization. The product included DC generator, battery storage, AC inverter, solar charge controller and remote monitoring in a single container which can be delivered to any remote location to provide power. We believe this product in its current configuration can serve mid-level micro grid needs in residential and commercial areas. We plan to develop new configurations of DC power system, battery storage and solar products to optimize the match between our solutions and various application needs.

Critical Accounting Policies

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. We recognize revenue in accordance with Financial Accounting Standards Board Accounting Standards Codification 606, *Revenue from Contracts with Customers* (“ASC 606”). ASC 606 requires entities to recognize revenue through the application of a five-step model, which includes: identification of the contract; identification of the performance obligations; determination of the transaction price; allocation of the transaction price to the performance obligations; and recognition of revenue as the entity satisfies the performance obligations.

Substantially all of our revenue is derived from product sales. Product 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. 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.

We also recognize revenue from the rental of equipment. Our rental revenues have not been significant to date and have accounted for less than one percent of total revenues for the years ended December 31, 2024 and 2023.

Warranty Costs. We provide limited warranties for parts and labor at no cost to our customers within a specified time period after the sale. 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. Our warranties are of an assurance-type and come standard with all of our products to cover repair or replacement should product not perform as expected. 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.

Inventory. Inventories are stated at the lower of cost or net realizable value, with cost determined on a first-in, first-out (“FIFO”) basis. We record adjustments to our inventory based on an estimated forecast of the inventory demand, taking into consideration, among others, inventory turnover, inventory quantities on hand, unfilled customer order quantities, forecasted demand, current prices, competitive pricing, and trends and performance of similar products. If the estimated net realizable value is determined to be less than the recorded cost of the inventory, the difference is recognized as a loss in the period in which it occurs. Once inventory has been written down, it creates a new cost basis for inventory that may not subsequently be written up.

Effects of Inflation

The impact of inflation and changing prices during 2024 has not been significant on the financial condition or results of operations of our company. Rapid changes in the global economy may cause significant spikes in inflation which may have an impact in our financial condition during 2025 and beyond. Because some of our contracts are at a fixed price, we face the risk that cost overruns or inflation may exceed, erode or eliminate our expected profit margin, or cause us to record a loss on certain projects. We are taking actions to manage the potential impacts of these matters and we will continue to assess the actual and expected impacts and the need for further action.

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-7 of this Annual Report on Form 10-K for management’s discussion as to the impact of recent accounting pronouncements.

Financial Performance Summary – Year Ended December 31, 2024

Our net sales for the year ended December 31, 2024, were \$13,970, as compared to \$15,293 for the year ended December 31, 2023. We reported a net loss of \$4,677 for 2024, as compared to net loss of \$6,548 for 2023. Cost of sales includes inventory write-downs of \$900 in 2024, and \$450 in 2023, to adjust inventory to net realizable value.

During 2024, we saw significant volatility in revenue primarily from our largest customer which greatly affected overall performance. We believe the drop in sales is attributed to excess inventory at customer warehouse collected during COVID-19 and customer concerted effort to reduce inventory. We believe the excess inventory has largely been reduced and anticipate normalization in purchases during second half of 2025. We reached profitability in the second and third quarters of the year with gross margins at 39% and 29%, respectively. We experienced net losses and negative margins in the first and fourth quarter. We believe economic and geopolitical factors continue to influence our customers’ buying patterns.

During 2024, sales to our customers in the U.S. were \$12,108, or 87% of total net sales, as compared to 79% in 2023. During 2024, our largest customer represented 48% of our total net sales, as compared to 50% in 2023. Our international sales were \$1,862, or 13% of total net sales in 2024, as compared to \$3,216, or 21%, during 2023.

Our sales backlog as of December 31, 2024, was \$1,306, with 53% of that amount being attributable to our largest U.S. telecommunications customer, 3% attributed to other telecommunications customers, 36% to customers in the military markets, and 9% to customers in marine and other markets. The Company expects to complete shipment of these orders within the next six to twelve months.

We plan to continue to market our products globally and expand our customer base in all market segments. We plan to continually improve our inventory turns to generate cash flow from operations combined with austerity measures on non-essentials overhead to manage cash flow while sales improves. During 2024, we successfully reduced overhead expenses by \$996 to improve cash generated through operations. We plan to continue take proactive steps to manage our operations and mitigate the financial impacts of higher costs, supply chain issues, and geopolitical factors. We have \$12.9 million in inventory and completed updating our manufacturing facilities to accommodate three to four times the annual revenue of 2024. However, the full impact on our financial and operating performance of these factors will depend significantly on the duration and severity of these factors, the actions taken to mitigate their impact, disruption to our supply chain, and the pace with which our clients return to more normalized purchasing behavior, among others factors beyond our knowledge or control. See “Risk Factors” commencing on page 17 of this Annual Report on Form 10-K for additional considerations.

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, 2024 and 2023 (in thousands)

	Year Ended December 31,		Dollar Variance Favorable (Unfavorable)	Percentage Variance Favorable (Unfavorable)	Results as a Percentage of Net Revenues for the Year Ended December 31,	
	2024	2023			2024	2023
Net sales	\$ 13,970	\$ 15,293	\$ (1,323)	(9)%	100.0%	100.0%
Cost of sales (includes inventory write-downs of \$900 and \$450, respectively)	12,656	14,598	1,942	13%	90.6%	95.5%
Gross profit	1,314	695	619	89%	9.4%	4.5%
Sales and marketing expenses	1,010	1,172	162	14%	7.2%	7.7%
Research and development expenses	771	1,222	451	37%	5.5%	8.0%
General and administrative expenses	3,908	4,291	383	9%	28.0%	28.1%
Total operating expenses	5,689	6,685	996	15%	40.7%	43.7%
Loss from operations	(4,375)	(5,990)	1,615	(27)%	(31.3)%	(39.2)%
Interest and finance costs	(649)	(559)	(90)	16%	(4.6)%	(3.7)%
Other income (expense), net	347	1	346	34600%	2.5%	0.0%
Loss before income taxes	(4,677)	(6,548)	1,871	(29)%	(33.5)%	(42.8)%
Income tax	—	—	—	—	—	—
Net loss	\$ (4,677)	\$ (6,548)	\$ 1,871	(29)%	(33.5)%	(42.8)%

Net Sales. Net sales decreased by \$1,323, or 9%, to \$13,970 for the year ended December 31, 2024, as compared to \$15,293 for the year ended December 31, 2023. The decrease in net sales is primarily due to a decrease in deliveries of our DC power generators to our largest telecommunications customer in the U.S.

During 2024, revenue from telecommunications customers accounted for 88% of total net sales, as compared to 95% of total net sales during 2023. Our two largest customers represented 48% and 14% of our total net sales in 2024, as compared to 50% and 18% in 2023. Our largest customer in each year was a Tier-1 telecommunications customer in the U.S., and our second largest customer in each year was a telecommunications customer outside the U.S. There was no other revenue from customers in excess of 10% of total net sales in either period.

During 2024 and 2023, sales to international customers accounted for 13% and 21% of total revenue, respectively. Sales to military customers during 2024 and 2023 accounted for 8% and 3% of total revenues, respectively. Sales to marine and other markets during 2024 and 2023 accounted for 4% and 2% of total revenue, respectively. Most of our sales were of our DC base powers systems during the two years.

Cost of Sales. Cost of sales decreased by \$1,942 or 13%, to \$12,656 during 2024, compared to \$14,598 during 2023. Cost of sales as a percentage of net sales decreased from 95.5% in 2023 to 90.6% in 2024 primarily as a result of a decrease in factory overhead absorption as compared to the same period in 2023. We believe we can achieve significant reductions in the cost of sales in 2025 as a percentage of net sales as volumes in production increase. Cost of sales includes inventory write-downs of \$900 in 2024, and \$450 in 2023, to adjust inventory to net realizable value.

Gross Profit. We recognized a gross profit of \$1,314 during 2024, as compared to a gross profit of \$695 during 2023, which represents an increase in gross profit of \$619 or 89%. Gross profit as a percentage of net sales increased to 9.4% in 2024, as compared to 4.5% in 2023. The increase in gross profit during 2024 was primarily because of improved labor efficiencies in manufacturing resulting from higher production volumes primarily during the second and third quarters of 2024.

Sales and Marketing Expenses. Sales and marketing expenses decreased \$162 to \$1,010 during 2024, as compared to \$1,172 during 2023. The decrease was attributable to a slight decrease in sales support staff during 2024 as compared the same period in 2023. We plan to increase our sales force and increase our marketing and tradeshow activities in 2025 to support our diversification strategy and expand our customer base in all market segments.

Research and Development Expenses. During 2024, research and development expenses decreased by \$451 to \$771, as compared to \$1,222 during 2023. The decrease in 2024 is attributed to a decrease in engineering staff during 2024 as compared to 2023. Our research and development efforts during 2024 primarily focused on product customization on new customers orders, our mobile EV chargers, and solar hybrid power systems. We continue to search for qualified engineers to join our engineering team and to support our customer diversification efforts.

General and Administrative Expenses. Our general and administrative expenses decreased by \$383 to \$3,908 during 2024, as compared to \$4,291 during 2023. The decrease in general and administrative expenses during 2024 was primarily due a decrease in the number of general and administrative staff during 2024, as compared to 2023.

Interest and Finance Costs. Our interest expense was \$649 in 2024, as compared to \$559 in 2023. Our interest expense is primarily from borrowings from our credit facility.

Net Loss. As a result of the factors identified above, we generated a net loss of \$4,677, or (\$1.86) per basic and diluted share, for 2024, as compared to net loss of \$6,548, or (\$3.45) per basic and diluted share, for 2023, a decrease loss of \$1,871.

Liquidity, Capital Resources and Going Concern

Going Concern

The Company's financial statements have been prepared under the assumption that the Company will continue as a going concern. For the year ended December 31, 2024, the Company recorded a net loss of \$4,677 and used cash in operations of \$536. These factors raise substantial doubt about the Company's ability to continue as a going concern within one year of the date that the financial statements are issued. In addition, the Company's independent registered public accounting firm, in their report on the Company's December 31, 2024, audited financial statements, raised substantial doubt about the Company's ability to continue as a going concern.

Our ability to continue as a going concern is dependent upon our ability to obtain additional financing, drive further operating efficiencies, reduce expenditures, and ultimately, create profitable operations. Our ability to obtain additional financing in the debt and equity capital markets is subject to several factors, including market and economic conditions, our performance and investor sentiment with respect to us and our industry. The Company has taken action to improve its margins, and is continuing to build a strong back log, and expects to continue investing in product development and sales and marketing activities. In the event that the Company does not generate sufficient cash flows from operations and is unable to obtain funding, the Company will be forced to delay, reduce, or eliminate some or all of its discretionary spending, which could adversely affect the Company's business prospects, ability to meet long-term liquidity needs or ability to continue operations.

Sources of Liquidity

During the year ended December 31, 2024, we funded our operations primarily from cash on hand. As of December 31, 2024, we had working capital of \$7,037, as compared to working capital of \$11,775 at December 31, 2023. This \$4,738 decrease in working capital is primarily attributable to a \$51 decrease in cash and cash equivalents resulting from net cash of \$536 used in operating activities, net cash used in investing activities of \$19 for the acquisition of new property and equipment, and net cash from financing activities of \$504 which includes net proceeds of \$559 from our credit facility.

On December 31, 2024, and December 31, 2023, our net trade receivables totaled \$2,153 and \$1,676, respectively. On December 31, 2024, \$1,771 (82%) represented the largest open customer account balance, while \$1,156 (69%) and \$264 (16%) represented the two largest open customer account balances on December 31, 2023.

At December 31, 2021, we recognized \$2,000 related to the ERC for salaries and benefits expenses incurred during 2021 resulting in a refundable tax credit. The ERC assist business owners and their employees by providing an incentive to keep workers on the payroll and eligible businesses received a tax credit for a percentage of each eligible employee's wage. In May 2024, the Company received \$2,000 of the ERC receivable.

Our available capital resources on December 31, 2024, consisted primarily of \$498 in cash and cash equivalents, as compared to \$549 as of December 31, 2023. We expect our future capital resources will consist primarily of cash on hand, cash generated by operations, drawdowns on our credit facility with Pinnacle Bank and future debt or equity financings, if any.

Credit Facility

Effective September 30, 2020, we entered into a Loan and Security Agreement, or Loan Agreement, with Pinnacle. The Loan Agreement was amended by the First Modification to Loan and Security Agreement on October 7, 2020. The Loan Agreement's initial term ended on September 30, 2022. On November 3, 2022, we executed the Second Modification to Loan and Security Agreement with Pinnacle for a two-year term with an expiration date of September 30, 2024. On September 23, 2024, the Loan and Security Agreement with Pinnacle was renewed for two years and expires September 30, 2026.

The Loan Agreement, provides for a revolving credit facility under which Pinnacle may, in its sole discretion upon our request, make advances to us in an amount, subject to certain limitations and adjustments, of up to (a) 85% of the aggregate net face amount of our accounts receivable and other contract rights and receivables, plus (b) the lesser of (i) 35% of the lower of cost or wholesale market value of certain of our inventory or (ii) \$2,500. The aggregate amount of the outstanding advances under the revolving credit facility were initially limited to \$4,000. On May 25, 2023, we executed the Fourth Modification to the Loan Agreement to amend the amount of available advances under the Loan Agreement such that the aggregate amount of the outstanding advances under the revolving credit facility may not be greater than \$6,000 and raised the concentration percentage applicable to certain Tier-1 telecommunication customers from 50% to 75% in the definition of eligible accounts.

On September 5, 2023, the Company entered into a Fifth Modification to the Loan Agreement under which the parties (a) agreed to amend the amount of available advances under the Loan Agreement such that the aggregate amount of the outstanding advances under the revolving credit facility may not be greater than seven and a half million dollars (\$7.5 million), (b) extended the standard of eligibility applicable to certain Tier-1 telecommunication customers from ninety (90) days to one hundred twenty (120) days of invoice date in the definition of eligible accounts, (c) increased the inventory advance rate from 35% to 40% of the aggregate eligible inventory value of eligible inventory, and (d) raised the inventory advance limit from two million dollars (\$2.0 million) to four million dollars (\$4.0 million).

Interest accrues on the daily balance at a rate of 1.25% above the prime rate, or the Standard Interest Rate, but in no event will the Standard Interest Rate be less than 3.75% per annum. Interest on the portion of the daily balance consisting of advances against inventory accrues interest at a rate of 2.25% above the prime rate per annum, or the Inventory Interest Rate, but in no event will the Inventory Interest Rate be less than 4.75% per annum. The Loan Agreement also contains a financial covenant requiring us to attain an effective tangible net worth, defined as our total assets, excluding all intangible assets, less our total liabilities plus loans to us from our officers, stockholders or employees that have been subordinated to our obligations to Pinnacle, greater than \$6,000 as determined by Pinnacle as of the end of each fiscal quarter.

We have an outstanding balance of \$4,797 under the Loan Agreement at December 31, 2024. During 2024, we advanced a net of \$559 under the Loan Agreement. As of December 31, 2024, we had availability under the Loan Agreement of \$654 and we believe that we are in compliance with the terms and conditions of the Loan Agreement.

Cash Flow

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

	Year Ended December 31,	
	2024	2023
Net Cash Provided By (Used In):		
Operating Activities	\$ (536)	\$ (3,430)
Investing Activities	\$ (19)	\$ (194)
Financing Activities	\$ 504	\$ 3,962
Net increase (decrease) in cash	\$ (51)	\$ 338

Operating Activities

Net cash used in operating activities for 2024 was \$536, as compared to \$3,430 for the same period in 2023. This decrease in net cash used in 2024 was primarily due to a net loss of \$4,677, a decrease in ERC receivable of \$2,000, a decrease in refundable income taxes of \$787, and a decrease in accounts payable of \$1,354.

Investing Activities

Net cash used in investing activities for 2024 totaled \$19, as compared to \$194 for 2023, a decrease of \$175. Net cash used in investing activities was primarily due to acquisitions of property and equipment.

Financing Activities

Net cash provided by financing activities totaled \$504 for 2024, as compared to \$3,962 provided by financing activities during 2023, an decrease of \$2,894. This cash provided was primarily borrowings from the line of credit with Pinnacle.

Backlog

As of December 31, 2024, we had a backlog of \$1,306. 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. Backlog at December 31, 2024 was comprised of the following elements: 56% in purchases of DC power systems by telecommunications customers in the U.S., 35% in purchases in military markets, and 9% in purchases by customers in the marine and other markets. We believe the majority of our backlog will be shipped within the next six to twelve 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 in 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, 2024, 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, 2024, 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, 2024, 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, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not applicable.

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	73	Chairman of the Board, President, Chief Executive Officer and Secretary
Luis Zavala	55	Chief Financial Officer
Non-Employee Directors		
Keith Albrecht	74	Director
Katherine Koster	62	Director
Michael Field	61	Director

Executive Officers and Employee Director

Arthur D. Sams has served as our President, Chief Executive Officer and Chairman of our Board 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.

Our Board considered his board and executive level leadership, broad international exposure, and extensive global experience in engineering and manufacturing as key attributes in his selection. The Board believes that through his experience in product development and international operations over the past three decades he can provide our company with particular insight into global opportunities and new markets for our current and planned future product lines.

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 30 years of experience managing accounting and finance departments in various industries, including banking and telecommunications. Mr. Zavala has a Bachelor of Arts degree in Business Administration from the California State University, Northridge and an MBA from the Keller Graduate School of Management, Long Beach.

Non-Employee Directors

Keith Albrecht has served as a member of our Board 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.

Our Board considered Mr. Albrecht's Board and executive level leadership, high level financial expertise, and extensive expertise in risk management, and believes Mr. Albrecht can provide our Company particular insight into analysis of financial statements, debt analysis, and risk oversight.

Katherine Koster has served as a member of our Board since December 2019 and serves as a member of each of our Audit Committee and Nominating and Corporate Governance Committee. Ms. Koster retired from over 30-years career in Investment Banking/Public Finance in May of 2024. Prior to May 2024, she was Senior Managing Director and Regional Manager for Hilltop Securities, LLC, where she assisted municipalities and developers in accessing the capital markets to fund critical infrastructure since February 2022. Ms. Koster was a managing director of public finance at D.A. Davidson from February 2021 to February 2022 and with Piper Sandler Companies from June 2008 to February 2021. Ms. Koster holds a Bachelor of Arts Degree in Theater/Business Administration from Pepperdine University and has completed the "Women in Governance: Preparing for Board Membership" corporate governance program at the UCLA Anderson School of Management. Ms. Koster holds the SIE, Series 7, Series 24 and Series 79TO licenses issued by the Financial Industry Regulatory Authority, Series 50, 52TO and Series 53 licenses issued by the Municipal Securities Rulemaking Board and a Series 63 certificate issued by the North American Securities Administrators Association.

Our Board considered Ms. Koster's board and executive level leadership, extensive experience with capital markets, and high-level financial expertise and believes that Ms. Koster's investment banking experience and her high level of financial literacy and expertise and experience in capital raising activities will provide strategic insight to financial decisions for future Company initiatives.

Michael G. Field has served as a member of our Board since July 2024 and serves as a member of each of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee. Mr. Field has been the President and Chief Executive Officer of The Raymond Corporation ("Raymond"), a company providing intralogistics solutions, since June 2014. From May 2010 to June 2014, he was Raymond's president of operations and engineering division. From January 2009 to April 2010, he was the executive vice president of operations and engineering. From January 2004 to December 2008, he was the vice president of engineering. Mr. Field is also a Board member of Industrial Truck Association. Mr. Field received his Bachelor of Science in mechanical engineering from Rochester Institute of Technology in 1986, his Master of Science in manufactured systems engineering and his MBA in international operations management, both from Boston University in 1995.

Our Board considered Mr. Field's board and executive level leadership, his extensive engineering expertise, and experience with global business operations and believes that Mr. Field will provide critical leadership as we expand our product and customer diversification strategies worldwide.

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 currently consists of four members: Arthur D. Sams, Keith Albrecht, Michael G. Field, and Katherine Koster. 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 entire Board. Our certificate of incorporation and bylaws also provide that any vacancy on our Board, including a vacancy resulting from an expansion of our Board, 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. 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.

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 has evaluated the independence of its members based upon the rules of the Nasdaq Stock Market and the Securities and Exchange Commission. Applying these standards, our Board 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 is comprised of "independent directors" as defined under the Nasdaq Listing Rules.

Role of Board in Risk Oversight Process

One of the key functions of our Board is informed oversight of our risk management process. Our Board does not have a standing risk management committee, but rather administers this oversight function directly through the Board as a whole, as well as through its standing committees that address risks inherent in their respective areas of oversight. In particular, our Board is responsible for monitoring and assessing strategic risk exposure. Our Audit Committee is responsible for reviewing and discussing our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies with respect to risk assessment and risk management. Our Audit Committee also monitors compliance with legal and regulatory requirements and reviews related party transactions, in addition to oversight of the performance of our external audit function. Our Board monitors the effectiveness of our corporate governance guidelines. Our Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking. The Board believes its leadership structure is consistent with and supports the administration of its risk oversight function.

Board Committees and Meetings

Our business, property and affairs are managed under the direction of our Board. Our directors are kept informed of our business through discussions with our executive officers, by reviewing materials provided to them and by participating in meetings of our Board and its committees. During 2024, our Board held three meetings. All directors attended 100% of the aggregate of the meetings of our Board and of the committees on which they served or that were held during the period they were directors or committee members, except for Michael Field that missed one committee meeting.

During 2024, members of the Board and its committees consulted informally with management from time to time and also acted by written consent seven times without a meeting.

It is our policy to invite and encourage our directors to attend our annual meetings of stockholders. One director attended our 2024 annual meeting of stockholders.

Our Board 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. Each charter is available at our website at <http://www.polarpower.com>. The composition and responsibilities of each committee are described below. Members serve on committees until their resignation or until otherwise determined by our Board. Each of these committees has adopted a written charter that satisfies the applicable standards of the Securities and Exchange Commission 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. Albrecht, Mr. Field and Ms. Koster. Mr. Albrecht is the chair of the Audit Committee. Each member of the Audit Committee satisfies the heightened audit committee independence requirements under the Nasdaq Listing Rules and Rule 10A-3 of the Exchange Act. During 2024, our Audit Committee held four meetings. In addition, our Board has determined that Mr. Albrecht qualifies as an audit committee financial expert, as that term is defined under Securities and Exchange Commission rules, and possesses the requisite financial sophistication, as defined under the Nasdaq Listing Rules. Our Audit Committee assists our Board 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 Securities and Exchange Commission 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 Messrs. Field and Albrecht. Mr. Field 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. Field 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 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 Mr. Field, Mr. Albrecht and Ms. Koster. Mr. Field 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 our Board 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 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 <https://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.

Family Relationships

There are no family relationships among any of our directors or executive officers.

Legal Proceedings

No director or executive officer has been involved in any legal proceeding during the past ten years that is material to an evaluation of his or her ability or integrity.

Insider Trading Policy

We are committed to promoting high standards of ethical business conduct and compliance with applicable laws, rules and regulations. As part of this commitment, we have adopted an Insider Trading Policy to govern the purchase, sale, and/or other dispositions of our securities by our directors, officers and employees, as well as by the Company itself, that we believe is reasonably designed to promote compliance with insider trading laws, rules and regulations, and the exchange listing standards applicable to us. A copy of our Insider Trading Policy was filed as Exhibit 19.1 to this report.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires directors and certain officers of the Company, as well as persons who own more than 10% of a registered class of the Company's equity securities, to file reports with the SEC.

Based upon a review of filings with the SEC and written representations from our directors, officers, and other persons who own more than 10% of a registered class of the our shares that no other reports were required, the Company believes that all of them complied with the reporting requirements of Section 16(a) of the Exchange Act during 2024, except Mr. Michel Field, due to his late filing of Forms 3 and 4.

Item 11. Executive Compensation.

For 2024, our Compensation Committee established an executive compensation plan for our President and Chief Executive Officer, and Chief Financial Officer, whom we refer to collectively as our "executive officers," with 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.

During 2024, 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 2024, 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 2024.

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 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.
- *Change in control.* All executive officers' unvested equity grants accelerate upon any change in control of Polar.
- *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 2024, the target for base salary compensation for our executive officers remained the same as in 2023 and 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 2024:

Company Name	Description
Espey Mfg. & Electronics Corp. – ESP (NYSE)	Power electronics design and manufacturing company, products include power supplies, power converters, power distribution equipment.
Beam Global – BEEM (Nasdaq)	Designs and manufactures renewably energized products for electric vehicle charging infrastructure, energy storage, energy security, disaster preparedness, street lighting, telecommunications, and energy infrastructure.

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 2024, 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 2024, the Compensation Committee kept the same base salary structure as in 2023, which has carried on since 2019. In determining base salary, the Compensation Committee tabulated the average base salary for the executive officers in the peer group of companies.

The Compensation Committee determined that 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 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	2024	Avg.
CEO (in \$,000)	386	600	400	275	69%
CFO/COO (in \$,000)	220	391	300	178	59%

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 2024, 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 us of the five 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 are eligible to receive awards at each level of participation (i.e., Minimum Level, Target Level and Maximum Level) to the extent Polar achieves such level. In the event our performance falls short of a specific performance level, participants will not be eligible to receive an award at that level. In addition, executive officers had to achieve a minimum of two performance elements in order to qualify for an award in the level. For example, if at conclusion of 2024 the total revenues were \$36 million and none of the additional elements qualified, then the executive officer would not be eligible for a performance award of 25% of base salary as outlined in the table below.

Company Performance Element	Minimum Level	Target Level	Maximum Level
Revenue	20%	25%	30%
Gross Margin	5%	10%	15%
EBITDA	5%	10%	15%
Customer Concentration	8%	15%	23%
International Sales	7%	12%	17%
Total	50%	75%	100%

Company Performance Element	Minimum Level	Target Level	Maximum Level	2024 Actual
Revenue (\$ million)	\$ 30	\$ 36	\$ 42	\$ 13.9
Gross Margin (% of revenue)	31%	32%	33%	9.4%
EBITDA (% of revenue)	5%	7%	9%	(26.6)%
Customer Concentration (% of total sales)	55%	45%	35%	48%
International Sales (% of total sales)	15%	20%	25%	13%

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 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 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.

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" (dollar amounts in thousands):

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

Name and Principal Position	Year	Salary (\$)	Option Awards (\$)	Stock Compensation (\$)	Total (\$)
Arthur D. Sams, President, Chief Executive Officer and Secretary	2024	275	—	—	275
	2023	275	—	—	275
Luis Zavala, Chief Financial Officer	2024	178	—	—	178
	2023	175	—	—	175

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. On April 2, 2018, we increased Mr. Sams' annual base salary to \$275 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.

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. On April 2, 2018, we appointed Mr. Zavala as our Chief Financial Officer and increased his annual base salary to \$175 effective as of April 1, 2018. On November 1, 2024, we increased Mr. Zavala’s base salary to \$200. 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.

Upon termination by Polar without cause, resignation by Mr. Zavala for good reason or upon Mr. Zavala’s disability, Mr. Zavala 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. Zavala is terminated without cause or resigns for good reason within three months before or twelve months after a change in control, Mr. Zavala 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. Zavala’s Executive Employment Agreement are identical to the definitions contained in Mr. Sams’ Amended and Restated 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 250,627 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 50,125 shares 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. 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 \$500 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 (as defined in the 2016 Plan) 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 2024. Mr. Field has the option, solely during the first year of service, to choose between receiving a cash payment in the amount of \$7,500 per quarter or receiving 2,679 shares of the Company's common stock, to be issued pursuant to the Company's 2016 Plan. 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 March 31, 2025 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 March 31, 2025. 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 March 31, 2025 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 2,511,532 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	806,229	32.0%
Luis Zavala ⁽³⁾	Common	12,592	*
Keith Albrecht ⁽⁴⁾	Common	1,429	*
Katherine Koster	Common	—	—
Michael Field	Common	2,679	*
All directors and executive officers as a group (5 persons) ⁽⁵⁾	Common	822,929	32.6%
Bard Associates, Inc. ⁽⁶⁾	Common	430,232	17.1%

* Less than 1%.

(1) Messrs. Sams, Albrecht, Field, and Ms. Koster are directors of Polar. Messrs. Sams and Zavala are named executive officers of Polar.

(2) Includes 7,143 shares of common stock issuable upon exercise of options.

(3) Includes 4,286 shares of common stock issuable upon exercise of options.

(4) Includes 1,429 shares of common stock issuable upon exercise of options.

(5) Includes 12,858 shares issuable upon exercise of options.

(6) Based on information provided in a Schedule 13G filed on November 6, 2024. Bard Associates, Inc. The address of the principal office of the Reporting Persons is 135 South LaSalle Street, Suite 3700, Chicago, IL 60603.

Equity Compensation Plan Information

The following table provides information about our common stock that may be issued upon the exercise of options, warrants and rights under all our existing equity compensation plans as of December 31, 2024.

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	20,002	\$ 36.56	207,576

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

The following is a summary of transactions since January 1, 2018 to which we have been a participant, in which:

- the amount involved exceeded or will exceed \$120 (in thousands); 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.

Employment Agreements

We have entered into amended employment agreement with each of Arthur D. Sams, our President, Chief Executive Officer and Secretary; and Luis Zavala, our Chief Financial Officer; providing for, without limitation, certain payments upon termination and change in control. See “Executive 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. In addition, we have entered into indemnification agreements with each of our directors and executive officers.

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 (in thousands) 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 depository 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 2024 and 2023 (in thousands).

	2024	2023
Audit Fees	\$ 228	\$ 245
Audit-Related Fees	3	4
Tax Fees	37	47
Total	<u>\$ 268</u>	<u>\$ 296</u>

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

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of 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, 2024 and 2023, 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, 2024 and 2023, 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.

Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, during the year ended December 31, 2024, the Company incurred a net loss and incurred negative operating cash flows. These conditions raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

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

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Inventory Valuation

As of December 31, 2024, the Company’s inventories totaled \$12.9 million. As explained in Note 1 to the financial statements, inventories are stated at the lower of cost or net realizable value, with cost determined on a first-in, first-out (“FIFO”) basis. The Company assesses inventory at each reporting date in order to assert that it is recorded at net realizable value. In determining net realizable value, management considers historical usage, forecasted demand in relation to inventory on hand, market conditions, and other factors.

We identified management’s assessment of net realizable value of inventory as a critical audit matter because the determination of excess and obsolete inventory and lower of cost or net realizable value is judgmental and considers a number of factors that are affected by market and economic conditions, such as estimating future customer demand, and industry supply and demand. This required a high degree of auditor judgment and increased auditor effort in auditing such assessments.

The primary procedures we performed to address this critical audit matter included:

- We evaluated the reasonableness of assumptions used by management in forming the forecasted inventory usage and future salability, and whether they were consistent with the historical data and evidence obtained in other areas of the audit.
- We developed an independent expectation of the net realizable value of inventory using historic inventory activity and compared our independent expectation to the amount recorded in the financial statements.

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

/s/ Weinberg & Company, P.A.
Los Angeles, California
March 31, 2025

POLAR POWER, INC.
BALANCE SHEETS
(in thousands, except share and per share data)

	December 31, 2024	December 31, 2023
ASSETS		
Current assets		
Cash and cash equivalents	\$ 498	\$ 549
Accounts receivable	2,153	1,676
Inventories	12,893	16,522
Prepaid expenses	53	455
Employee retention credit receivable	—	2,000
Income taxes receivable	—	787
Total current assets	15,597	21,989
Other assets:		
Operating lease right-of-use assets, net	1,645	2,818
Property and equipment, net	196	344
Deposits	108	108
Total assets	\$ 17,546	\$ 25,259
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	\$ 408	\$ 1,762
Customer deposits	607	1,618
Accrued liabilities and other current liabilities	1,100	1,151
Line of credit	4,797	4,238
Notes payable-related party	266	257
Notes payable	—	64
Current portion of operating lease liabilities	1,382	1,124
Total current liabilities	8,560	10,214
Operating lease liabilities, net of current portion	474	1,856
Total liabilities	9,034	12,070
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, 2,511,350 shares issued and 2,508,853 shares outstanding on December 31, 2024 and 2023	2	2
Additional paid-in capital	38,886	38,886
Accumulated deficit	(30,336)	(25,659)
Treasury Stock, at cost (2,497 shares)	(40)	(40)
Total stockholders' equity	8,512	13,189
Total liabilities and stockholders' equity	\$ 17,546	\$ 25,259

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

POLAR POWER, INC.
STATEMENTS OF OPERATIONS
(in thousands, except share and per share data)

	Years Ended December 31,	
	2024	2023
Net sales	\$ 13,970	\$ 15,293
Cost of Sales (includes inventory write-downs of \$900 and \$450, respectively)	12,656	14,598
Gross profit	1,314	695
Operating Expenses		
Sales and marketing	1,010	1,172
Research and development	771	1,222
General and administrative	3,908	4,291
Total operating expenses	5,689	6,685
Loss from operations	(4,375)	(5,990)
Other income (expenses)		
Interest expense and finance costs	(649)	(559)
Interest Income	221	—
Other income (expenses), net	126	1
Total other income (expenses), net	(302)	(558)
Net Loss	\$ (4,677)	\$ (6,548)
Net loss per share, basic and diluted	\$ (1.86)	\$ (3.45)
Weighted average shares outstanding, basic and diluted	2,508,853	1,898,800

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

POLAR POWER, INC.
STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share data)

	Common Stock,		Additional paid-in capital	(Accumulated Deficit)	Treasury Stock	Total Stockholders' Equity
	Number	Amount				
Balances, December 31, 2022	1,852,484	\$ 1	\$ 37,331	\$ (19,111)	\$ (40)	\$ 18,182
Shares of common stock issued for cash, net of offering costs	657,143	1	1,555	—	—	1,555
Shares of common stock issued upon cashless exercise of warrants	1,723	—	—	—	—	—
Net loss	—	—	—	(6,548)	—	(6,548)
Balances, December 31, 2023	<u>2,511,350</u>	<u>\$ 2</u>	<u>\$ 38,886</u>	<u>\$ (25,659)</u>	<u>\$ (40)</u>	<u>\$ 13,189</u>
Net loss	—	—	—	(4,677)	—	(4,677)
Balances, December 31, 2024	<u><u>2,511,350</u></u>	<u><u>\$ 2</u></u>	<u><u>\$ 38,886</u></u>	<u><u>\$ (30,336)</u></u>	<u><u>\$ (40)</u></u>	<u><u>\$ 8,512</u></u>

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

POLAR POWER, INC.
STATEMENTS OF CASH FLOWS
(in thousands)

	Years Ended December 31,	
	2024	2023
Cash flows from operating activities:		
Net loss	\$ (4,677)	\$ (6,548)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	167	387
Inventory write-down	900	450
Changes in operating assets and liabilities		
Accounts receivable	(477)	554
Inventories	2,729	(1,512)
Prepaid expenses	402	2,174
Employee retention credit receivable	2,000	—
Income taxes receivable	787	—
Operating lease right-of-use asset	1,173	1,000
Deposits	—	(15)
Accounts payable	(1,354)	1,532
Customer deposits	(1,011)	(508)
Accrued expenses and other current liabilities	(51)	(80)
Operating lease liability	(1,124)	(864)
Net cash used in operating activities	<u>(536)</u>	<u>(3,430)</u>
Cash flows from investing activities:		
Acquisition of property and equipment	(19)	(194)
Net cash used in investing activities	<u>(19)</u>	<u>(194)</u>
Cash flows from financing activities:		
Net proceeds from sale of common stock	—	1,556
Proceeds from notes payable-related party	9	257
Repayment of notes payable	(64)	(205)
Advances from credit facility, net	559	2,354
Net cash provided by financing activities	<u>504</u>	<u>3,962</u>
Increase (decrease) in cash and cash equivalents	(51)	338
Cash and cash equivalents, beginning of period	549	211
Cash and cash equivalents, end of period	<u>\$ 498</u>	<u>\$ 549</u>
Noncash investing and financing activities:		
Initial recognition of right-of-use asset and lease liabilities	<u>\$ —</u>	<u>3,578</u>

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

POLAR POWER, INC.
NOTES TO FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2024 AND 2023
(In thousands, except for share and per share data and where otherwise noted)

NOTE 1 – ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company

Polar Power, Inc. was incorporated 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, electric vehicle (EV) charging, and nano-grid applications. The Company’s products integrate DC generator, proprietary electronic control systems, lithium batteries and solar photovoltaic (PV) technologies to provide low operating cost and emissions for telecommunications, defense, automotive, nano-grid, EV charging and industrial markets.

Going Concern

The accompanying financial statements have been prepared under the assumption that the Company will continue as a going concern. In accordance with Accounting Standards Codification (“ASC”) 205-40, *Going Concern*, the Company’s management has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company’s ability to continue as a going concern within one year after the date the accompanying financial statements were issued. For the year ended December 31, 2024, the Company recorded a net loss of \$4,677 and used cash in operating activities of \$536. These factors raise substantial doubt about the Company’s ability to continue as a going concern within one year of the date that the financial statements are issued. The financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

As of December 31, 2024, the Company had a cash balance of \$498, with borrowing capacity of \$654, and a working capital of \$7,037. Historically, the Company has financed its operations through public and private sales of common stock, issuance of term loans and credit lines from financial institutions, and cash generated from operations. As we seek additional sources of financing, there can be no assurance that such financing would be available to us on favorable terms or at all. Our ability to obtain additional financing in the debt and equity capital markets is subject to several factors, including market and economic conditions, our performance and investor sentiment with respect to us and our industry. The Company has taken action to improve its margins, and is continuing to build a strong backlog, and expects to continue investing in product development and sales and marketing activities. The long-term continuation of the Company’s business plan is dependent upon the generation of sufficient revenues from its products to offset expenses. In the event that the Company does not generate sufficient cash flows from operations and is unable to obtain funding, the Company will be forced to delay, reduce, or eliminate some or all of its discretionary spending, which could adversely affect the Company’s business prospects, ability to meet long-term liquidity needs or ability to continue operations.

Reverse stock split

On November 18, 2024, the Company filed a Certificate of Amendment to Certificate of Incorporation with the Secretary of State of Delaware to effect a 1:7 reverse stock split of the shares of the Company’s common stock either issued and outstanding or held by the Company as treasury stock. The amendment was authorized by the Company’s stockholders on November 11, 2024, and was effective on November 18, 2024. No fractional shares were issued in connection with the reverse stock split, with all fractional shares being rounded up to the next whole share. All share and per share amounts and information presented herein have been retroactively adjusted to reflect the reverse stock split for all periods presented.

Inflation

The continuing impact of higher inflation, the actions by the Federal Reserve to address inflation, most notably sustained increases in interest rates, and rising energy prices create uncertainty about the future economic environment which will continue to evolve and, we believe, has impacted the Company’s business in 2024 and may continue to impact its business in 2025. The implications of higher government deficits and debt, tighter monetary policy, and potentially higher long-term interest rates may drive a higher cost of capital for the business and an increase in the Company’s operating expenses.

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 estimates for credit loss reserves for accounts receivable, assumptions used in valuing inventories at net realizable value, impairment testing of recorded long-term assets, accruals for warranty reserves, accruals for potential liabilities, assumptions made in valuing stock instruments issued for services, and assumptions used in the determination of the Company's liquidity. Actual results may differ from those estimates.

Revenue Recognition

The Company recognizes revenue in accordance with Accounting Standards Codification ("ASC") 606, Revenue from Contracts with Customers ("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.

Substantially all of the Company's revenue is derived from product sales. Product 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 its 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 Company determines 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 the Company places the product with the customer's carrier or delivers the product to a customer's location. The Company regularly reviews its customers' financial positions to ensure that collectability is reasonably assured.

The Company also recognizes revenues from engineering services, technical support, and sale of accessories that support the Company's direct current, or DC, power systems. Revenue is recognized when transfer of control to the customer has been made and the Company's performance obligation has been fulfilled. The Company's revenue from engineering services, technical support services, and product accessories are clearly defined in each transaction with its customers and have not been significant to date.

The Company also recognizes revenues from the rental of equipment. The Company's rental revenues have not been significant to date and have accounted for less than one percent of total revenues for the years ended December 31, 2024 and 2023. The Company's rental contracts are fixed price contracts for fixed durations of time and include freight and delivery charges and are recognized on a straight-line basis over the rental period.

Disaggregation of Net Sales

The following table shows the Company's disaggregated net sales by product type (in thousands):

	Years Ended December 31,	
	2024	2023
DC power systems	\$ 12,577	\$ 14,408
Engineering & Tech Support Services	384	347
Accessories	1,009	538
Total net sales	<u>\$ 13,970</u>	<u>\$ 15,293</u>

The following table shows the Company's disaggregated net sales by customer type (in thousands):

	Years Ended December 31,	
	2024	2023
Telecom	\$ 12,300	\$ 14,516
Government/Military	1,145	475
Marine	364	206
Other (backup DC power to various industries)	161	96
Total net sales	<u>\$ 13,970</u>	<u>\$ 15,293</u>

The following tables shows the Company's net sales by the respective geographical regions of our customers (in thousands):

	Years Ended December 31,	
	2024	2023
United States	\$ 12,108	\$ 12,078
Canada	2	267
Other N. America	—	8
Australia and South Pacific Islands	1,359	2,822
Asia	31	9
Europe and Middle East	6	85
United Kingdom	352	—
S. Africa	112	24
Total net sales	<u>\$ 13,970</u>	<u>\$ 15,293</u>

For the years ended December 31, 2024 and 2023, international sales totaled \$1,862 and \$3,215, respectively.

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 Company's standard warranty on new products is two years from the date of delivery to the customer. The Company offers a limited extended warranty of up to five years on its certified DC power systems based on application and usage. The Company's warranties are of an assurance-type and come standard with all Company products to cover repair or replacement should the product not perform as expected. 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, which are included in accrued liabilities and other current liabilities in the accompanying balance sheets. As of December 31, 2024 and 2023, the Company had accrued a liability for warranty reserve of \$600 and \$600, respectively, which are included in other accrued liabilities in the accompanying balance sheets. Management believes that the warranty accrual is appropriate; however, actual claims incurred could differ from original estimates, requiring adjustments to the accrual.

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

	Years End December 31,	
	2024	2023
Changes in estimates for warranties		
Balance at beginning of the period	\$ 600	\$ 600
Payments	(214)	(469)
Provision for warranties	214	469
Balance at end of the period	<u>\$ 600</u>	<u>\$ 600</u>

Shipping Costs

Amounts billed to a customer in a sales transaction related to shipping and handling are reported as revenue. Costs incurred by the Company for shipping and handling are considered fulfillment costs and reported as cost of sales.

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. Cash primarily consists of bank demand deposits maintained by a major financial institution. The Company's policy is to maintain its cash balances with financial institutions with high credit ratings and in accounts insured by the Federal Deposit Insurance Corporation (the "FDIC"). The Company may periodically have cash balances in financial institutions in excess of the FDIC insurance limit of \$250,000 per account per institution. The Company has not experienced any losses to date resulting from this policy.

At December 31, 2024 and 2023, cash denominated in Australian Dollar with a U.S. Dollar equivalent of \$2 and \$7, respectively, was held in an account at a financial institution located in Australia. At December 31, 2024 and 2023, cash denominated in Romanian Leu with a U.S. Dollar equivalent of \$12 and \$16, respectively, was held in an account at a financial institution located in Romania.

Accounts Receivable

Trade receivables are recorded at their estimated collectible amounts consisting of the carrying amount less an allowance for credit losses, as needed. The Company maintains an allowance for doubtful accounts for balances that appear to have specific collection issues and estimates an allowance for expected credit losses. 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 December 31, 2024 and 2023.

Inventories

Inventories are stated at the lower of cost or net realizable value, with cost determined on a first-in, first-out ("FIFO") basis. The Company records adjustments to its inventory based on an estimated forecast of the inventory demand, taking into consideration, among others, inventory turnover, inventory quantities on hand, unfilled customer order quantities, forecasted demand, current prices, competitive pricing, and trends and performance of similar products. If the estimated net realizable value is determined to be less than the recorded cost of the inventory, the difference is recognized as a loss in the period in which it occurs. Once inventory has been written down, it creates a new cost basis for inventory that may not be subsequently written up. The Company recorded a write down of inventory of \$900 for the year ended December 31, 2024, and recorded a write down of inventory of \$450 for the year ended December 31, 2023.

As of December 31, 2024 and 2023, inventories consisted of the following (in thousands):

	At December 31,	
	2024	2023
Raw materials	\$ 11,902	\$ 14,313
Finished goods	991	2,209
Inventories	<u>\$ 12,893</u>	<u>\$ 16,522</u>

Property and Equipment

Property and equipment are recorded at cost less accumulated depreciation and amortization. Additions, improvements, and major renewals or replacements that substantially extend the useful life of an asset are capitalized. Repairs and maintenance expenditures are expensed as incurred. Depreciation and amortization of property and equipment is computed using the straight-line method over the estimated useful life. Estimated useful lives of the principal classes of assets are as follows:

	Estimated life
Production and shop equipment and machinery and fixtures	3-5 years
Vehicles	3-5 years
Leasehold improvements	Shorter of the lease term or estimated useful life
Computer software and office equipment	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, 2024, or December 31, 2023.

Leases

The Company accounts for its leases in accordance with ASC 842, *Leases*. The Company determines whether a contract is, or contains, a lease at inception. Operating lease right-of-use ("ROU") assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. ROU assets represent the Company's right to use an underlying asset during the lease term, and lease liabilities represent the Company's obligation to make lease payments arising from the lease. Generally, the implicit rate of interest in arrangements is not readily determinable and the Company utilizes its incremental borrowing rate in determining the present value of lease payments. The Company's incremental borrowing rate is a hypothetical collateralized borrowing rate based on its understanding of what its credit rating would be.

Share-Based Compensation

The Company periodically issues share-based compensation to officers, directors, and consultants for services rendered. Such issuances vest and expire according to terms established at the issuance date.

Stock-based payments to employees, directors, and for acquiring goods and services from nonemployees, which include grants of employee stock options, are recognized in the financial statements based on their grant date fair values in accordance with ASC 718, *Compensation-Stock Compensation*. Stock option grants to employees, which are generally time vested, are measured at the grant date fair value and depending on the conditions associated with the vesting of the award, compensation cost is recognized on a straight-line or graded basis over the vesting period. Recognition of compensation expense for non-employees is in the same period and manner as if the Company had paid cash for the services. The fair value of stock options granted is estimated using the Black-Scholes option-pricing model, which uses certain assumptions related to risk-free interest rates, expected volatility, expected life, and future dividends. The assumptions used in the Black-Scholes option pricing model could materially affect compensation expense recorded in future periods.

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.

Research and Development Costs

Research and development costs are expensed as incurred and consist primarily of salaries and other expenses relating to the design, development, and testing of the Company's products. For the years ended December 31, 2024 and 2023, research and development expenditures totaled \$771 and \$1,222, respectively.

Net Loss Per Share

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted average number of shares of common stock outstanding for the period. Diluted earnings per share is computed by dividing the net income applicable to common stockholders by the weighted average number of shares of common stock outstanding plus the number of additional shares of common stock that would have been outstanding if all dilutive potential shares of common stock had been issued using the treasury stock method. Potential shares of common stock 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 shares of common stock during the reporting period.

For the years ended December 31, 2024 and 2023, options to purchase 20,002 shares and 20,002 shares, respectively, of the Company's common stock were excluded from the shares used to calculate diluted earnings per share as their inclusion would be anti-dilutive.

Financial Assets and Liabilities Measured at Fair Value

The Company uses various inputs in determining the fair value of its financial assets and liabilities. 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 are 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, accounts payable and accrued expenses, approximate their fair values because of the short maturity of these instruments. The carrying values of notes and loans payable approximate their fair values due to the fact that the interest rates on these obligations are based on prevailing market interest rates.

Segments

Under ASC 280, *Segment Reporting*, operating segments are defined as components of an enterprise where discrete financial information is available that is evaluated regularly by the chief operating decision maker ("CODM"), in deciding how to allocate resources and in assessing performance. The Company's operating segment consists of one component, and the Company's Chief Executive Officer, who is also the CODM, makes decisions and manages the Company's operations as a single operating segment.

Concentrations

Revenues. For the year ended December 31, 2024, 48% and 14%, respectively, of our revenue was generated from the Company's two largest customers, one being a Tier-1 telecommunications customer in the U.S. and one being a telecommunications customer in Puerto Rico. In 2023, 50% and 18%, respectively, of our revenue was generated from the Company's two largest customers, one being a Tier-1 telecommunications customer in the U.S. and one being a telecommunications customer outside the U.S. In 2024 and 2023, sales to telecommunications customers accounted for 88% and 95% of total revenue, respectively. In 2024 and 2023, sales to international customers accounted for 13% and 21% of total revenue, respectively.

Accounts receivable. At December 31, 2024, the Company's largest receivable account represented 82% of the Company's total accounts receivable. At December 31, 2023, the Company's two largest receivable accounts represented 69% and 16% of the Company's total accounts receivable. There was no other customer that accounted for more than 10% of the Company's accounts receivable as of the years ended December 31, 2024 and 2023.

Accounts payable. On December 31, 2024, the three largest accounts payable accounts to the Company's vendors represented 18%, 13%, and 8%, respectively. On December 31, 2023, the three largest accounts payable accounts to the Company's vendors represented 30%, 10%, and 5%, respectively.

Recent Accounting Pronouncements

In September 2016, the FASB issued ASU No. 2016-13, *Credit Losses - Measurement of Credit Losses on Financial Instruments* ("ASC 326"). The standard significantly changes how entities will measure credit losses for most financial assets, including accounts and notes receivables. The standard will replace today's "incurred loss" approach with an "expected loss" model, under which companies will recognize allowances based on expected rather than incurred losses. Entities will apply the standard's provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. As a smaller reporting company, ASU 2016-13 became effective for the Company beginning January 1, 2023. The Company adopted ASU 2016-03 effective January 1, 2023, and there was no material impact on the Company's financial position, results of operations and cash flows.

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosure*, which is intended to improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expense categories that are regularly provided to the chief operating decision maker and included in each reported measure of a segment's profit or loss. The update also requires all annual disclosures about a reportable segment's profit or loss and assets to be provided in interim periods and for entities with a single reportable segment to provide all the disclosures required by ASC 280, *Segment Reporting*, including the significant segment expense disclosures. The updates required by this standard should be applied retrospectively to all periods presented in the financial statements. As of December 31, 2024, the Company has adopted ASU 2023-07. The adoption of this standard did not have a material impact on the Company's financial statements but has resulted in additional disclosures within the footnotes to our financial statements (See Note 10).

In December 2023, the Financial Accounting Standards Board ("FASB") issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*. ASU 2023-09 requires that public business entities on an annual basis (1) disclose specific categories in the rate reconciliation and (2) provide additional information for reconciling items that meet a quantitative threshold (if the effect of those reconciling items is equal to or greater than 5 percent of the amount computed by multiplying pretax income or loss by the applicable statutory income tax rate). ASU 2023-99 is effective for annual reporting periods beginning after December 15, 2024, with early adoption permitted. The Company does not expect that the guidance will have a material impact on our financial statements or notes to our financial statements.

In November 2024, the Financial Accounting Standards Board (FASB) issued ASU No. 2024-03, *Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures (Subtopic 220-40): Disaggregation of Income Statement Expenses* which includes amendments that require disclosure in the notes to financial statements of specified information about certain costs and expenses, including purchases of inventory; employee compensation; and depreciation, amortization and depletion expenses for each caption on the income statement where such expenses are included. The amendments are effective for the Company's annual periods beginning January 1, 2027, with early adoption permitted, and should be applied either prospectively or retrospectively. The Company is in the process of evaluating this ASU to determine its impact on the Company's disclosures.

The Company's management has evaluated all other recently issued, but not yet effective, accounting standards and guidance that have been issued or proposed by the FASB or other standards-setting bodies through the filing date of these financial statements and does not believe the future adoption of any such pronouncements will have a material effect on the Company's financial position and results of operations.

NOTE 2 – PROPERTY AND EQUIPMENT

Property and equipment consist of the following (in thousands):

	December 31, 2024	December 31, 2023
Production and shop equipment and machinery and fixtures	\$ 3,654	\$ 3,636
Vehicles	177	177
Leasehold improvements	390	390
Computer software and office equipment	291	291
Total property and equipment, cost	4,512	4,494
Less: accumulated depreciation and amortization	(4,316)	(4,150)
Property and equipment, net	\$ 196	\$ 344

Depreciation and amortization expense on property and equipment for the years ended December 31, 2024 and 2023 was \$167 and \$387 respectively. During the years ended December 31, 2024 and 2023, \$160 and \$374, respectively, of depreciation expense was included in cost of sales for the years then ended.

NOTE 3 – NOTES PAYABLE, RELATED PARTY

During 2023, the Company's Chief Executive Officer made three loans to the Company for aggregate principal amount of \$260 pursuant to terms of the note agreements. The notes have relatively similar terms, are unsecured, and accrue interest at 3.5% per annum. As of December 31, 2024, the aggregate outstanding balance of the loans including accrued interest is \$266, with \$165 due in April 2025, \$73 due in August 2025, and \$28 due in October 2025.

NOTE 4 – NOTES PAYABLE

In prior years, the Company entered into several financing agreements for the purchase of equipment. The terms of these financing arrangements were 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, and maturing between September 2023 and July 2024. At December 31, 2022, the balance of these notes totaled \$268. During 2023, note principal of \$205 was repaid, and at December 31, 2023, the balance of the notes totaled \$64. The notes were paid off in full during 2024.

NOTE 5 – LINE OF CREDIT

Effective September 30, 2020, the Company entered into a Loan and Security Agreement (the "Loan Agreement") with Pinnacle Bank ("Pinnacle"). The Loan Agreement, as amended, provides for a revolving credit facility under which Pinnacle may make advances to the Company up to \$7,500, subject to certain limitations and adjustments, of up to (a) 85% of the aggregate net face amount of the Company's accounts receivable and other contract rights and receivables, plus (b) the lesser of (i) 40% of the aggregate eligible inventory value of eligible inventory or (ii) \$4.0 million, plus (c) up to \$146 collateralized by certain equipment. Before the Loan Agreement was set to expire in September 2024, the Company and Pinnacle executed an amendment to extend the term of the Loan Agreement until September 30, 2026.

During 2023, the Company advanced an aggregate net amount of \$2,354 under the facility. At December 31, 2023, the outstanding balance under the line of credit was \$4,238. During 2024, the Company advanced an aggregate net amount of \$559 under the facility. At December 31, 2024, the outstanding balance under the line of credit was \$4,797 and the Company had availability under the line of credit in the amount of \$654.

Borrowings based on receivables bears an interest on the daily balance at a rate of 1.25% above the prime rate, but in no event less than 3.75% per annum (9.75% at December 31, 2024 and 9.75% at December 31, 2023). Interest on the portion of the daily balance consisting of advances against inventory accrues interest at a rate of 2.25% above the prime rate, but in no event less than 4.75% per annum (10.75% at December 31, 2024 and 10.75% at December 31, 2023).

During 2023, amendments to the Loan Agreement included, among other, extending the 90-day period on AT&T accounts receivable to 120 days, raising the concentration percentage applicable to certain Tier-1 telecommunication customers from 50% to 75% in the definition of eligible accounts receivable, and increasing the aggregate advance limit under the credit facility from \$6,000 to \$7,500, for a fee of \$23 (1.5% of the \$1.5 million increase).

Pinnacle may terminate the Loan Agreement at any time upon ninety days prior written notice and immediately upon the occurrence of an event of default. Under the Loan Agreement, the Company granted Pinnacle a security interest in all presently existing and thereafter acquired or arising assets of the Company. The Loan Agreement also contains a financial covenant requiring the Company to attain an effective tangible net worth, as defined, which the Company attained as of December 31, 2024.

The Loan Agreement obligates the Company to pay Pinnacle a yearly facility fee in an amount equal to 1.125% of the sum of the advance limit. The Loan Agreement contains certain affirmative and negative covenants, all of which the Company was in compliance with at December 31, 2024.

Total interest expense, fees, and financing costs incurred under the Loan Agreement during the years ended December 31, 2024 and 2023 was \$733 and \$657, respectively, of which \$95 and \$110 were included in the balance of general and administrative expenses during 2024 and 2023, respectively, and \$638 and \$547 were included in the balance of interest expense and finance costs during 2024 and 2023, respectively, in the accompanying statements of operations.

NOTE 6 – OPERATING LEASES

At December 31, 2024, the Company has two operating leases for its warehouse and office facilities. The first lease expired February 28, 2023 and was extended beginning March 1, 2023 to February 28, 2026. The second lease expired August 31, 2023, and was extended beginning September 1, 2023 to August 31, 2026. The aggregate monthly lease payments range from \$89 (year one), to \$111 (year two), to \$125 (year three), with an aggregate commitment of \$3,896. The lease amendments to the two operating leases were considered new lease agreements and as a result, the Company recognized operating lease right-of-use assets and related operating lease liabilities of approximately \$3,578 upon commencement of the new terms.

The Company also has a third lease on a month-to-month basis and is charged \$25 per month.

The components of rent expense and supplemental cash flow information related to leases for the period are as follows:

	Years Ended December 31,	
	2024	2023
Lease Cost (in thousands)		
Operating lease cost (of which \$124 is included in general and administration and \$1,126 is included in cost of sales in the Company's statement of operations for the year ended December 31, 2024, and \$145 is included in general and administration and \$978 is included in cost of sales in the Company's statement of operations for the year ended December 31, 2023)	\$ 1,250	\$ 1,123
Other Information		
Weighted average remaining lease term – operating leases (in years)	1.4	2.4
Average discount rate – operating leases	6.13%	5.13%

The supplemental balance sheet information related to leases for the period is as follows:

	At	At
	December 31, 2024	December 31, 2023
Operating leases (in thousands)		
Long-term right-of-use assets, net of accumulated amortization of \$1,931 and \$760, respectively	\$ 1,645	\$ 2,818
Current portion of operating lease liabilities	\$ 1,382	\$ 1,124
Noncurrent portion of operating lease liabilities	474	1,856
Total operating lease liabilities	\$ 1,856	\$ 2,980

Maturities of the Company's lease liabilities are as follows:

Year Ending (in thousands)	Operating Leases
2025	\$ 1,446
2026	496
Total lease payments	1,942
Less: Imputed interest/present value discount	(86)
Present value of lease liabilities	\$ 1,856

Rent expense for the years ended December 31, 2024 and 2023 was \$1,618 and \$1,423, respectively (including short-term and other rentals).

NOTE 7 – STOCKHOLDERS' EQUITY

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. At December 31, 2024 and 2023, no shares of preferred stock were issued.

Common Stock

- *Issuance of common stock during 2023 in underwritten Public Offering of Common Stock*

On December 5, 2023, the Company issued and sold 657,143 shares of common stock in an underwritten public offering. The Company received at the closing of the offering net proceeds of approximately \$1,556 after deducting underwriting discounts and commissions and other offering expenses paid by the Company. The Company is using the net proceeds from the Offering for general corporate purposes.

- *Issuance of common stock during 2023 upon exchange of warrants*

On November 9, 2023, warrants to purchase an aggregate of 3,446 shares of the Company's common stock, originally issued July 7, 2020, were exchanged on a cashless basis for 1,723 shares of Common Stock in accordance to a warrant exchange agreement. Upon issuance of such shares and cancellation of the warrants, the Company no longer has any warrants outstanding as of December 31, 2024.

Treasury Stock

At December 31, 2024 and 2023, the Company had 2,497 shares of common stock held as treasury stock at a cost of \$40.

NOTE 8 – STOCK OPTIONS

The following table summarizes stock option activity:

	Number of Options	Weighted Average Exercise Price
Outstanding, December 31, 2022	20,002	\$ 36.56
Granted	—	—
Exercised	—	—
Cancelled	—	—
Outstanding, December 31, 2023	20,002	\$ 36.56
Granted	—	—
Exercised	—	—
Outstanding and exercisable, December 31, 2024	<u>20,002</u>	<u>\$ 36.56</u>

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 250,627 shares of common stock as incentives to employees and consultants to the Company with awards limited to a maximum of 50,125 shares to any one participant in any calendar year.

At December 31, 2024 and 2023, the Company had total outstanding options of 20,002, which are fully vested, exercise prices ranging from \$33.88 to \$39.20, and with 4,287 option shares set to expire in December 2027 and the remaining 15,715 option shares set to expire in April 2028.

There was no intrinsic value of the outstanding options at December 31, 2024.

NOTE 9 – STOCK WARRANTS

The following table summarizes warrant activity:

	Number of Warrants	Weighted Average Exercise Price
Outstanding, December 31, 2022	3,446	\$ 21.91
Issued	—	—
Exercised	(3,446)	2.80
Outstanding, December 31, 2023	—	\$ —
Issued	—	—
Exercised	—	—
Outstanding, December 31, 2024	<u>—</u>	<u>\$ —</u>
Exercisable, December 31, 2024	<u>—</u>	<u>\$ —</u>

On November 9, 2023, warrants to purchase an aggregate of 3,446 shares of the Company’s common stock, originally issued July 7, 2020, were exchanged on a cashless basis for 1,723 shares of Common Stock in accordance to a warrant exchange agreement. Upon issuance of such shares and cancellation of the warrants, the Company no longer has any warrants outstanding as of December 31, 2024.

NOTE 10. SEGMENT INFORMATION

The Company operates and manages its business as one reportable and operating segment. The Company designs, manufactures, and sells DC power systems for applications that do not have access to the utility grid (i.e., prime power and mobile applications) or have critical power needs and cannot be without power in the event of utility grid failure (i.e., back-up power applications). The measure of segment assets is reported on the balance sheet as total assets. In addition, the Company generates revenue primarily from the sale of its DC power systems, and to a lesser extent from the sale of parts and services to support its DC power systems. The Company manages the business activities on a consolidated basis.

The Company's CODM reviews financial information presented on a consolidated basis and decides how to allocate resources based on net income (loss). Consolidated net income (loss) is used for evaluating financial performance and in establishing management's compensation.

Significant segment expenses include research and development, salaries, insurance, and stock-based compensation. Operating expenses include all remaining costs necessary to operate our business, which primarily include external professional services and other administrative expenses. The following table presents the significant segment expenses and other segment items regularly reviewed by our CODM:

	Years ended December 31,	
	2024	2023
Revenue	\$ 13,970	\$ 15,293
Cost of goods sold	(12,656)	(14,598)
Compensation	(2,385)	(3,200)
Consulting and professional fees	(1,148)	(973)
Other cost and expenses, net	(2,156)	(2,512)
Other expenses, net	(302)	(558)
Net loss	\$ (4,677)	\$ (6,548)

NOTE 11 – INCOME TAXES

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

	Years Ended December 31,	
	2024	2023
Federal income tax rate	(21)%	(21)%
State tax, net of federal benefit	(7)%	(7)%
Valuation allowance	28%	28%
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, 2024 and 2023 are as follows (in thousands):

	December 31, 2024	December 31, 2023
Deferred tax assets:		
Inventory valuation	\$ 1,300	\$ 977
Accrued liabilities	243	256
Capitalized R&D	463	-
Operating lease liability	520	834
Net operating loss carryforwards	6,233	5,065
Gross deferred tax assets	8,759	7,132
Valuation allowance	(8,250)	(6,737)
Total deferred tax assets	509	395
Deferred tax liabilities:		
Operating lease right-of-use asset, net	(461)	(395)
Depreciation	(48)	-
Total deferred tax liabilities	(509)	(395)
Net deferred tax asset (liability)	\$ -	\$ -

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") was enacted and signed into law in response to the COVID-19 pandemic. Under the CARES Act, net operating loss ("NOL") carryforwards arising in tax years beginning after December 31, 2017, and before January 1, 2021 (such as NOLs incurred in 2018, 2019, or 2020 by a calendar-year taxpayer) may be carried back to each of the five tax years preceding the tax year of such loss. Since the enactment of the Tax Cuts and Jobs Act of 2017 (TCJA), NOLs generally could not be carried back but could be carried forward indefinitely. Further, the TCJA limits NOL absorption to 80% of taxable income. At December 31, 2023, the Company had income taxes receivable of \$787 related to NOL carrybacks. During 2024, the Company received \$787 in income tax refunds, and on December 31, 2024 had \$nil income tax receivables.

At December 31, 2024, the Company had available Federal and state NOLs carryforwards to reduce future taxable income of approximately \$20.0 million and \$27.9 million, respectively. The Federal NOL can be carried forward indefinitely but can only offset 80% of taxable income in future years. The state carryforward expires in 2041 through 2044.

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 their net deferred tax assets do not meet the requirements to be realized, and as such, the Company has provided a full valuation allowance against them.

The Company follows 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 December 31, 2024 and 2023, 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 2019.

The Company's policy is to record interest and penalties on uncertain tax provisions as income tax expense. As of December 31, 2024 and 2023, the Company had no accrued interest or penalties related to uncertain tax positions. Additionally, tax years 2019 through 2024 remain open to examination by the major taxing jurisdictions to which the Company is subject.

NOTE 12 - EMPLOYEE RETENTION CREDITS

The Consolidated Appropriations Act, passed in December 2021, expanded the employee retention credit ("ERC") program through December 2021. The credits cover 70% of qualified wages, plus the cost to continue providing health benefits to our employees, subject to a \$7 cap per employee per quarter. Due to revenue declines we experienced, we qualified for approximately \$2,000 of ERC during 2021. As of December 31, 2023, the ERC receivable was \$2,000. In May 2024, the Company received the \$2,000 ERC receivable.

NOTE 13 – COMMITMENTS AND CONTINGENCIES.

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. In the opinion of management of the Company, adequate provision has been made in the Company's financial statements at December 31, 2024 with respect to such matters. See also Notes 6 and 11.

INDEX TO EXHIBITS

Exhibit Number	Description*	Where Located				
		Form	File Number	Exhibit Number	Filing Date	Filed Herewith
3.1	Certificate of Incorporation	10-K	001-37960	3.1	3/10/2017	
3.2	Certificate of Amendment to Certificate of Incorporation	8-K	001-37960	3.1	11/21/2024	
3.3	Bylaws	10-K	001-37960	3.2	3/10/2017	
4.1	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934					X
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 Luis Zavala#	S-1	333-213572	10.4	9/9/2016	
10.4	Form of Indemnification Agreement between the Registrant and each of its Executive Officers and Directors#	S-1	333-213572	10.5	11/18/2016	
10.5	Lease Agreement dated November 7, 2014 between the Registrant and Two Bros L.P.	S-1	333-213572	10.8	9/9/2016	
10.6	First Amendment to Lease Agreement dated February 5, 2019 between the Registrant and Two Bros L.P.	10-K	001-37960	10.9	3/31/2023	
10.7	Second Amendment to Lease Agreement dated January 31, 2023 between the Registrant and Two Bros L.P.	10-K	001-37960	10.10	3/31/2023	
		65				

10.8	Amendment No. 1 to Polar Power, Inc. 2016 Omnibus Incentive Plan	10-K	001-37960	10.10	4/1/2019	
10.9	Securities Purchase Agreement dated July 2, 2020 between Polar Power, Inc. and each purchaser identified on the signature pages thereto	8-K	001-37960	10.1	7/8/2020	
10.10	Registration Rights Agreement dated July 2, 2020 between Polar Power, Inc. and each purchaser identified on the signature pages thereto	8-K	001-37960	10.2	7/8/2020	
10.11	Loan and Security Agreement dated August 31, 2020 between Pinnacle Bank and Polar Power, Inc.	8-K	001-37960	10.1	10/9/2020	
10.12	First Modification to Loan and Security Agreement dated October 7, 2020 by and between Polar Power, Inc. and Pinnacle Bank	8-K	001-37960	10.2	10/9/2020	
10.13	Second Modification to Loan and Security Agreement dated November 3, 2022 by and between Polar Power, Inc. and Pinnacle Bank	10-Q	001-37960	10.1	11/14/2022	
10.14	Third Modification to Loan and Security Agreement dated April 13, 2023 by and between Polar Power, Inc. and Pinnacle Bank	8-K	001-37960	10.1	5/26/2023	
10.15	Fourth Modification to Loan and Security Agreement dated May 25, 2023 by and between Polar Power, Inc. and Pinnacle Bank	8-K	001-37960	10.2	5/26/2023	
10.16	Fifth Modification to Loan and Security Agreement dated September 5, 2023 by and between Polar Power, Inc. and Pinnacle Bank	8-K	001-37960	10.1	9/11/2023	
10.17	Offer Letter between Polar Power, Inc. and Michael G. Field, dated July 24, 2024	8-K	001-37960	10.1	7/30/2024	
14.1	Code of Ethics	10-K	001-37960	14.1	3/10/2017	
19.1	Insider Trading Policy					X
21.1	Subsidiaries of the Registrant	10-K	001-37960	21.1	3/10/2017	
23.1	Consent of Independent Registered Public Accounting Firm					X
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
97.1	Clawback Policy	10-K	001-37960	97.1	4/1/2024	
101.INS	Inline XBRL Instance Document					X
101.SCH	Inline XBRL Taxonomy Extension Schema					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase					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.

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 31st day of March 2025.

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Arthur D. Sams</u> Arthur D. Sams	Chief Executive Officer, President, Secretary and Chairman of the Board of Directors (principal executive officer)	March 31, 2025
<u>/s/ Luis Zavala</u> Luis Zavala	Chief Financial Officer (principal financial and accounting officer)	March 31, 2025
<u>/s/ Keith Albrecht</u> Keith Albrecht	Director	March 31, 2025
<u>/s/ Katherine Koster</u> Katherine Koster	Director	March 31, 2025
<u>/s/ Michael Field</u> Michael Field	Director	March 31, 2025

DESCRIPTION OF SECURITIES

The following description summarizes the material terms and provisions of Polar Power, Inc.'s common stock and preferred stock. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our certificate of incorporation, as amended, which we refer to as the certificate of incorporation, and our bylaws, as may be amended, which we refer to as the bylaws. The terms of our common stock and preferred stock may also be affected by Delaware law.

Common Stock

We are authorized to issue up to a total of 50,000,000 shares of common stock, par value \$0.0001 per share. Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of our stockholders. Holders of our common stock have no cumulative voting rights. Further, holders of our common stock have no preemptive, conversion, redemption or subscription rights and there are no sinking fund provisions applicable to our common stock. Upon our liquidation, dissolution or winding-up, holders of our common stock are entitled to share ratably in all assets remaining after payment of all liabilities and the liquidation preferences of any of our outstanding shares of preferred stock. Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of our assets which are legally available.

As of March 31, 2025, we had 2,511,532 shares of common stock issued and outstanding and 2,497 shares of common stock held in treasury. There were 22 holders of record of our common stock. 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.

Preferred Stock

Our board of directors is authorized to issue up to 5,000,000 shares of preferred stock, par value \$0.0001 per share, 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 our stockholders. Any preferred stock to be issued could rank prior to our common stock with respect to dividend rights and rights on liquidation. Our 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 our common stock and discourage, delay or prevent a change in control of our company.

Qualification and Election of Directors

Our bylaws provide that to be eligible to be a nominee for election to our board of directors, a person must submit a written questionnaire regarding his or her background and qualifications and must agree to other representations as set forth in our bylaws. In addition, we have adopted a director resignation policy. The director resignation policy is incorporated into our bylaws and Corporate Governance Guidelines and provides that any nominee for director in an uncontested election who receives a greater number of votes "withheld" from his or her election than votes "for" his or her election must tender his or her resignation to the board of directors for consideration in accordance with the procedures set forth in our Corporate Governance Guidelines. The Nominating and Corporate Governance Committee will then evaluate the best interests of our company and our stockholders and will recommend to the board of directors the action to be taken with respect to the tendered resignation. Following the board of directors' determination, we will promptly publicly disclose the board of directors' decision of whether or not to accept the resignation and an explanation of how the decision was reached, including, if applicable, the reasons for rejecting the resignation.

Anti-Takeover Provisions of Delaware Law, our Certificate of Incorporation and our Bylaws

The provisions of Delaware law, our certificate of incorporation and our bylaws discussed below could discourage or make it more difficult to accomplish a proxy contest or other change in our management or the acquisition of control by a holder of a substantial amount of our voting stock. It is possible that these provisions could make it more difficult to accomplish, or could deter, transactions that stockholders may otherwise consider to be in their best interests or in our best interests. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by our board of directors and to discourage certain types of transactions that may involve an actual or threatened change of our control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy fights. Such provisions also may have the effect of preventing changes in our management.

Advance Notification of Stockholder Nominations and Proposals

Our bylaws provide that, for nominations to our board of directors or for other business to be properly brought by a stockholder before a meeting of stockholders, the stockholder must first have given timely notice of the proposal in writing to our Chief Executive Officer. For an annual meeting, a stockholder's notice generally must be delivered not less than 90 days nor more than 120 days prior to the anniversary of the mailing date of the proxy statement for the previous year's annual meeting. For a special meeting, the notice must generally be delivered not earlier than the 90th day prior to the meeting and not later than the later of (i) the 60th day prior to the meeting or (ii) the 10th day following the day on which public announcement of the meeting is first made. Detailed requirements as to the form of the notice and information required in the notice are specified in the bylaws. If it is determined that business was not properly brought before a meeting in accordance with our bylaw provisions, such business will not be conducted at the meeting. These provisions may preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Board Vacancies; Removal

Our bylaws provide that any vacancy occurring on our board of directors may be filled by a majority of directors then in office, even if less than a quorum. Our certificate of incorporation provides that directors may be removed only for cause by affirmative vote of the holders of a majority of the voting power of the outstanding shares of common stock entitled to vote. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board of directors, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. In addition, the number of directors constituting our board of directors is permitted to be set only by a resolution adopted by our board of directors. These provisions prevent a stockholder from increasing the size of our board of directors in order to gain control of our board of directors by filling the resulting vacancies with its own nominees. This makes it more difficult to change the composition of our board of directors but promotes continuity of management.

Special Meetings of Stockholders

Our bylaws and certificate of incorporation provide that only our board of directors may call a special meeting, and that stockholders may only conduct business at special meetings of stockholders that was specified in the notice of the meeting. This provision limits the ability of a stockholder to call a special meeting of the stockholders.

Issuance of Undesignated Shares of Preferred Stock

Our board of directors has the authority, without further action by the stockholders, to issue up to 5,000,000 shares of undesignated preferred stock with rights, preferences and privileges, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock enables our board of directors to render more difficult or to discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest or other means.

Exclusive Forum

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. 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.

Limitation on Liability and Indemnification of Directors and Officers

Our certificate of incorporation and bylaws contain provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, or the DGCL, the personal liability of our directors and executive officers for monetary damages for breach of their fiduciary duties as directors or officers. Our certificate of incorporation and bylaws provide that we must indemnify our directors and executive officers and may indemnify our employees and other agents to the fullest extent permitted by the DGCL.

Sections 145(a) and 102(b)(7) of the DGCL empower a corporation to indemnify any director, officer, employee or agent, or former director, officer, employee or agent, who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of such person's service as a director, officer, employee or agent of the corporation, or such person's service, at the corporation's request, as a director, officer, employee or agent of another corporation or enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding; *provided* that such director, officer employee or agent acted in good faith and in a manner reasonably believed to be in or not opposed to the best interests of the corporation; and, with respect to any criminal action or proceeding, *provided* that such director, officer employee or agent had no reasonable cause to believe his conduct was unlawful.

Section 145(b) of the DGCL empowers a corporation to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another enterprise, against expenses (including attorneys' fees) actually and reasonably incurred in connection with the defense or settlement of such action or suit; *provided* that such director, officer, employee or agent acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification may be made in respect of any claim, issue or matter as to which such director, officer, employee or agent shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such director, officer, employee or agent is fairly and reasonably entitled to indemnity for such expenses that the court shall deem proper.

We have also entered into indemnification agreements with our directors and executive officers, in addition to the indemnification provided for in our certificate of incorporation and bylaws, and we intend to enter into indemnification agreements with any new directors and executive officers in the future.

We have purchased and currently intend to maintain directors' and officers' liability insurance.

Transfer Agent and Registrar

Our transfer agent and registrar for our common stock is VStock Transfer, LLC, 18 Lafayette Place, Woodmere, New York 11598. Its telephone number is 855-9VSTOCK.

Listing

Our common stock is listed on The Nasdaq Capital Market under the symbol "POLA."

POLAR POWER, INC.

INSIDER TRADING POLICY

Dated: December 6, 2016

To: All Directors, Officers and Employees

From: Arthur D. Sams, President, Chief Executive Officer and Chairman of the Board of Directors

Polar Power, Inc. (the “**Company**”) has included its shares of common stock for quotation on The NASDAQ Capital Market. As a result, we have a responsibility towards our stockholders to establish rigorous internal procedures regarding the flow of information within the Company and from the Company to the public. Moreover, our directors and officers and many of our employees may or do hold options to purchase shares of the Company and, under United States securities laws, our Company is required to take steps to ensure that director, officer and employee decisions regarding the purchase and sale of securities are made only on the basis of the same level of information concerning the Company as other stockholders. In other words, the Company is required to take steps to ensure that directors, officers and employees do not trade on “inside information.”

The Board of Directors has adopted the following Insider Trading Policy which applies to all directors, officers and employees of the Company arising from our legal and ethical responsibilities as a public company.

I. Prohibition Against Trading on Material Non-public Information.

If you are aware of material non-public information relating to the Company (often called “inside information”), you are prohibited from trading in our securities, directly or indirectly (including in a 401K plan or employee stock purchase plan) except as provided for in written sales plans (“**10b5-1 Sales Plans**”) that have been adopted in conformity with Rule 10b5-1 (“**Rule 10b5-1**”) under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), and from disclosing such information to any other persons (including relatives, friends, brokers, investment adviser, etc.). Any information, positive or negative, is “material” if it would be expected to (a) affect the decision of a reasonable investor in determining whether to purchase, sell or hold our securities or (b) significantly alter the market price of our securities. Information may be material for this purpose even if it would not alone determine the investor’s decision. Examples include:

- a potential business acquisition;
 - internal information about revenues, earnings or other aspects of financial performance that departs in any way from what the market would expect based upon prior disclosures;
-

- important business developments;
- the acquisition or loss of a major customer; or
- an important transaction.

We emphasize that this list is merely illustrative.

Information may be considered “non-public” if it has not been disseminated in the Company’s filings with the Securities and Exchange Commission (the “SEC”) or in its annual reports to stockholders or has not been the subject of a prior widely-disseminated Company press release. Unless the Company publicly confirms information reported in wire service dispatches and other news media, market letters or other third-party sources, such information may still be considered non-public. You should be aware that it is the Company’s policy not to comment on such information.

Once material information is publicly disseminated, trading can occur after a lapse of one full trading day. Therefore, if an announcement is made before the commencement of trading on a Monday, a director, officer or employee may trade in the Company’s stock starting on the Tuesday of that week, because one full trading day would have elapsed by then (all of Monday). If the announcement is made on Monday after trading begins, directors, officers and employees may not trade in the Company’s stock until Wednesday.

It is impossible to overstate the importance of understanding and complying with the insider trading laws. You need not be a director or officer of the Company to be subject to the insider trading laws. *Any* employee is subject to prosecution for a violation.

Please consult the Company’s Chief Financial Officer (or the Company’s Acting Chief Financial Officer, as the case may be) (the “**Securities Compliance Officer**”) if you are uncertain when trading may commence following an announcement.

II. Restricted Periods.

Directors, officers and director-level employees should not trade any securities of the Company except during the period that begins one full trading day after the financial results for the quarter (or for the full year with respect to the fourth quarter) have been announced publicly and ends on the fifteenth day of the last month of the following fiscal quarter. The announcement date of the quarterly results varies, but occurs normally toward the end of the month following the end of the fiscal quarter (the “**trading window**”). For example, if the first quarter results of the Company are announced on the evening of May 1, trading would be permissible from the morning of May 3 until the close of trading on June 15. This restriction on trading after June 15 and until one full trading day after the next quarter’s results are announced is intended to prevent any implication that knowledge of the second quarter results could affect trading.

The Company may impose event specific restricted periods during which directors, officers and employees may not trade any securities of the Company. Such event specific restricted periods may be imposed during a trading window. If an event specific restricted period is imposed, the Securities Compliance Officer will separately communicate both the start and end dates of the restricted period by e-mail communications to affected persons. Only after receipt of such notification from the Securities and Compliance Officer that the event specific restricted period is over may a director, officer or employee engage in a stock trade, subject to compliance with the other provisions of this Policy, including that the trade occur during a trading window.

Note that the limitations in Section I above relating to material non-public information remain applicable even during periods when trading is otherwise permitted by this Section II. The two sections apply independently. In other words, you are not permitted, even during a trading window, to trade if you are in possession of material non-public information.

In some circumstances, standing trading orders to buy or sell Company securities extend beyond the open trading window into the restricted period. As a result, Company employees could be in the position of buying or selling Company stock based on such pre-existing orders during the restricted period or while in possession of material, non-public information, each of which is a violation of this policy. Consequently, Company directors, officers and employees should not place trading orders with brokers that extend into blackout periods, and must immediately cancel any such orders that inadvertently extend into blackout periods to prevent trades after close of the applicable trading window. 10b5-1 Sales Plans (as described below), which generally may operate without regard for trading windows or restricted periods, are the appropriate vehicle for such automated trading programs.

Finally, no director, executive officer or other person designated by the Securities Compliance Officer may trade, even during periods otherwise permitted under this Section II, without first complying with the pre-clearance procedures described in Sections 4 below.

III. 10b5-1 Sales Plans.

Assuming compliance with Rule 10b5-1 and this policy, under certain 10b5-1 Sales Plans, the trading window (and restricted period) restrictions are not applicable, as further described herein.

The SEC adopted Rule 10b5-1 to assist insiders of public companies like the Company in planning and carrying out personal trading programs reducing the risk of violating insider trading laws. Rule 10b5-1 provides that a Company insider who trades securities while aware of material, non-public information does not violate Section 10(b) and Rule 10b-5 if the trading is in conformity with a binding contract, instruction or written plan put into place at a time when the Company insider is not aware of material, non-public information. Thus, from time to time, the Board of Directors of the Company may approve 10b5-1 Sales Plans pursuant to which certain Company insiders can trade Company securities without certain restrictions including trading windows and blackout periods as set forth herein. Any Company policies regarding Rule 10b5-1 stock sales generally govern the procedures required to establish such a plan, and any such implemented policies should be consulted in advance in order to make the process run smoothly.

Any person seeking to implement a 10b5-1 Sales Plan must submit the plan in advance to the Company's Securities Compliance Officer for legal compliance evaluation and subsequent consideration by the Company's Board of Directors. Such procedures could take several weeks to complete. Proposed 10b5-1 Sales Plans may become operative only after all such reviews have been completed and approval by the Board, which is not a certainty and is in the Board's sole discretion. Although Rule 10b5-1 may help Company insiders avoid liability under Rule 10b-5, it does not eliminate the requirements and prohibitions contained in other relevant securities laws. Also, the 10b5-1 Sales Plan must comply with the reporting requirements and short-swing liability rules under the Exchange Act as discussed later in this policy.

IV. Accelerated Filing of Reports for Persons Subject to Section 16 of the Securities Exchange Act of 1934.

Section 403 of the Sarbanes-Oxley Act of 2002 amends Section 16 of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), to accelerate the filing due dates for certain beneficial ownership reporting forms on Forms 3, 4 and 5 (the "**Section 16 Reports**") of directors, executive officers and greater than 10% beneficial owners of our securities ("**Section 16 Insiders**") to the second business day following a transaction that effects a change in the ownership of our securities.

Given the amended short time frame for Section 16 Insiders to file their Section 16 Reports, it is the Company's policy that all transactions in the Company's stock (including a benefit plan transaction such as a cashless option exercise (other than an option exercise such as a stock for stock trade that does not include the sale of Company stock), a gift, a contribution to a trust or any other transfer) by directors and officers, including family members, must be cleared in advance with the Securities Compliance Officer. However, any Company insider subject to a 10b5-1 Sales Plan generally is not restricted by this pre-clearance requirement. A request for pre-clearance should be submitted at least two business days in advance of the proposed transaction. A determination will be made whether the transaction may proceed. These procedures will help prevent inadvertent violations of the federal securities laws, will help avoid the appearance of insider trading and will prevent potentially embarrassing proxy disclosures. You will be notified if you are a Section 16 Insider.

In addition, Company insiders shall report each of the following transactions in writing to the Securities Compliance Officer: (a) the establishment of a 10b5-1 Sales Plan and (b) transactions in Company securities done pursuant to a 10b5-1 Sales Plan.

V. Confidentiality Generally.

Serious problems could be caused for the Company by unauthorized disclosure of internal information about the Company (or confidential information about our customers or vendors), whether or not for the purpose of facilitating improper trading in our stock. Company personnel should not discuss internal Company matters or developments with anyone outside of the Company, except as required in the performance of regular corporate duties.

This prohibition applies specifically (but not exclusively) to inquiries about the Company that may be made by the financial press, investment analysts or others in the financial community. It is important that all such communications on behalf of the Company be made only pursuant to the Company's public disclosure policies. Unless you are expressly authorized to the contrary, if you receive any inquires of this nature, you should decline comment and refer the inquiry to Arthur D. Sams.

VI. Information About Other Companies.

In the course of your employment, you may become aware of material non-public information about other public companies — for example, other companies with which our Company has business dealings. You are prohibited from trading in the securities of any other public company at a time when you are in possession of material non-public information about such company.

VII. Tipping.

Improper disclosure of material non-public information to another person who trades in the stock (so-called "tipping") is also a serious legal offense by the tipper and a violation of the terms of this Policy. If you disclose material non-public information about our Company, or material non-public information about any other public company which you acquire in connection with your employment with our Company, you may be fully responsible legally for the trading of the person receiving the information from you (your "tippee") and even persons who receive the information directly or indirectly from your tippee. Accordingly, in addition to your general obligations to maintain confidentiality of information obtained through your employment and to refrain from trading while in possession of material non-public information, you must take utmost care not to discuss confidential or material non-public information with family members, friends or others who might abuse the information by trading in securities.

VIII. Anti-Hedging Policy.

We encourage interested directors, officers and employees to own our securities as a long-term investment at levels consistent with their individual financial circumstance and risk bearing abilities (since ownership of any security entails risk). However, certain forms of hedging or monetization transactions allow interested directors, officers and employees to lock in much of his or her stock holdings, often in exchange for all or a part of the potential for upside appreciation in the stock. These transactions allow interested directors, officers and employees to continue to own the covered securities, but without the full risks and rewards of ownership. When that occurs, the interested director, officer or employee may no longer have the same objectives as other stockholders of the Company. For these reasons, Company personnel may not trade in puts, calls, short sales or any other types of derivatives or hedging transactions relating to the future price of the Company's stock. (You may, of course, exercise any stock options granted to you by the Company.)

IX. Margin Accounts and Pledges.

Securities held in a margin account may be sold by the broker without the customer's consent if the customer fails to meet a margin call. Similarly, securities pledged (or hypothecated) as collateral for a loan may be sold in foreclosure if the borrower defaults on the loan. Because a margin sale or foreclosure sale may occur at a time when the pledgor is aware of material, non-public information or otherwise is not permitted to trade in the Company's securities (based on Section 16 of the Exchange Act that prohibits "short-swing" trading by Insiders or otherwise), directors, officers and other employees are prohibited from holding the Company's securities in a margin account or pledging the Company's securities as collateral for a loan.

X. Consequences of Violation.

The Company considers strict compliance with this Policy to be a matter of utmost importance. We would consider any violation of this Policy by any director, officer or employee as a threat to our reputation. Violation of this Policy could cause extreme embarrassment and possible legal liability to you and the Company. Knowing or willful violations of the letter or spirit of this Policy will be grounds for immediate dismissal from the Company.

Insider trading is a crime, punishable by fines of up to \$1,000,000 and 10 years in jail for individuals. In addition, the SEC may seek to impose on the violator a civil penalty of up to three times the profits made or losses avoided from the trading. Violators must also disgorge any profits made and are often subject to an injunction against future violations. Finally, under some circumstances violators may be subjected to civil liability in private lawsuits.

Employers and other controlling persons (including supervisory personnel) are also at risk under federal law. Controlling persons may, among other things, face penalties of the greater of \$1,000,000 or three times the profits made or losses avoided by the violator if they recklessly fail to take preventive steps to control insider trading.

Thus, it is important both to you and the Company to avoid insider trading violations. You should be aware that stock market surveillance techniques are becoming more sophisticated all the time, and the chance that federal authorities will detect and prosecute even small-level trading is a significant one. The risk is simply not worth taking.

XI. Resolving Doubts.

If you have any doubt as to your responsibilities under this Policy, seek clarification and guidance before you act from the Securities Compliance Officer. Do not try to resolve uncertainties on your own.

XII. A Caution About Possible Inability to Sell.

Although the Company encourages directors, officers and employees to own our securities as a long-term investment (see Section VIII above regarding anti-hedging policy), all personnel must recognize that trading in securities may be prohibited at a particular time because of the existence of material non-public information. Anyone purchasing our securities must consider the inherent risk that a sale of the securities could be prohibited at a time he or she might desire to sell them. The next opportunity to sell might not occur until after an extended period, during which the market price of the securities might decline.

XIII. Effective Time.

This Insider Trading Policy had been duly approved and adopted by the Board of Directors.

**ACKNOWLEDGEMENT OF RECEIPT
OF INSIDER TRADING POLICY**

The undersigned does hereby acknowledge receipt of the Insider Trading Policy of Polar Power, Inc. (the "**Company**"). The undersigned has read and understands (or has had explained) such Insider Trading Policy and agrees to be governed by such Insider Trading Policy at all times in connection with the purchase and sale of securities and the confidentiality of non-public information during the undersigned's employment or other relationship with the Company or longer as may be required. The undersigned understands that failure to comply in all respects with the Insider Trading Policy is basis for termination for cause of employment or other relationship with the Company.

Dated: _____

Signature

Printed Name:

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Form S-1 (No. 333-240134), Form S-3 (No. 333-276705), and Form S-8 (No. 333-215056) of Polar Power, Inc. of our report dated March 31, 2025, with respect to the financial statements of Polar Power, Inc. as of December 31, 2024 and 2023, and for the years then ended (which report includes an explanatory paragraph relating to substantial doubt about Polar Power, Inc.'s ability to continue as a going concern), included in this Annual Report on Form 10-K for the year ended December 31, 2024.

/s/ Weinberg & Company
Los Angeles, California
March 31, 2025

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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2025

/s/ Arthur D. Sams

Arthur D. Sams
President, Chief Executive Officer and Secretary
(Principal Executive Officer)

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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2025

/s/ Luis Zavala

Luis Zavala
Chief Financial Officer
(Principal Financial Officer)

**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, 2024, 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: March 31, 2025

/s/ Arthur D. Sams

Arthur D. Sams
President and Chief Executive Officer
(Principal Executive Officer)

/s/ Luis Zavala

Luis Zavala
Chief Financial 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.
