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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K

(Mark One)
x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE FISCAL YEAR ENDED DECEMBER 31 , 2023

OR

o **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 001-38971

Spruce Power Holding Corporation
(Exact name of Registrant as specified in its Charter)

Delaware	**83-4109918**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
2000 S Colorado Blvd, Suite 2-825 Denver , Colorado	**80222**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (866) 777-8235

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

Title of Each Class:	Trading Symbol(s)	Name of Each Exchange on Which Registered:
Shares of common stock, $0.0001 par value	SPRU	New York Stock Exchange

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 o No x

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

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 shorter applicable period). Yes x No o

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

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 definition of “large accelerated filer,” “accelerated filer”, “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	o	Accelerated filer	o
Non-accelerated filer	x	Smaller reporting company	x
		Emerging growth company	o

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. o

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. o

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

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. o

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). o

The aggregate market value of the Registrant’s voting and non-voting common stock held by non-affiliates of the Registrant as of June 30, 2023 based on the closing price of the Registrant’s common stock as reported by the New York Stock Exchange of $6.50 per share, was approximately $ 101.5 million. Shares of common stock beneficially owned by each executive officer, director and holders of more than 5% of the Registrant’s common stock have been excluded as such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of April 3, 2024, 18,297,596 shares of the Registrant’s common stock, $0.0001 par value, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant’s definitive Proxy Statement for the 2024 annual meeting of stockholders are deemed to be incorporated by reference into Part III of this Form 10-K.

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CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This Annual Report on Form 10-K includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act") that relate to future events or our future financial performance including, but not limited to, statements regarding our plans, strategies and prospects, both business and financial, our growth plans, future financial and operating results, costs and expenses, the outcome of contingencies, financial condition, results of operations, liquidity, cost savings, business strategies, and other statements that are not historical facts. Forward-looking statements can be identified by the use of forward-looking words or phrases such as "anticipate," "believe," "could," "expect," "intends," "may," "opportunity," "plans," "goals," "target" "predict," "potential," "estimate," "should," "will," "would," "continue," "likely" or the negative of these terms or other words of similar meaning. These statements are based upon our current plans and strategies and reflect our current assessment of the risks and uncertainties related to its business and are made as of the date of this report. These statements are inherently subject to known and unknown risks and uncertainties. You should read these statements carefully as they discuss our future expectations or state other "forward-looking" information. There may be events in the future that we are not able to accurately predict or control and our actual results may differ materially from the expectations we describe in our forward-looking statements. Factors that could cause actual results to differ materially from those currently anticipated include the following:

- Any inability or delay in realizing the benefits anticipated by the acquisition of Spruce Holding Company 1 LLC, Spruce Holding Company 2 LLC, Spruce Holding Company 3 LLC, and Spruce Manager LLC (collectively and together with their subsidiaries, "Legacy Spruce Power").
- Uncertainties relating to the solar energy industry and the risk that sufficient additional demand for home solar energy systems may not develop or take longer to develop than we anticipate.
- Disruptions to our solar monitoring systems could negatively impact our revenues and increase our expenses.
- Warranties provided by the manufacturers of equipment for our assets and maintenance obligations may be inadequate to protect us.
- The solar energy systems we own or may acquire may have a limited operating history and may not perform as we expect, including as a result of unsuitable solar and meteorological conditions.
- Problems with performance of our solar energy systems may cause us to incur expenses, may lower the value of our solar energy systems and may damage our market reputation.
- Developments in technology or improvements in distributed solar energy generation and related technologies or components may materially adversely affect demand for our offerings.
- We could be harmed by a material reduction in the retail price of traditional utility generated electricity, electricity from other sources or renewable energy credits.
- We may fail to grow by expanding our market penetration or to manage our growth effectively.
- We may not be able to identify adequate strategic relationship opportunities, or form strategic relationships, and we may experience difficulties in integrating strategic acquisitions.
- We may require additional financing to support the development of our business and implementation of our growth strategy.
- We are subject to risks relating to our outstanding debt, including risks relating to rising interest rates and the risk that we may not have sufficient cash flow to pay our debt.
- We may be adversely affected by the impact of natural disasters and other events beyond our control, such as hurricanes, wildfires or pandemics.
- We are subject to cybersecurity risks.

- We are subject to risks relating to global economic conditions.
- Governmental investigations, litigation or other claims may cause us to incur significant expense, hinder execution of business and growth strategy or impact the price of our Common Stock.
- Changes in tax laws may materially adversely affect our business, prospects, financial condition and operating results.
- Our ability to use net operating loss carryforwards and other tax attributes may be limited in connection with business combinations or other ownership changes.
- We are subject to risks associated with construction, regulatory compliance, relating to changes in, and our compliance with, laws and regulations affecting our business and other contingencies.
- Violations of export control and/or economic sanctions laws and regulations to which we are subject could have a material adverse effect on our business operations, financial position and results of operations.
- Our insurance coverage may not be adequate to protect us from all business risks.
- We face competition from traditional energy companies as well as solar and other renewable energy companies.

All forward-looking statements should be considered in the context of the risks and other factors described above and in Item 1A under the heading “Risk Factors”, which are not exhaustive. Other sections of this Annual Report on Form 10-K, such as the description of our business set forth in Item 1 and our Management’s Discussion and Analysis of Financial Condition and Results of Operations set forth in Item 7 describe additional factors that could adversely affect our business, financial condition or results of operations. New risk factors emerge from time to time, and it is not possible to predict all such risk factors, nor can we assess the impact of all such risk factors on its business or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. Forward-looking statements are not guarantees of performance. You should not put undue reliance on these statements, which speak only as of the date hereof. All forward-looking statements attributable to Spruce Power or persons acting on its behalf are expressly qualified in their entirety by the foregoing cautionary statements. We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

This report includes certain registered trademarks, including trademarks that are the property of Spruce Power and its affiliates. This report also includes other trademarks, service marks and trade names owned by Spruce Power or other persons. All trademarks, service marks and traded names included herein are the property of their respective owners. Use or display by us of other parties’ trademarks, trade dress, or products in this report is not intended to, and does not, imply a relationship with, or endorsements or sponsorship of, us by the trademark or trade dress owners.

Summary of Risk Factors

Our business is subject to numerous risks and uncertainties, including those highlighted in the section below entitled “Risk Factors,” that represent challenges that we face in connection with the successful implementation of our strategy and growth of our business. The occurrence of one or more of the events or circumstances described in the section entitled “Risk Factors,” alone or in combination with other events or circumstances, may have an adverse effect on our business, financial condition, results of operations and prospects. Such risks include, but are not limited to:

Risks Related to the Solar Energy Industry

- The solar energy industry is an emerging market which is constantly evolving and may not develop to the size or at the rate we expect. Demand for home solar systems may decline, cease or take longer to develop than we expect.
- Global economic conditions and any related impact of supply chain constraints, including the market for our products and services could adversely affect our results of operations.
- Our solar partners or suppliers may be unwilling or unable to fulfill their respective warranty and other contractual obligations. Warranty claims, product liability claims or accidents against us could adversely affect our business.
- Developments in technology or improvements in distributed solar energy generation and related technologies or components may materially adversely affect demand for our offerings.
- Our solar energy systems and energy storage systems depend heavily on suitable solar and meteorological conditions. Seasonality fluctuations and effects of climate change could adversely affect our results of operations.
- We typically bear the risk of loss and the cost of maintenance, repair and removal on solar energy systems that are owned by our subsidiaries and included in tax equity vehicles.

Risks Related to Our Business Operations

- We are an early stage company with a history of losses, and we expect to incur significant expenses and continuing losses.
- Our business model requires further market penetration to drive growth and a failure to acquire additional home solar portfolios would have a material adverse effect on our operating results and business and could result in our operating expenses exceeding our revenues.
- We may require additional financing to support the development of our business and implementation of our growth strategy.
- We are highly dependent on the services of our Chief Executive Officer, and if we are unable to retain him or attract and retain other key employees, management or technical personnel, our ability to compete could be harmed.
- Management has limited experience in operating a public company. If we fail to manage our growth effectively, we may not be able to develop, produce, make or sell our products or services successfully.
- Rising interest rates could adversely affect our financial condition.
- Servicing our debt requires a significant amount of cash to comply with certain covenants and satisfy payment obligations, and we may not have sufficient cash flow from our business to pay our substantial debt and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.
- Our interest rate swaps could be adversely affected if the financial institutions holding such rate swaps fail.
- Our employees and independent contractors may engage in misconduct or other improper activities, including noncompliance with regulations, which could have an adverse effect on our business and operating results.
- Any security breach, unauthorized access or disclosure, or theft of data, including personal information, we, our third party service providers, or our suppliers gather, store, transmit or use, could harm our reputation, subject us to claims, litigation, and financial harm and have an adverse impact on our business.

- Unfavorable publicity, failure to respond effectively to adverse publicity, reports published by analysts, including projections in those reports that differ from our actual results, or securities or industry analysts who do not publish or cease publishing research or reports about us could adversely affect our business.

- We have been named as a defendant in certain stockholder class actions, which like many litigation matters, could result in substantial damages and other related costs and may require management-level attention.

- We may need to defend ourselves against patent, copyright or trademark infringement claims or trade secret misappropriation claims, which may be time-consuming and cause us to incur substantial costs.

- If the Internal Revenue Service (the "IRS") makes determinations that the fair market value of our solar energy systems is materially lower than what we have claimed, we may have to pay significant amounts to our fund investors, and our business, financial condition and prospects may be materially and adversely affected.

Risks Related to Regulation

- Our business depends in part on the regulatory treatment of third-party owned solar energy systems.

- Compliance with occupational safety and health requirements can be costly and noncompliance with such requirements may result in potentially significant monetary penalties, operational delays, and adverse publicity.

- A failure to comply with laws and regulations relating to interactions by us with current or prospective customers could result in negative publicity, claims, investigations, and litigation that may adversely affect our business.

- We are subject to U.S. and foreign anti-corruption and anti-money laundering laws and regulations. We could face criminal liability and other serious consequences for violations, which could harm our business.

- We have received subpoenas from states attorneys general requesting information about our business. These investigations could result in substantial legal fees, fines, penalties, or damages and may divert Management's time and attention from our business.

Risks Related to Ownership of Our Securities

- We have no current plans to declare a dividend in the foreseeable future.

- If we fail to maintain effective internal control over financial reporting, our ability to produce accurate financial statements or comply with applicable regulations could be impaired.

- We are a "smaller reporting company" and will be able to avail ourselves of reduced disclosure requirements applicable to smaller reporting companies, which could make our common stock less attractive to investors.

- If our stock price declines, our Common Stock may be subject to delisting from the New York Stock Exchange (the "NYSE").

- The price of our Common Stock may be volatile.

- We may issue additional Common Stock or preferred stock, including under our equity incentive plan. Any such issuances would dilute the interest of our stockholders and likely present other risks.

- We may issue additional shares of Common Stock or other equity securities without stockholder approval, which will dilute existing stockholders' interests and may depress the market price of our Common Stock.

- Our Certificate of Incorporation contains anti-takeover provisions that could adversely affect the rights of our stockholders.

- Our Certificate of Incorporation provides, subject to limited exceptions, that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees, or stockholders.

PART I

Unless the context provides otherwise, all references in this Annual Report on Form 10-K to the "Company", "Spruce Power", "we", "our" and "us" refer to Spruce Power Holding Corporation and its consolidated subsidiaries, including Legacy Spruce Power after the acquisition of Legacy Spruce Power on September 9, 2022. Depending on the context, references to "Spruce Power" may also include the historical business of Legacy Spruce Power prior to September 9, 2022.

Item 1. Business

Company Overview

Spruce Power (formerly known as XL Fleet Corp.) is a leading owner and operator of distributed solar energy assets across the United States (the "U.S."), offering subscription-based services to approximately 75,000 home solar assets and customer contracts, making renewable energy more accessible to everyone. Our mission is to provide our customers with clean, affordable solar energy systems and an extraordinary customer experience.

We are engaged in the ownership and maintenance of home solar energy systems for homeowners in the U.S. We provide clean, solar energy typically at savings compared to traditional utility energy. Our primary customers are homeowners and our core solar service offerings generate revenues primarily through (i) the sale of electricity generated by our home solar energy systems to homeowners pursuant to long-term agreements, which requires our subscribers to make recurring monthly payments, (ii) third party contracts to sell solar renewable energy credits ("SRECs") generated by the solar energy systems for fixed prices and (iii) the servicing of those agreements for other institutional owners of home solar energy systems. In addition, we generate cash flows and earn interest income from an investment through a master lease agreement.

We hold subsidiary fund companies that own and operate portfolios of home solar energy systems, which are subject to solar lease agreements ("SLAs") and power purchase agreements ("PPAs", together with the SLAs, "Customer Agreements") with home solar customers who benefit from the production of electricity generated by the solar energy systems. The solar energy systems may qualify for subsidies, renewable energy credits and other incentives as provided by various states and local agencies. These benefits have generally been retained by our subsidiaries that own the solar energy systems, with the exception of the investment tax credit ("ITC") under Section 48 of the Internal Revenue Code as amended, (the "IRC"), which were generally passed through to the various financing partners of the solar energy systems.

Our business offers services which include asset management services and operating and maintenance services for home solar energy systems. In addition to providing management services to our portfolio, we also provide portfolio management services through our Spruce Pro platform to approximately 5,000 systems owned by other companies, which include (i) billing and collections, (ii) account management services, (iii) financial reporting, (iv) homeowner support and (v) maintenance monitoring and dispatch.

Corporate History and Background

Historically, we provided fleet electrification solutions for commercial vehicles in North America, offering our systems for vehicle electrification (the "Drivetrain" business) and through our energy efficiency and infrastructure solutions business, offering and installing charging stations to enable customers develop the charging infrastructure required for their electrified vehicles (the "XL Grid" business).

In the first quarter of 2022, we initiated a strategic review of our overall business operations, which included assessing our offerings, strategy, processes and growth opportunities. As a result of the strategic review, we made the following decisions relating to the restructuring of our Drivetrain business in the first quarter of 2022: (i) the elimination of a substantial majority of our hybrid drivetrain products; (ii) the elimination of our plug-in hybrid electric vehicles products; (iii) the reduction in the size of our workforce by approximately 50 employees; (iv) the closure of our production center and warehouse in Quincy, IL; (v) the closure of engineering activities in our Boston office; and (vi) the termination of our partnership with eNow.

Following the strategic review, we decided to pursue transformational mergers and acquisition ("M&A") opportunities, which included the implementation of a process to institutionalize the M&A effort and resulted in the formation of an investment committee comprised of senior members of our executive team ("Management") and members of our Board of Directors. The objective of the investment committee was to continue the exploration of value-generative opportunities in the decarbonization and energy transition ecosystem, focused on three core requirements: (i) a business that makes an impact on decarbonization, (ii) a leader in an established, growing market segment and (iii) a company that generates positive earnings before interest, taxes, depreciation and amortization ("EBITDA"). As a result of these efforts, on September 9, 2022, we acquired 100% of the membership interests of Legacy Spruce Power, which was one of the largest privately held owner and operator of home solar energy systems in the U.S. at the time of the transaction, with approximately 51,000 customer subscribers as of December 31, 2022.

For reference, on December 21, 2020 (the "Closing Date"), Pivotal Investment Corporation II ("Pivotal"), a special purpose acquisition company ("SPAC") incorporated on March 20, 2019, consummated a business combination pursuant to that certain Agreement and Plan of Reorganization, dated as of September 17, 2020 (the "Merger Agreement"), by and among (i) Pivotal, PIC II Merger Sub Corp., a Delaware corporation and wholly owned subsidiary of Pivotal ("Merger Sub") and (ii) XL Hybrids, Inc., a Delaware corporation ("Legacy XL"). Pursuant to the terms of the Merger Agreement, a business combination between Pivotal and Legacy XL was effected through the merger of Merger Sub with and into Legacy XL, resulting in Legacy XL as the surviving company and a wholly-owned subsidiary of Pivotal. On the Closing Date, Pivotal changed its name to XL Fleet Corp ("XL Fleet"). In November 2022, following the acquisition of Legacy Spruce Power, we changed our corporate name from "XL Fleet Corp." to "Spruce Power Holding Corporation." Additionally, we changed our ticker symbol from "XL" to "SPRU."

With the completion of the acquisition of Legacy Spruce Power, we analyzed strategic alternatives related to our Drivetrain business, and subsequently in December 2022, set plans to exit our Drivetrain business and sold a portion of the business to Shyft Group USA ("Shyft"), which closed in January 2023. Shyft also (i) acquired certain technical equipment and assumed our Wixom, Michigan facility, (ii) offered employment to certain engineers and sales personnel and (iii) assumed completion of our pilot development agreement with the Department of Defense related to vehicle hybridization, wherein we retained the rights to potential future royalties from the program. We also sold certain battery inventory and our legacy hybrid technology to RMA Group, an automotive and equipment supplier in Southeast Asia, during the fourth quarter of 2022. Furthermore, we assessed the operations of our XL Grid business to evaluate its strategic fit with Legacy Spruce Power, and in the fourth quarter of 2022, we entered into a non-binding letter of intent for the sale of World Energy Efficiency Services, LLC ("World Energy"). The divestiture of World Energy closed in January 2023, and we subsequently ceased our XL Grid business.

On March 28, 2023, we were notified by the NYSE that we were not in compliance with Section 802.01C of the NYSE Listed Company Manual (the "NYSE Manual") because the average closing price of our common stock was less than $1.00 over a consecutive 30 day trading period. As a result, on October 6, 2023, we filed an Amendment to our Second Amended and Restated Certificate of Incorporation (the "Amended Certificate of Incorporation") to effect a 1-for-8 reverse stock split of our issued and outstanding shares of common stock, par value $0.0001 per share (the "Reverse Stock Split"). On November 17, 2023, we received a notice from the NYSE confirming we regained compliance with the continued listing standards set forth in the NYSE Manual.

In the first quarter of 2023, we completed the acquisition of all issued and outstanding interests in SS Holdings 2017, LLC and its subsidiaries ("SEMTH") from certain funds managed by HPS Investment Partners, LLC, pursuant to a membership interest purchase and sale agreement as of that date (the "SEMTH Acquisition"). The SEMTH related asset includes a 20-year use rights to customer payment streams of approximately 22,500 home SLAs and PPAs (the "SEMTH Master Lease"). Subsequently on August 18, 2023, we acquired approximately 2,400 home solar assets and contracts, with an average remaining contract life of approximately 11 years, from a publicly traded, regulated utility company (the "Tredegar Acquisition").

With the completion of the SEMTH and Tredegar Acquisitions, we have, in the aggregate, 12 portfolios of rooftop solar Customer Agreements with a combined capacity of approximately 426 MWdc. In the aggregate, as of December 31, 2023, we offered subscription-based services and owned the cash flows from approximately 75,000 home solar assets and customer contracts.

Corporate Strategy

We believe the combination of our existing subscriber-base and proven servicing platform related to our Customer Agreements, together with our capital resources and relationships, gives us the ability to take advantage of rapid growth in distributed solar and battery storage services, while creating a path to more predictable revenues, profits, and cash flow for our shareholders. Our corporate strategy has three key elements:

Leveraging the Spruce Power platform to become a leading provider of subscription-based solutions for distributed energy resources

We have more than a decade of experience owning and operating rooftop solar systems, as well as energy efficiency upgrades. We believe our proven platform for managing home solar can be extended to other categories of distributed energy resources, and by leveraging our platform, we intend to grow our revenues by providing subscription-based solutions for rooftop solar and energy storage and other future energy-related products to homeowners and businesses, including commercial and industrial ("C&I") solar developers. We are focused on delivering best-in-class customer service, with investment into process and platform improvement for on-site monitoring, customer billing and working with qualified partners for field services.

Profitably growing return on assets by focusing on channels with the lowest customer acquisition cost

We seek to grow our subscriber revenues by focusing on those channels that have lowest customer acquisition costs and the ability to increase return on assets, including acquiring existing systems from other companies or investment funds, selling additional services to existing subscribers, selling services to new customers online and partnering with selected independent installers to provide a subscription-based solution for their customers.

Increasing shareholder value by delivering predictable revenues, profits and cash flow

By focusing on subscription-based solutions with long-term customer contracts, we seek to generate consistent revenues, profits and cash flow.

Customer Operations

We have more than a decade of experience servicing rooftop solar systems, including servicing approximately 75,000 home solar systems and customer contracts from our own portfolios and approximately 5,000 systems owned by third parties. A noteworthy differential is our in-house capabilities which include customer billing and collections, account management services, customer support, systems monitoring and maintenance, and portfolio accounting and financial reporting. We have made progress in elevating our customer service and continue to invest resources in our goal of becoming best-in-class customer experience. Our in-house capabilities and operations infrastructure has established a scalable platform where we are able to continually improve profitability through growth while reducing incremental operational costs.

Corporate Development

Our corporate growth strategy provides a unique differential from our competitors. While our competitors lose future long-term value creation for short-term cash flow by selling new solar systems outright directly to consumers, we focus on long-term positive cash flow. We have a dedicated corporate development M&A team that has historically been successful in acquiring high quality portfolios of solar energy systems that are already in operation and have existing long-term contracts with homeowners. Our in-house M&A team acquires operating home solar energy systems "in-bulk" from other companies, and such approach has enabled us to achieve step-change growth while minimizing our customer acquisition costs. Our corporate development M&A team also brings significant experience in renewable energy credit markets, and other tax incentives programs, which enables additional value creation alongside our acquisition strategy.

Competition

Distributed solar generation is a capital-intensive, evolving business with numerous industry participants. While our solar generation portfolios are currently contracted, we may compete in the future primarily on the basis of price of electricity, quality of service and low/no carbon energy. We consider the long-term contracted profile of our solar generation assets, among other strengths discussed below, as competitive advantages. Distributed solar generation is a growing industry in the U.S. and diverse in terms of industry structure, and as such, there is a wide variation in terms of the capabilities, resources, nature and identity in the companies we compete with depending on the market. In residential distributed solar generation, customers' needs are met through long-term bilateral contracts, which supply power and maintenance services.

We also compete with other companies to acquire operating portfolios of home solar energy systems with stable contracted cash flows. We consider our primary competitors for opportunities in North America as other solar companies with vertically integrated business models, existing solar servicing companies, purely finance focused organizations and regulated utility holding companies. We believe we are well-positioned to execute our strategy over the long term based on the following competitive strengths:

Our management and operational expertise

We benefit from our Management's seasoned experience in industry (renewables, utilities and financial services), corporate development (M&A) and customer focused, cost-efficient operations.

Contracted assets with stable cash flows

The contracted nature and diversification of off-takers in our portfolio of home solar assets supports stable long-term cash flows. Home solar assets in our portfolio are contracted under long-term contracts, which generally provide for lease payments or production-based power purchase payments over the contract term. Our home solar asset portfolios have a total weighted average remaining contract term of approximately 12 years as of December 31, 2023.

Newer, well-maintained portfolio

Based on expected contributions to cash generated, approximately 50% of our portfolio of home solar energy systems have been operating on average for fewer than 9 years. Due to the portfolio of our projects being in the first half of their expected useful life and using industry-standard technology, we believe the projects will achieve the expected levels of performance.

Geographic and resource diversification

With the SEMTH and Tredegar Acquisitions, our portfolio of approximately 75,000 home solar systems and customer contracts is geographically diverse across 18 states in the U.S., which reduces exposure to localized weather events, natural disasters, regional underperformance, and adverse regulatory actions and provides a more stable stream of cash flows over the long term when compared to a non-diversified portfolio.

Flexible customer service platforms

We utilize scalable, cost-effective customer service platforms and systems in our operations, which support efficient integration and service of acquired portfolios and third party owned portfolios. These service platforms also provide our customers with self-service options to make payments and other services.

Competitiveness of renewable energy

Renewable energy technology has improved in recent years. Solar energy generation is becoming one of the lowest cost energy generation technologies in many regions in the U.S. which is expected to lead to significant growth in the renewable energy industry. Solar technology is improving as solar cell efficiencies improve and installation costs are declining.

Intellectual Property

Generally, the solar installation business is not dependent on intellectual property. Within our residential business, we utilize licensed software, which enables our organization to efficiently manage thousands of customer portfolios. The success of our business depends, in part, on our ability to maintain and protect our proprietary information, license agreements and other contractual provisions, processes and know-how.

Human Capital Management

With our mission of "Powering Our Customers' Clean and Efficient Energy use, for a Sustainable Future", we believe that starts with our employees. We aim to attract top talent by building a culture upon our values of coordination, purpose-driven and results oriented. We make investments in talent management and employee engagement initiatives, in order to foster a culture of belonging and inclusion. As of December 31, 2023, we had 142 full time employees primarily located in Denver, Colorado and Houston, Texas. As of December 31, 2023, no employees were covered by collective bargaining agreements, and we have not experienced any work stoppages.

To develop, attract and retain personnel, we establish an environment of learning, purpose, diversity and opportunity and our leadership continually looks for ways to improve. We do this by implementation of several training programs, which includes our internally developed educational platform, Spruce University, to nurture an environment of learning, employee development and talent retention. Bi-annually, we are committed to enhancing our senior leadership with curriculums to promote and develop teamwork and accountability.

Attraction and retention of key employees contributes to our ability to remain competitive, and we have comprehensive rewards programs to help ensure we are compensating and rewarding our employees in line with market practice, providing a competitive benefits program, paid time off, retirement 401(k) matching, education assistance, internally developed trainings, and flexibility through programs like our floating holidays. Our ongoing support of our employees' financial, health and wellness needs will continue to be essential.

Government Regulations

Although we are not regulated as a public utility in the U.S. under applicable federal, state, or other local regulatory regimes where we conduct business, we compete primarily with regulated utilities. As a result, we maintain a team that focuses on the key regulatory and legislative issues impacting the entire industry.

Interconnection permission from any applicable local primary electric utility is already granted upon acquisition of existing home solar systems. Depending on the size of the solar energy system and local law requirements, interconnection permission is provided by the local utility to our customers upon initial installation. In almost all cases, interconnection permissions are issued on the basis of a standard process which has been pre-approved by the local public utility commission or other regulatory body with jurisdiction over net metering policies. As such, no additional regulatory approvals are required once interconnection permission is given.

Our collection activities are regulated in various states in which they operate. As such, we obtain and maintain collection agency licenses in the states in which we operate, as required by law, and are subject to regulatory examination of such collection activities on a regular basis.

Government Incentives

Federal, state, and local government bodies provide incentives to owners, distributors, system integrators and manufacturers of solar energy systems to promote solar energy in the form of rebates, tax credits, payments for renewable energy credits associated with renewable energy generation and exclusion of solar energy systems from property tax assessments. These incentives enable us to lower the price we charge customers for energy from, and to lease, our solar energy systems, helping to catalyze customer adoption of solar energy as an alternative to utility-provided power. In addition, for some investors, the acceleration of depreciation creates a valuable tax benefit that reduces the overall cost of the solar energy system and increases the return on investment. The federal government also currently offers an ITC under Section 48(a) of the IRC for the installation of certain energy properties, including solar power facilities owned for business purposes.

Inflation Reduction Act

The Inflation Reduction Act ("IRA") was enacted August 16, 2022, which President Biden signed into law as of that date. This legislative package includes major policy initiatives enacted to enhance the clean energy industry. While there are numerous federal, state, and local government incentives that benefit our business, some adverse actions, interpretations or determinations of new or existing laws or regulations could have a negative impact on our business. Congress could revise or eliminate certain provisions in the IRA that could negatively impact our business. Federal agencies may also issue tax guidance or regulations that could negatively impact our business or prevent certain businesses from participating.

Corporate Information

Our principal executive offices are located at 2000 S Colorado Blvd, Suite 2-825, Denver, Colorado, and our telephone number is (866) 777-8235. Our website address is www.sprucepower.com and the information contained in, or that can be accessed through our website, is not part of this Annual Report on Form 10-K and should not be considered part of this Annual Report on Form 10-K.

Information Available on the Internet

Our website address is www.sprucepower.com, to which we regularly post copies of our press releases as well as additional information about us. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, are available free of charge through the Investor Relations section of our website as soon as reasonably practicable after such materials have been electronically filed with, or furnished to, the Securities and Exchange Commission (the "SEC"). The SEC maintains an internet site (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. We include our website address in this Annual Report on Form 10-K only as an inactive textual reference. Information contained on our website does not constitute a part of this report or our other filings with the SEC.

1A. Risk Factors

Risk Factors

An investment in our securities is speculative and involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks described below, together with other information in this Annual Report on Form 10-K and the other information and documents we file with the SEC. The occurrence of any of the following risks could have a material and adverse effect on our business, reputation, financial condition, results of operations and future growth prospects, as well as our ability to accomplish our strategic objectives. As a result, the trading price of our Common Stock could decline, and you could lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations and stock price.

Risks Related to the Solar Energy Industry

The solar energy industry is an emerging market which is constantly evolving and may not develop to the size or at the rate we expect. Demand for home solar systems may decline, cease or take longer to develop than we expect.

The distributed home solar energy market is at a relatively early stage and is a constantly evolving market. We believe the solar energy industry is still developing and maturing, and we cannot be certain that the market will grow to the size or at the rate we expect. Any future growth of the solar energy market and the success of our solar service offerings depend on many factors beyond our control, including recognition and acceptance of the solar service market by consumers, the pricing of alternative sources of energy, a favorable regulatory environment, the continuation of expected tax benefits and other incentives, and our ability to provide our solar service offerings cost effectively. If the markets for solar energy do not develop to the size or at the rate we expect, or demand for distributed home solar energy systems fails to develop sufficiently, our business may be adversely affected.

Many factors may affect the demand for solar energy systems, including the following:

- availability, substance and magnitude of solar support programs including government targets, subsidies, incentives, renewable portfolio standards and residential net metering rules;
- the relative pricing of other conventional and non-renewable energy sources, such as natural gas, coal, oil and other fossil fuels, wind, utility-scale solar, nuclear, geothermal and biomass;
- performance, reliability and availability of energy generated by solar energy systems compared to conventional and other non-solar renewable energy sources;
- availability and performance of energy storage technology, the ability to implement such technology for use in conjunction with solar energy systems and the cost competitiveness such technology provides to customers as compared to costs for those customers reliant on the conventional electrical grid; and
- general economic conditions and the level of interest rates.

Solar energy has yet to achieve broad market acceptance and depends in part on continued support in the form of rebates, tax credits, and other incentives from federal, state and local governments. If this support diminishes materially, our ability to obtain external financing on acceptable terms, or at all, could be materially adversely affected. These types of funding limitations could lead to inadequate financing support for the anticipated growth in our business. We cannot be certain if historical growth rates reflect future opportunities or whether growth anticipated by us will be realized. Furthermore, growth in home solar energy depends in part on macroeconomic conditions, retail prices of electricity and customer preferences, each of which can change quickly. Declining macroeconomic conditions, including in the job markets and residential real estate markets, could contribute to instability and uncertainty among customers and impact their financial wherewithal, credit scores or interest in entering into long-term contracts, even if such contracts would generate immediate and long-term savings.

Furthermore, market prices of retail electricity generated by utilities or other energy sources could decline for a variety of reasons, as discussed further below. Any such declines in macroeconomic conditions, changes in retail prices of electricity or changes in customer preferences would adversely impact our business.

Global economic conditions and any related ongoing impact of supply chain constraints, including the market for our products and services could adversely affect our results of operations

The uncertain condition of the global economy as well as the current conflict between Russia and Ukraine, including the retaliatory economic measures taken by Unites States, European, and others continue impacting businesses around the world. The deterioration of the economic conditions or financial uncertainty to provide our services could reduce customers' confidence and negatively affect our sales and results of operations. Also, the recent inflationary pressures have increased the cost of energy, raw materials, and other indirect costs used in our business could adversely influence customer purchasing decisions. We cannot predict whether or when such circumstances may change, improve, or worsen in the near future.

Our solar partners or suppliers may be unwilling or unable to fulfill their respective warranty and other contractual obligations. Warranty claims, product liability claims or accidents against us could adversely affect our business

We agree to maintain the solar energy systems and energy storage systems installed on our customers' homes during the length of the term of our Customer Agreements, which are typically 20 years. We are exposed to any liabilities arising from the solar energy systems' failure to operate properly and are generally under an obligation to ensure each solar energy system remains in good condition during the term of the Customer Agreement. We are the beneficiary of the manufacturers' and system installers' warranty coverage, typically of 20 years for equipment warranties and five to ten years for workmanship warranties. In the event that such warranty providers file for bankruptcy, cease operations or otherwise become unable or unwilling to fulfill their warranty or related maintenance obligations, we may not be adequately protected by such warranties or maintenance obligations. Even if such warranty providers fulfill their obligations, the warranty or maintenance obligations may not be sufficient to protect us against all of our losses. These warranties are subject to liability and other limits. If we seek warranty protection and a warranty provider is unable or unwilling to perform its warranty obligations, whether as a result of its financial condition, its ability to act in a timely manner, or otherwise, or if the term of the warranty or maintenance obligation has expired or a liability limit has been reached, there may be a reduction or loss of protection for the affected assets, which could have a material adverse effect on our business, financial condition and results of operations.

Our failure to accurately predict future liabilities related to material quality or performance expenses could result in unexpected volatility in our financial condition. Because of the long estimated useful life of our solar energy systems, we have been required to make assumptions and apply judgments regarding a number of factors, including our anticipated rate of warranty claims and the durability, performance and reliability of our solar energy systems. Additionally, we discontinued our Drivetrain business, sold some of the assets relating to this business and retained warranty obligations relating to the historical business. If our warranty reserves are inadequate to cover future warranty claims, our business, prospects, financial condition and operating results could be materially and adversely affected. We may become subject to significant and unexpected warranty expenses as well as claims from former customers.

We made these assumptions based on the historic performance of similar solar energy systems or on accelerated life cycle testing. Our assumptions could prove to be materially different from the actual performance of our solar energy systems, causing us to incur substantial expense to repair or replace defective solar energy systems in the future or to compensate customers for solar energy systems that do not meet their performance guarantees. Equipment defects, serial defects or operational deficiencies also would reduce our revenue from Customer Agreements because the customer payments under such Customer Agreements are dependent on solar energy system production or would require us to make refunds under performance guarantees. Any widespread product failures or operating deficiencies may damage our market reputation and adversely impact our financial results.

Developments in technology or improvements in distributed solar energy generation and related technologies or components may materially adversely affect demand for our offerings

Significant developments in technology, such as advances in distributed solar power generation, energy storage solutions such as batteries, energy storage management systems, the widespread use or adoption of fuel cells for residential or commercial properties or improvements in other forms of distributed or centralized power production may materially and adversely affect demand for our offerings and otherwise affect our business. Future technological advancements may result in reduced prices to consumers or more efficient solar energy systems than those available today, either of which may result in current customer dissatisfaction. We may not be able to adopt these new technologies as quickly as our competitors or on a cost-effective basis.

Due to the length of our Customer Agreements, the solar energy system deployed on a customer's residence may be outdated prior to the expiration of the term of the related Customer Agreement, reducing the likelihood of renewal of our Customer Agreement at the end of the applicable term and possibly increasing the occurrence of customers seeking to terminate or cancel their Customer Agreements or customer defaults. If current customers become dissatisfied with the price they pay for their solar energy system under our Customer Agreements relative to prices that may be available in the future or if customers become dissatisfied by the output generated by their solar energy systems relative to future solar energy system production capabilities, or both, this may lead to customers seeking to terminate or cancel their Customer Agreements or to higher rates of customer default and have an adverse effect on our business, financial condition and results of operations. Additionally, recent technological advancements may impact our business in ways we do not currently anticipate. Any failure by us to adopt or have access to new or enhanced technologies or processes, or to react to changes in existing technologies, could result in product obsolescence or the loss of competitiveness of and decreased consumer interest in our solar energy services, which could have a material adverse effect on our business, financial condition and results of operations.

Our solar energy systems and energy storage systems depend heavily on suitable solar and meteorological conditions. Seasonality fluctuations and effects of climate change could adversely affect our results of operations

The energy produced and the revenue and cash receipts generated by a solar energy system depend on suitable solar, atmospheric, and weather conditions, all of which are beyond our control. Shifts in weather are difficult to predict and may not be immediately apparent, and the impact of these changes is difficult to quantify from period to period. Our economic model and projected returns on our solar energy systems require achievement of certain production results from our systems and, in some cases, we guarantee these results to our consumers. There can be no assurance we will be successful in implementing effective strategies to counter these shifts in weather. If the solar energy systems underperform for any reason, our business could suffer. For example, the amount of revenue we recognize in a given period and the amount of our obligations under the performance guarantees of our Customer Agreements are dependent in part on the amount of energy generated by solar energy systems under such Customer Agreements. Furthermore, climate change could exacerbate the frequency and severity of weather events in all areas where we operate. Climate change or other factors could also cause prevailing weather patterns to materially change in the future, making it harder to predict the average annual amount of sunlight striking each location where our solar energy systems and energy storage systems are. Potential negative effects of climate change include, among others, a temporary decrease in solar availability in certain locations, disruptions in transmission grids and delays or reductions in new installations. These or other effects could make our solar energy systems less economical overall or make individual solar energy systems less economical. Any of these effects on meteorological conditions could harm our business, financial condition, and results of operations.

We typically bear the risk of loss and the cost of maintenance, repair and removal on solar energy systems that are owned by our subsidiaries and included in tax equity vehicles

We typically bear the risk of loss and are generally obligated to cover the cost of maintenance, repair, and removal for any of our solar energy systems. Under our Customer Agreements, we agree to operate and maintain the solar energy system for a fixed fee calculated to cover our future expected maintenance costs. If our solar energy systems require an above-average amount of repairs or if the cost of repairing the solar energy systems is higher than our estimate, we would need to perform such repairs without additional compensation. If our solar energy systems are damaged as the result of a natural disaster beyond our control, losses could exceed or be excluded from our insurance policy limits and we could incur unforeseen costs that could harm our business and financial condition. We may also incur significant costs for taking other actions in preparation for, or in reaction to, such events. We purchase property insurance with industry standard coverage and limits to hedge against such risk, but such coverage may not cover our losses.

Risks Related to Our Business Operations

We are an early stage company with a history of losses, and we expect to incur significant expenses and continuing losses

We incurred net losses of approximately $65.8 million and $93.9 million for the years ended December 31, 2023 and 2022, respectively. We believe that we will continue to incur operating and net losses through the near future. We completed the acquisition of Legacy Spruce Power and discontinued and disposed of our legacy businesses, and as a result our future net income or loss will depend upon the implementation of our strategy to expand our new solar power business. We expect the rate at which we will incur future losses will be impacted by the following:

- Costs which may be incurred in connection with the implementation of our business strategy;
- Costs related to our general and administrative functions to support our public company obligations; and

- Acquisition and integration of other solar energy portfolios or businesses.

Because we will incur portions of the costs and expenses from these efforts before we receive the expected incremental revenues with respect thereto, our losses in future periods are expected to be significant. In addition, we may find that these efforts are more expensive than we currently anticipate or that these efforts may not result in revenues, which would have a material adverse effect on our results of operations and further increase our losses.

Our business model requires further market penetration to drive growth and a failure to acquire additional home solar portfolios would have a material adverse effect on our operating results and business and could result in our operating expenses exceeding our revenues.

It may be difficult to predict our future revenues and appropriately budget for our expenses, and we have limited insight into trends that may emerge and affect our business. In the event that actual results differ from our estimates or we adjust our estimates in future periods, our operating results and financial position could be materially affected. Our future results depend on the successful implementation of Management's growth strategies (including acquisition of additional home solar portfolios and the launch of new products and services) and are based on assumptions and events over which we have only partial or no control. These initiatives and products may not generate as much revenue, cost more to bring to market and create greater liabilities than we anticipate. We will continue to encounter risks and difficulties frequently experienced by early stage companies, including scaling up our infrastructure and headcount, and may encounter unforeseen expenses, difficulties or delays in connection with our growth. In addition, as a result of the capital-intensive nature of our business, we may sustain substantial operating expenses without generating sufficient revenues to cover expenditures.

We may require additional financing to support the development of our business and implementation of our growth strategy

We expect to have sufficient capital for the next 12 months for our operations and strategic initiatives. However, we may require additional capital investment in the future to fund operations and support strategic initiatives. There can be no assurance that we will have access to the capital we need on favorable terms when required or at all. Additional financing may not be available on terms acceptable to us. If we are unable to obtain needed financing on acceptable terms, we may not be able to implement our business plan, which could have a material adverse effect on our business, financial condition, results of operations and prospects. If we raise additional funds through the sale of equity, convertible debt or other equity-linked securities, our shareholders' ownership will be diluted. We may issue securities that have rights, preferences and privileges senior to our Common Stock.

We are highly dependent on the services of our Chief Executive Officer, and if we are unable to retain him or attract and retain other key employees, management or technical personnel, our ability to compete could be harmed.

Our success depends, in part, on our ability to retain our key personnel. We are highly dependent on the services of Christian Fong, our Chief Executive Officer. Mr. Fong is the source of many of the ideas and execution driving our company. If Mr. Fong were to discontinue his service to us due to death, disability or any other reason, we would be significantly disadvantaged. We do not maintain, and we have no plans to maintain in the future, key man life insurance policies with respect to Mr. Fong.

Our success also depends, in part, on our continuing ability to identify, hire, attract, train, develop and retain other highly qualified personnel. Experienced and highly skilled employees are in high demand and competition for these employees can be intense, and our ability to hire, attract and retain them depends on our ability to provide competitive compensation. We may not be able to attract, assimilate, develop or retain qualified personnel in the future, and our failure to do so could adversely affect our business, including the execution of our global business strategy. Any failure by Management and our employees to perform as expected may have a material adverse effect on our business, prospects, financial condition and operating results.

Management has limited experience in operating a public company. If we fail to manage our growth effectively, we may not be able to develop, produce, make or sell our products or services successfully.

Our executive officers have limited experience in the management of a publicly traded company. Management may not successfully or effectively manage a public company that is subject to significant regulatory oversight and reporting obligations under federal securities laws. Management's limited experience in dealing with the increasingly complex laws pertaining to public companies could be a significant disadvantage in that it is likely that an increasing amount of their time may be devoted to these activities, which will result in less time being devoted to the management and growth of the post-combination company. Any failure to manage our growth effectively could materially and adversely affect our business, prospects, operating results and financial condition.

Additionally, we may not have adequate personnel with the appropriate level of knowledge, experience and training in the accounting policies, practices or internal control over financial reporting required of public companies in the U.S. The development and implementation of the standards and controls necessary for us to achieve the level of accounting standards required of a public company in the U.S. may require costs greater than expected. Competition for individuals with this experience is intense, and we may not be able to attract, integrate, train, motivate or retain additional highly qualified personnel. The failure to attract, integrate, train, motivate and retain these additional employees could seriously harm our business, prospects, financial condition and operating results.

Rising interest rates could adversely affect our financial condition

We have $646.7 million of long-term debt outstanding as of December 31, 2023, which are secured by our solar assets and the majority of which is variable rate debt. Although we use interest rate swap contracts to mitigate the market risk associated with rising interest rates, significant increases in interest rates may still increase our cost of capital.

Servicing our debt requires a significant amount of cash to comply with certain covenants and satisfy payment obligations, and we may not have sufficient cash flow from our business to pay our substantial debt and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful

We have $646.7 million of long-term debt outstanding as of December 31, 2023, as discussed in more detail in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements, in each case, included in this Annual Report on Form 10-K. Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness depends on our future performance, which is subject to economic, financial, competitive, and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures to operate our business. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt, or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to timely repay or otherwise refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations and negatively impact our financial condition and prospects.

Our interest rate swaps could be adversely affected if the financial institutions holding such rate swaps fail

We use derivative financial instruments, primarily interest rate swaps, to manage our exposure to interest rate risks on our syndicated term loans, which are recognized on the balance sheet at their fair values. Our interest rate swaps are with third-party financial institutions, including Silicon Valley Bridge Bank, N.A., which is the successor to Silicon Valley Bank. If Silicon Valley Bridge Bank, or another third-party financial institution that holds the Company’s interest rate swaps, fails to perform under the interest rate swaps, our operating liquidity and financial performance could be materially and adversely affected.

Our employees and independent contractors may engage in misconduct or other improper activities, including noncompliance with regulations, which could have an adverse effect on our business and operating results.

We are exposed to the risk that our employees and independent contractors may engage in misconduct or other illegal activity. Misconduct by these parties could include intentional, reckless or negligent conduct or other activities that violate laws and regulations, including production standards, U.S. federal and state fraud, abuse, data privacy and security laws, other similar non-U.S. laws or laws that require the true, complete and accurate reporting of financial information or data. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. In addition, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, prospects, financial condition and operating results, including, without limitation, the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgement, integrity oversight and reporting obligations to resolve allegations of non-compliance, imprisonment, other sanctions, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, any of which could adversely affect our business, prospects, financial condition and operating results.

Any security breach, unauthorized access or disclosure, or theft of data, including personal information, we, our third party service providers, or our suppliers gather, store, transmit or use, could harm our reputation, subject us to claims, litigation, and financial harm and have an adverse impact on our business.

In the ordinary course of business, we, our third-party service providers and our suppliers receive, store, transmit, and use data, including the personal information of customers, such as names, addresses, email addresses, credit information and other housing and energy use data, as well as the personal information of our employees. Any unauthorized disclosure of such personal information, whether through a breach of our systems or those of our third-party service providers or suppliers by an unauthorized party, including, but not limited to hackers, threat actors, sophisticated nation-states or nation-state-supported actors, or through the personnel theft, or misuse of information, or otherwise, could harm our business. In addition, we, our third party service providers and our suppliers may be subject to a variety of evolving threats, such as computer malware (including as a result of advanced persistent threat intrusions), ransomware, malicious code (such as viruses or worms), social engineering (including spear phishing and smishing attacks), telecommunications failures, natural disasters and extreme weather events, general hacking and other similar threats.

Cybersecurity incidents have become more prevalent and could occur on our systems and those of our third parties in the future. Our team members who work remotely pose increased risks to our information technology systems and data, because many of them utilize less secure network connections outside our premises.

Inadvertent disclosure of confidential data or unauthorized access by a third party could result in future claims or litigation arising from damages suffered by those affected, government enforcement actions (for example, investigations, fines, penalties, audits, and inspections), additional reporting requirements and/or oversight, indemnification obligations, reputational harm, interruptions in our operations, financial loss, and other similar harms. In addition, we could incur significant costs in complying with the multitude of federal, state, and local laws, and applicable independent security control frameworks, regarding the unauthorized disclosure of personal information. Although we have not experienced a material information security breach in the past and have developed systems and processes to prevent or detect security breaches and protect the confidential information we receive, store, transmit, and use, we cannot assure that such measures will provide adequate security. Finally, any perceived or actual unauthorized disclosure of such information, unauthorized intrusion, or other cyberthreat could harm our reputation, substantially impair our ability to attract and retain customers, interrupt our operations, and have an adverse impact on our business.

Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations. While we currently maintain cybersecurity insurance, such insurance may not be sufficient to cover us against claims, and we cannot be certain that cybersecurity insurance will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim.

Unfavorable publicity, failure to respond effectively to adverse publicity, reports published by analysts, including projections in those reports that differ from our actual results, or securities or industry analysts who do not publish or cease publishing research or reports about us could adversely affect our business.

We expect that securities research analysts will establish and publish their own periodic projections for our business. These projections may vary widely and may not accurately predict the results we actually achieve. Maintaining and enhancing our brand and reputation is critical to our ability to attract and retain employees, partners, customers, and investors, and to mitigate legislative or regulatory scrutiny, litigation and government investigations.

Recent negative publicity has adversely affected our brand and reputation and our stock price. Negative publicity may result from allegations of fraud, improper business practices, employee misconduct or any other matters that could give rise to litigation and/or governmental investigations. Unfavorable publicity relating to us or those affiliated with us has and may in the future adversely affect public perception of the entire company. Adverse publicity and its effect on overall public perceptions of our brand, or our failure to respond effectively to adverse publicity, could have a material adverse effect on our business.

Negative publicity may adversely affect our brand and reputation as well as our stock price, which may make it difficult for us to attract and retain employees, partners and customers, reduce confidence in our products and services, harm investor confidence and the market price of our securities, and invite legislative and regulatory scrutiny. As a result, customers, potential customers, partners and potential partners may in the future fail to award us additional business or cancel or seek to cancel existing contracts or otherwise, direct future business to our competitors, and investors may invest in our competitors instead.

Our stock price may decline if our actual results do not match the projections of these securities research analysts. Similarly, if one or more of the analysts who write reports on us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price could decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, our stock price or trading volume could decline.

We have been named as a defendant in certain stockholder class actions, which like many litigation matters, could result in substantial damages and other related costs and may require management-level attention

Beginning on March 8, 2021, two putative class action complaints were filed in the federal district court for the Southern District of New York against us and certain of our current officers and directors. The cases were consolidated as *In re XL Fleet Corp. Securities Litigation* , Case No. 1:21-cv-02171, a lead plaintiff was appointed, and an amended consolidated complaint was filed on July 20, 2021. The amended complaint alleges that certain public statements made by the defendants between September 18, 2020, and March 31, 2021 violated Sections 10(b) and 20(a) of the Exchange Act and Rule 10b-5 promulgated thereunder. Our motion to dismiss the amended complaint was denied on February 17, 2022. We reached a settlement with the plaintiffs, which is currently pending approval by the court.

On September 20, 2021, and October 19, 2021, two class action complaints were filed in the Delaware Court of Chancery against certain of our current officers and directors, and the company's sponsor of its SPAC merger, Pivotal Investment Holdings II LLC. The actions were consolidated, and a consolidated amended complaint was filed on January 31, 2022, alleging various breaches of fiduciary duty, and aiding and abetting breaches of fiduciary duty, for purported actions relating to the negotiation and approval of the December 21, 2020, merger and organization of Legacy XL to become XL Fleet, and purportedly materially misleading statements made in connection with the merger. Although we believe that the allegations asserted in both actions are without merit, we are pursuing a settlement of these matters.

In 2021, we received requests for information, including a subpoena, from the SEC related to, among other things, the XL Fleet business combination with Legacy XL and the related private investment in public equity financing, the Company's sales pipeline and revenue projections, purchase orders, suppliers, California Air Resources Board approvals, fuel economy from our Power Drive products, customer complaints, and disclosures and other matters in connection with the foregoing. In September 2023, the SEC simultaneously filed and settled administrative proceedings alleging violations of the federal securities laws. Specifically, the settlement order requires that we: (i) cease and desist from committing or causing any violations and any future violations of Sections 17(a)(2) and 17(a)(3) of the Securities Act, Sections 13(a) and 14(a) of the Exchange Act and Rules 12b-20, 13a-11, and 14a-9 thereunder, and (ii) pay, a civil money penalty in the amount of $11.0 million to the SEC, which has been paid.

These legal proceedings and any other similar or related legal proceedings or investigations are subject to inherent uncertainties, and the actual costs to be incurred relating to these matters will depend upon many unknown factors. The outcome of these legal proceedings is uncertain, and we could be forced to expend significant resources in the defense of these actions, and we may not prevail. Monitoring and defending against legal actions is time-consuming for Management and detracts from our ability to fully focus our internal resources on our business activities, which could result in delays of our testing or our development and commercialization efforts. In addition, we may incur substantial legal fees and costs in connection with these matters. We are also generally obligated, to the extent permitted by law, to indemnify our current and former directors and officers who are named as defendants in these and similar actions. We are not currently able to estimate the possible cost to us from these matters, as these actions are currently at an early stage, and we cannot be certain how long it may take to resolve these matters or the possible amount of any damages that we may be required to pay. It is possible that we could, in the future, incur judgments or enter into settlements of claims for monetary damages. Decisions adverse to our interests in these actions could result in the payment of substantial damages, or possibly fines, and could have a material adverse effect on our cash flow, results of operations and financial position. In addition, the uncertainty of the currently pending litigation could lead to increased volatility in our stock price.

We may need to defend ourselves against patent, copyright or trademark infringement claims or trade secret misappropriation claims, which may be time-consuming and cause us to incur substantial costs

Companies, organizations, or individuals, including our competitors, may own or obtain patents, trademarks or other proprietary rights that would prevent or limit our ability to make, use, develop or sell our home solar and other products and services, which could make it more difficult for us to operate our business. We may receive inquiries from patent, copyright or trademark owners inquiring whether we infringe upon their proprietary rights. We may also be the subject of allegations that we have misappropriated their trade secrets or other proprietary rights. Companies owning patents or other intellectual property rights relating to battery packs, electric motors, or electronic power management systems may allege infringement or misappropriation of such rights. In response to a determination that we have infringed upon or misappropriated a third party's intellectual property rights, we may be required to do one or more of the following:

- cease development, sales or use of our products that incorporate the asserted intellectual property;

- pay substantial damages;
- obtain a license from the owner of the asserted intellectual property right, which license may not be available on reasonable terms or at all; or
- redesign one or more aspects of an applicable product or service.

A successful claim of infringement or misappropriation against us could materially adversely affect our business, prospects, financial condition and operating results. Any litigation or claims, whether valid or invalid, could result in substantial costs and diversion of resources.

If the IRS makes determinations that the fair market value of our solar energy systems is materially lower than what we have claimed, we may have to pay significant amounts to our fund investors, and our business, financial condition, and prospects may be materially and adversely affected

We and our fund investors claim the Commercial ITC or the U.S. Treasury grant in amounts based on the fair market value of our solar energy systems. We have obtained independent appraisals to determine the fair market values we report for claiming Commercial ITCs and U.S. Treasury grants. With respect to U.S. Treasury grants, the U.S. Treasury Department reviews the reported fair market value in determining the amount initially awarded, and the IRS may also subsequently audit the fair market value and determine that amounts previously awarded constitute taxable income for U.S. federal income tax purposes. With respect to Commercial ITCs, the IRS may review the fair market value on audit and determine that the tax credits previously claimed must be reduced. If the fair market value is determined in these circumstances to be less than what we or our tax equity investment funds reported, we may owe our fund investors an amount equal to this difference (including any interest and penalties), plus any costs and expenses associated with a challenge to that valuation. We could also be subject to tax liabilities, including interest and penalties. If the IRS further disagrees now or in the future with the amounts we or our tax equity investment funds reported regarding the fair market value of our solar energy systems, it could have a material adverse effect on our business, financial condition, and prospects.

Risks Related to Regulation

Our business depends in part on the regulatory treatment of third-party owned solar energy systems

Retail sales of electricity by third parties such as us face regulatory challenges in some states and jurisdictions, including states and jurisdictions we intend to enter where the laws and regulatory policies have not historically embraced competition to the service provided by the vertically integrated centralized electric utility. Some of the principal challenges pertain to whether third-party owned solar energy systems qualify for the same levels of rebates or other non-tax incentives available for customer owned solar energy systems, whether third-party owned solar energy systems are eligible at all for these incentives and whether third-party owned solar energy systems are eligible for net metering and the associated significant cost savings. Furthermore, in some states and utility territories third parties are limited in the way they may deliver solar energy to their customers. These regulatory constraints may, for example, give rise to various property tax issues. Changes in law and reductions in, eliminations of or additional requirements for, benefits such as rebates, tax incentives and favorable net metering policies decrease the attractiveness of new solar energy systems to distributed home solar power companies and the attractiveness of solar energy systems to customers, which could reduce our acquisition opportunities. Such a loss or reduction could also adversely impact our access to capital and reduce our willingness to pursue solar energy systems due to higher operating costs or lower revenues.

Compliance with occupational safety and health requirements can be costly and noncompliance with such requirements may result in potentially significant monetary penalties, operational delays and adverse publicity.

The ongoing operations and maintenance of solar energy systems and energy storage systems requires individuals hired by us or third-party contractors, potentially including our employees, to work at heights with complicated and potentially dangerous electrical systems. There is substantial risk of serious injury or death if proper safety procedures are not followed. Our operations are subject to regulation under Occupational Safety and Health Administration ("OSHA"), the U.S. Department of Transportation ("DOT") regulations and equivalent state and local laws. Changes to OSHA or DOT requirements, or stricter interpretation or enforcement of existing laws or regulations, could result in increased costs. If we fail to comply with applicable OSHA or DOT regulations, even if no work-related serious injury or death occurs, we may be subject to civil or criminal enforcement and be required to pay substantial penalties, incur significant capital expenditures, or suspend or limit operations. Because individuals hired by us or on our behalf to perform ongoing operations and maintenance of our solar energy systems and energy storage systems, including third-party contractors, are compensated on a per project basis, they are incentivized to work more quickly than servicers compensated on an hourly basis. While we have not experienced a high level of injuries to date, this incentive structure may result in higher injury rates than others in the industry and could accordingly expose us to increased liability. Individuals hired by or on behalf of us may have workplace accidents and receive citations from OSHA regulators for alleged safety violations, resulting in fines. Any such accidents, citations, violations, injuries or failure to comply with industry best practices may subject us to adverse publicity, damage our reputation and competitive position and adversely affect our business.

A failure to comply with laws and regulations relating to interactions by us with current or prospective customers could result in negative publicity, claims, investigations and litigation and adversely affect our business.

Our business substantially focuses on Customer Agreements and transactions with residential customers. We offer leases, loans and other products and services to consumers by contractors in our networks, who utilize sales people employed by or engaged as third-party service providers of such contractors. We must comply with numerous federal, state and local laws and regulations that govern matters relating to interactions with residential consumers, including those pertaining to consumer protection, marketing and sales, privacy and data security, consumer financial and credit transactions, mortgages and refinancings, home improvement contracts, warranties and various means of customer solicitation. These laws and regulations are dynamic and subject to potentially differing interpretations and various federal, state and local legislative and regulatory bodies may initiate investigations, expand current laws or regulations, or enact new laws and regulations regarding these matters. Changes in these laws or regulations or their interpretation could dramatically affect how we do business, acquire customers, manage and use information collected from and about current and prospective customers and the costs associated therewith. We strive to comply with all applicable laws and regulations relating to interactions with customers. It is possible, however, these requirements may be interpreted and applied in a manner inconsistent from one jurisdiction to another and may conflict with other rules or our practices.

We are subject to U.S. and foreign anti-corruption and anti-money laundering laws and regulations. We could face criminal liability and other serious consequences for violations, which could harm our business

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act and possibly other anti-bribery and anti-money laundering laws in countries in which we conduct or will conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors, and other collaborators from authorizing, promising, offering or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors, and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences.

We have received subpoenas from states attorneys general requesting information about our business. These investigations could result in substantial legal fees, fines, penalties or damages and may divert Management's time and attention from our business

We have received subpoenas from the attorneys general for the states of Connecticut, New Jersey, New York, and Texas related to filed customer complaints each of which requested a substantial number of documents to be produced by the Company. While we are responding to these subpoenas with the assistance of counsel, it is possible that these investigations may result in a fine, penalty or injunction which may adversely affect our ability to operate in these states. In addition, responding to these requests for production may result in the diversion of Management's attention and cause the Company to incur legal expenses.

Risks Related to Ownership of Our Securities

We have no current plans to declare a dividend in the foreseeable future

We have no current plans to declare any cash dividends to holders of our Common Stock in the foreseeable future. Consequently, investors may need to rely on sales of their shares after price appreciation, which may never occur, as the only way to realize any future gains on their investment.

If we fail to maintain effective internal control over financial reporting, our ability to produce accurate financial statements or comply with applicable regulations could be impaired.

In connection with our assessment of the effectiveness of our internal control over financial reporting as of December 31, 2023, we concluded that there were material weaknesses in our internal control over financial reporting. See Item 9A. Controls and Procedures, included in Part II, for additional information regarding these matters.

We may identify other material weaknesses in our internal control over financial reporting in the future. The existence of material weaknesses within our internal controls could harm our business, the market price of our Common Stock and our ability to retain our current, or obtain new, lenders, suppliers, key employees, alliance, and strategic partners or require the implementation of certain undertakings with the SEC. In addition, the existence of material weaknesses in our internal control over financial reporting may affect our ability to timely file periodic reports under the Exchange Act. The inability to timely file periodic reports could result in the SEC revoking the registration of our Common Stock, which would negatively impact our ability to remain listed on the NYSE.

Pursuant to Section 404 of the Sarbanes-Oxley Act, Management is required annually to deliver a report that assesses the effectiveness of our internal control over financial reporting. However, for as long as we remain a “non-accelerated filer” under the rules of the SEC, our independent registered public accounting firm is not required to deliver an annual attestation report on the effectiveness of our internal control over financial reporting. We will cease to be a non-accelerated filer if (a) the aggregate market value of our outstanding common stock held by non-affiliates as of the last business day of our most recently completed second fiscal quarter is $75 million or more and we reported annual net revenues of greater than $100 million for our most recently completed fiscal year or (b) the aggregate market value of our outstanding common stock held by non-affiliates as of the last business day of our most recently completed second fiscal quarter is $700 million or more, regardless of annual net revenues. If we cease to be a non-accelerated filer, we would again be subject to the requirement for an annual attestation report by our independent registered public accounting firm on the effectiveness of our internal control over financial reporting. If we are unable to maintain effective internal control over financial reporting as required by Section 404 of the Sarbanes-Oxley Act, we may not be able to produce accurate financial statements, and investors may therefore lose confidence in our operating results, our stock price could decline, and we may be subject to litigation or regulatory enforcement actions.

We are a “smaller reporting company” and will be able to avail ourselves of reduced disclosure requirements applicable to smaller reporting companies, which could make our common stock less attractive to investors

We are a “smaller reporting company,” as defined in the Securities Exchange Act of 1934, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “smaller reporting companies,” including reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer a “smaller reporting company.” We will remain a “smaller reporting company” until (a) the aggregate market value of our outstanding common stock held by non-affiliates as of the last business day of our most recently completed second fiscal quarter is $75 million or more and we reported annual net revenues as of our most recently completed fiscal year is $100 million or more, or (b) the aggregate market value of our outstanding common stock held by non-affiliates as of the last business day of our most recently completed second fiscal quarter is $700 million or more, regardless of annual revenue.

If our stock price declines, our Common Stock may be subject to delisting from the New York Stock Exchange

If the average closing price of our Common Stock is less than $1.00 per share for 30 consecutive trading days, we may receive a letter from the staff of the NYSE stating that our Common Stock will be delisted unless we are able to regain compliance with the NYSE listing criteria requiring that we maintain an average closing price for our Common Stock of at least $1.00 per share. The average closing price of our Common Stock was below $1.00 per share for 30 consecutive trading days in 2022 and 2023, to which we received notices of non-compliance from the NYSE on October 20, 2022 and March 28, 2023. On October 6, 2023, following stockholder approval, we filed the Amended Certificate of Incorporation to effect the Reverse Stock Split. Although, subsequent to the Reverse Stock Split, we were able to regain compliance because the average closing price for our Common Stock was subsequently at least $1.00 per share for 30 consecutive trading days, we cannot guarantee that our stock price will continue to trade above $1.00 per share or otherwise meet the NYSE listing requirements and therefore our Common Stock may in the future be subject to delisting. The continuing effect of the Reverse Stock Split on the market price of our Common Stock cannot be predicted with any certainty, and the history of similar reverse stock splits for companies in like circumstances is varied. If our Common Stock is delisted, this would, among other things, substantially impair our ability to raise additional funds and could result in a loss of institutional investor interest and fewer development opportunities for us.

The price of our Common Stock may be volatile

The price of our Common Stock may fluctuate due to a variety of factors, including:

- actual or anticipated fluctuations in our quarterly and annual results and those of other public companies in our industry;
- our failure to meet market expectations for our performance;
- mergers and strategic alliances in the industry in which we operate;
- market prices and conditions in the industry in which we operate;
- changes in laws or government regulations applicable to our business;
- substantial sales of our Common Stock;
- issuance of new or updated research reports from securities analysts;
- announcement or expectation of additional equity or debt financing efforts;
- potential or actual military conflicts or acts of terrorism;
- announcements concerning us or our competitors;
- the general state of the securities markets;
- threatened or actual lawsuits, investigations, or other legal proceedings; and
- short-selling activity related to our Common Stock.

These market and industry factors may materially reduce the market price of our Common Stock, regardless of our operating performance. In addition, we believe there has been and may continue to be substantial trading in derivatives of our Common Stock, including short selling activity or related similar activities, which are beyond our control, and which may be beyond the full control of the SEC and Financial Institutions Regulatory Authority or “FINRA”. While the SEC and FINRA rules prohibit some forms of short selling and other activities that may result in stock price manipulation, such activity may nonetheless occur without detection or enforcement. There can be no assurance that should there be any illegal manipulation in the trading of our stock, it will be detected, prosecuted or successfully eradicated. Significant short selling market manipulation could cause our Common Stock trading price to decline, to become more volatile, or both.

We may issue additional Common Stock or preferred stock, including under our equity incentive plan. Any such issuances would dilute the interest of our stockholders and likely present other risks

We may issue a substantial number of additional shares of common or preferred stock, including under our equity incentive plan. Any such issuances of additional shares of common or preferred stock:

- may significantly dilute the equity interests of our investors;
- may subordinate the rights of holders of Common Stock if preferred stock is issued with rights senior to those afforded our Common Stock;
- could cause a change in control if a substantial number of shares of our Common Stock are issued, which may affect, among other things, our ability to use our net operating loss carry forwards, if any, and could result in the resignation or removal of our present officers and directors; and
- may adversely affect prevailing market prices for our Common Stock.

We may issue additional shares of Common Stock or other equity securities without stockholder approval, which will dilute existing stockholders' interests and may depress the market price of our Common Stock

As of December 31, 2023, we have options, restricted stock units (RSUs) and warrants outstanding to issue up to an aggregate of 1,825,181 shares of our Common Stock. We also have the ability to issue up to 324,467,408 shares of Common Stock under our 2020 Equity Incentive Plan (the "2020 Plan"). Pursuant to the 2020 Plan, the number of shares available for issuance automatically increases annually on the first day of each fiscal year during the period beginning with the fiscal year immediately following the fiscal year during which the 2020 Plan is first approved by the our stockholders, and ending on the second day of fiscal year 2030, in an amount equal to the lesser of: (a) 5% of the number of outstanding shares of Common Stock on such date; and (b) an amount determined by the plan administrator. We may issue additional shares of Common Stock or other equity securities of equal or senior rank in the future in connection with, among other things, future acquisitions, or repayment of outstanding indebtedness, without stockholder approval, in a number of circumstances.

Our issuance of additional shares of Common Stock or other equity securities of equal or senior rank would have the following effects:

- our existing stockholders' proportionate ownership interest in our will decrease;
- the amount of cash available per share, including for payment of dividends (if any) in the future, may decrease;
- the relative voting strength of each previously outstanding share of Common Stock may be diminished; and
- the market price of our shares of Common Stock may decline.

Our Certificate of Incorporation contains anti-takeover provisions that could adversely affect the rights of our stockholders

Our Certificate of Incorporation contains provisions to limit the ability of others to acquire control of our or cause us to engage in change-of-control transactions, including, among other things:

- provisions that authorize our Board of Directors, without action by our stockholders, to issue additional shares of Common Stock and preferred stock with preferential rights determined by our Board of Directors;
- provisions that permit only a majority of our Board of Directors to call stockholder meetings and therefore do not permit stockholders to call stockholder meetings;
- provisions that impose advance notice requirements, minimum shareholding periods and ownership thresholds, and other requirements and limitations on the ability of stockholders to propose matters for consideration at stockholder meetings;
- provisions limiting stockholders' ability to act by written consent; and
- a staggered board whereby our directors are divided into three classes, with each class subject to retirement and re-election once every three years on a rotating basis.

These provisions could have the effect of depriving our stockholders of an opportunity to sell their Common Stock at a premium over prevailing market prices by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transaction. With our staggered Board of Directors, at least two annual or special meetings of stockholders will generally be required in order to effect a change in a majority of our directors. Our staggered Board of Directors can discourage proxy contests for the election of our directors and purchases of substantial blocks of our shares by making it more difficult for a potential acquirer to gain control of our Board of Directors in a relatively short period of time.

Our Certificate of Incorporation provides, subject to limited exceptions, that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders

Our Certificate of Incorporation provides, to the fullest extent permitted by law, that derivative actions brought in our name, actions against directors, officers and employees for breach of fiduciary duty and other similar actions may be brought only in the Court of Chancery in the State of Delaware and, if brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to service of process on such stockholder's counsel except any action (A) as to which the Court of Chancery in the State of Delaware determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within ten days following such determination), (B) which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, (C) for which the Court of Chancery does not have subject matter jurisdiction, or (D) any action arising under the Securities Act, as to which the Court of Chancery and the federal district court for the District of Delaware shall have concurrent jurisdiction. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provisions in the Certificate of Incorporation.

This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that we find favorable for disputes with our or any of our directors, officers, other employees, or stockholders, which may discourage lawsuits with respect to such claims. We cannot be certain that a court will decide that this provision is either applicable or enforceable, and if a court were to find the choice of forum provision contained in our Certificate of Incorporation to be inapplicable or unenforceable in an action, our may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, operating results, and financial condition.

Our Certificate of Incorporation provides that the exclusive forum provision will be applicable to the fullest extent permitted by applicable law. Notwithstanding the foregoing, 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. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity - Risk Management, Strategy and Governance

Cybersecurity Strategy, Policy and Procedures

We recognize the importance of assessing, identifying, and managing material risks associated with cybersecurity threats, as such term is defined within Item 106(a) of Regulation S-K. These risks include, among other things, operational risks, intellectual property theft, fraud, extortion, harm to employees or customers and violation of data privacy or security laws. We utilize information technology ("IT") that enables our teams to access both operational and financial performance data in real time, while at the same time, identifying and preventing cybersecurity threats and risks.

Risk Management and Strategy

Risk Management

Our cybersecurity risk management program is integrated into our overall enterprise risk management ("ERM") framework, and shares common methodologies, reporting channels, and governance processes that apply across the ERM framework to other areas, including legal, compliance, strategic, operational, and financial risk. We assess and identify cybersecurity risk to the organization by:

- Employing a cybersecurity policy that sets forth a protocol for assessing, testing, identifying and preventing security risks;
- Conducting assessments of risk likelihood and magnitude from unauthorized access, use, disclosure, disruption, modification or destruction of IT systems and the related information processes, stored, or transmitted;
- Training personnel on security risks and how to identify and prevent such risks;
- Performing risk analysis and security assessments that document the results of the assessment for use and review;
- Overseeing and identifying any risk from cyber threats associated with any third-party service provider.
- Ensuring security controls are assessed for effectiveness, are implemented correctly, operating as intended; and
- Continuously scanning for vulnerabilities and remedying all vulnerabilities in accordance with the associated risk.

Cybersecurity is among the risks identified for Board-level oversight, with the Audit Committee of our Board of Directors responsible for overseeing our policies, practices, and assessments with respect to cybersecurity. Our Audit Committee and Board of Directors receive regular updates throughout the year on cybersecurity from our Finance, Risk and Sustainability (the “FRS”) Committee, which is tasked with risk management, data protection, and monitoring compliance with our cybersecurity policy. The FRS Committee is comprised of our Chief Financial Officer, Chief Legal Officer, Chief Operating Officer, Senior Vice President of IT, and VP of Corporate Development. Each of our Board of Directors and Audit Committee member separately receives an annual report on cybersecurity matters and related risk exposures, and when the report is covered during an Audit Committee meeting, the chair of the Audit Committee reports on its related matters to our Board of Directors. Our Audit Committee also receives regular updates on our cybersecurity posture throughout the year, as appropriate.

Monitoring

In accordance with our cybersecurity policy, we have established a continuous monitoring strategy and program which includes:

- Defined security metrics to be monitored;
- Performance of security control assessments on an ongoing basis;
- Engaging third party security consultants to, among other things, conduct a review of our cybersecurity program which is overseen by the FRS Committee for identifying any cybersecurity threats;
- Addressing results of analysis and reporting security status to the executive team;
- Monitoring information systems to detect attacks and indicators of potential attacks; and
- Identification of unauthorized use of information system resources.

Data Protection

We have also implemented procedures set forth in our cybersecurity policy that secure sensitive data protected by us, which include:

- Establishing policies governing data security;
- Monitoring data access throughout the organization;
- Providing annual security training and awareness;
- Protecting sensitive data through encryption techniques; and
- Designing and implementing systems to include backup and recoverability principles, such as periodic data backups and safeguards in the case of a disaster.

Incident Management Plan

Our cybersecurity policy includes an incident management plan ("IMP"), which consists of the following processes:

- The development, documentation, review and testing of security procedures and incident management procedures, which are continually re-assessed, updated and tested;
- The FRS Committee reviews any identified matters by assessment, verification and classification of incidents to determine affected stakeholders and appropriate parties for contact;
- The FRS Committee notifies the Board of Directors and the Audit Committee to validate that the response is being addressed appropriately;
- The FRS Committee consults with outside experts, if determined that the incident rises to a significant level;
- The FRS Committee initiates containment by making tactical changes to the computing environment to mitigate active threats based on currently known information;
- The FRS Committee establishes the root cause of incidents, identification and evidence collection from all affected machines and logs sources, threat intelligence and other information sources;
- IT personnel recovers and restores normal business functionality, which includes the reversal of any damage caused by the incident and responding as needed; and
- The FRS Committee reviews the closure of each incident and conducts a "lessons learned" analysis to improve prevention and ensure the IMP and cybersecurity plans are more efficient and effective.

We face several cybersecurity risks in connection with just conducting business. Although such risks have not materially affected us, including our business strategy, results of operations or financial condition, to date, we have, from time to time, experienced threats to and breaches of our data and systems, including malware and computer virus attacks.

Notwithstanding the extensive approach we take to cybersecurity, we may not be successful in preventing or mitigating a cybersecurity incident that could have a material adverse effect on us. While we maintain cybersecurity insurance, the costs related to cybersecurity threats or disruptions may not be fully insured. For more information about the cybersecurity risks we face, see the risk factor entitled "Any security breach, unauthorized access or disclosure, or theft of data, including personal information, we, our third party service providers, or our suppliers gather, store, transmit or use, could harm our reputation, subject us to claims, litigation, and financial harm and have an adverse impact on our business" within Item 1A. Risk Factors.

Item 2. Properties

Our corporate headquarters is located in leased office space in Denver, Colorado. Our Chief Executive Officer and several key members of the leadership team are located in Denver. We also lease office space in Houston, Texas, where our accounting and finance, human resources, customer operations, asset operations and business development, and information technology functions are located.

Item 3. Legal Proceedings

See Note 15. Commitments and Contingencies in Part II, Item 8. Financial Statements and Supplementary Data for a description of our material pending legal proceedings.

Item 4. Mine Safety Disclosures

Not Applicable.

Part II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

Market Information

Our Common Stock is currently listed on the NYSE under the symbol "SPRU."

Holders

As of April 3, 2024, there were approximately 51 holders of record of our Common Stock. This figure does not include shareholders whose certificates are held in the name of their broker-dealers or other nominees.

Dividends

We have not paid any cash dividends on our Common Stock to date. We may retain future earnings, if any, for future operations, expansion and debt repayment and have no current plans to pay cash dividends for the foreseeable future. Any decision to declare and pay dividends in the future will be made at the discretion of our Board of Directors and will depend on, among other things, our results of operations, financial condition, cash requirements, contractual restrictions, and other factors that our Board of Directors may deem relevant. In addition, our ability to pay dividends may be limited by covenants of any existing and future outstanding indebtedness we or our subsidiaries incur. We do not anticipate declaring any cash dividends to holders of our Common Stock in the foreseeable future.

Securities Authorized for Issuance Under Equity Compensation Plans

See Item 12 of Part III of this Annual Report on Form 10-K regarding information about securities authorized for issuance under our equity compensation plans.

Recent Sales of Unregistered Securities

We had no sales of unregistered equity securities during the period covered by this Annual Report on Form 10-K that were not previously reported in a Current Report on Form 8-K or Quarterly Report on Form 10-Q.

Issuer Purchases of Equity Securities

In May 2023, our Board of Directors approved a share repurchase program for the repurchase of up to $50.0 million of our outstanding common stock through May 15, 2025 (the "Repurchase Program"). We are not obligated to repurchase any specific number of shares or dollar amount and may discontinue the Repurchase Program at any time.

The following table provides information with respect to shares of our Common Stock we repurchased under the Repurchase Program during the three months ended December 31, 2023:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plan or Program	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plan or Program (in '000s)
October 1 - October 31, 2023	—	$ —	—	$ 44,881
November 1 - November 30, 2023	—	$ —	—	$ 44,881
December 1 - December 31, 2023	69,903	$ 4.35	69,903	$ 44,694
	69,903		69,903	

The IRA introduced a 1% excise tax on all stock repurchases effective January 2023. In relation to the Repurchase Program, this excise tax had no material impact on our financial position, results of operations or cash flows as of and for the year ended December 31, 2023.

Future share repurchases under our Repurchase Program are subject to the business judgment of our Board of Directors or Management, taking into consideration our historical and projected results of operations, financial condition, cash flows, capital requirements, covenant compliance, current economic environment and other factors considered relevant. As of December 31, 2023, we had approximately $44.7 million available under the Repurchase Program. Refer to Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” within this Annual Report on Form 10-K for additional information on our share repurchases.

Item 6. [Reserved]

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

The following discussion and analysis provides information which our Management believes is relevant to an assessment and understanding of our financial condition and results of operations. This discussion and analysis should be read together with our results of operations and financial condition and the audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. In addition to historical financial information, this discussion and analysis contains forward-looking statements based upon current expectations that involve risks, uncertainties, and assumptions. Refer to the section entitled "Cautionary Note Regarding Forward-Looking Statements." Actual results and timing of selected events may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Risk Factors" or elsewhere in this Annual Report on Form 10-K.

Certain figures, such as interest rates and other percentages, included in this section have been rounded for ease of presentation. Percentage figures included in this section have not in all cases been calculated on the basis of such rounded figures but on the basis of such amounts prior to rounding. For this reason, percentage amounts in this section may vary slightly from those obtained by performing the same calculations using the figures in our consolidated financial statements or in the associated text. Certain other amounts that appear in this section may similarly not sum due to rounding.

Company Overview

We are a leading owner and operator of distributed solar energy assets across the U.S., offering subscription-based services to approximately 75,000 home solar assets and customer contracts, making renewable energy more accessible to everyone. We offer asset management services and operating and maintenance services for home solar energy systems in our portfolio and approximately 5,000 systems owned by other companies. Refer to Item 1, "Business" within this Annual Report for additional information on our corporate history and background.

Restructuring Actions

Subsequent to the acquisition of Legacy Spruce Power, we commenced the evaluation of personnel and processes of various corporate functions between Spruce Power and legacy XL Fleet to optimize our future corporate structure and implemented certain restructuring actions. As a result of exiting the Drivetrain business and the restructuring actions, we recognized, in the aggregate, restructuring and related charges of approximately $21.6 million during the year ended December 31, 2022, which included (i) $4.4 million of severance charges paid in 2022, (ii) $5.0 million impact of accelerated vesting of certain equity awards and (iii) $12.3 million of charges related to inventory obsolescence. During the year ended December 31, 2023, we recognized incremental severance charges of approximately $0.7 million, all of which were paid in 2023. Inventory obsolescence charges are included in net loss from discontinued operations within our consolidated statements of operations for the year ended December 31, 2022. Severance charges and accelerated vesting of equity awards are included in selling, general and administrative expenses within our consolidated statements of operations for the years ended December 31, 2023 and 2022.

Recent Developments

Capital Investments, Acquisitions and Divestitures

In January 2023, we completed the sale of our legacy operations, including the Drivetrain and XL Grid businesses, each for an immaterial amount. Both businesses are presented as discontinued operations within our consolidated financial statements.

In March 2023, we completed the acquisition of all the issued and outstanding interests of SEMTH to acquire the rights of the SEMTH Master Lease. Total consideration for the SEMTH Acquisition included approximately $23.0 million of cash, net of cash received, and the assumption of $125.0 million of outstanding senior indebtedness held by SEMTH at the close of the acquisition.

In August 2023, we completed the Tredegar Acquisition acquiring 2,400 home solar assets and contracts for approximately $20.9 million. The Tredegar Acquisition was concurrently funded by term loan proceeds from the SP2 Facility Amendment (defined below).

SP2 Facility Amendment

In August 2023, we entered into a second amendment to our existing credit agreement with Silicon Valley Bank, a division of First-Citizens Bank & Trust Company (the "SP2 Facility Amendment"), resulting in incremental term loans of approximately $21.4 million, of which proceeds were primarily used to fund the Tredegar Acquisition. In addition, we entered into an interest rate swap agreement to hedge the floating rate of the incremental SP2 Facility term loans, which included a notional amount of $19.0 million, a fixed rate of 4.24% and a maturity date of January 31, 2032.

Common Share Repurchase Program

In May 2023, our Board of Directors approved the Repurchase Program for the repurchase of up to $50.0 million of our outstanding common stock through May 15, 2025. During the year ended December 31, 2023, we repurchased 0.8 million shares of common stock under the Repurchase Program, for a total purchase price of $5.4 million, inclusive of transaction costs.

Reverse Stock Split

On October 6, 2023, we effected the Reverse Stock Split with respect to our issued and outstanding shares of common stock. Excluding the par value and the number of authorized shares of our common stock, all share, per share amounts, and the values of our common stock outstanding and related effect on additional paid in capital included in this Form 10-K have been retrospectively presented as if the Reverse Stock Split had been effective from the beginning of the earliest period presented. No fractional shares of our Common Stock were issued in connection with the Reverse Stock Split. In late October 2023, certain stockholders entitled to fractional shares of our Common Stock, upon the Reverse Stock Split, received aggregate cash payments of approximately $0.01 million in lieu of receiving fractional shares.

Reportable Segments

Segment reporting is based on the management approach, following the method Management organizes our reportable segments for which separate financial information is made available to and evaluated regularly by our chief operating decision maker ("CODM") in allocating resources and in assessing performance. Our CODM is our Chief Executive Officer. Our CODM does not evaluate operating segments using asset or liability information.

In December 2022, we determined both our Drivetrain and XL Grid operations were discontinued operations, which have been presented as such within our consolidated financial statements. As of December 31, 2023, we have one reportable segment, which constitutes selling electricity through approximately 75,000 home solar systems or through residual ownership in master lease agreements in 18 states. In addition to providing management services to our own portfolio, we also provide management services to approximately 5,000 systems owned by other companies. These services include (i) billing and collections, (ii) account management services, (iii) financial reporting, (iv) homeowner support and (v) maintenance monitoring and dispatch.

Key Factors Affecting Operating Results

We are a leading owner and operator of distributed solar energy assets across the U.S., offering subscription-based solutions to homeowners for rooftop solar energy storage, EV chargers and other energy-related products. Additionally, we provide servicing functions for our assets and customers, as well as for other institutional owners of home solar energy systems. Our operating results and ability to grow our business over time could be impacted by certain factors and trends that affect our industry, as well as elements of our strategy, including the following factors, as well as the risk factors and other factors set forth under "Risk Factors" or elsewhere in this Annual Report on Form 10-K:

Development of Distributed Energy Assets

Our future growth depends significantly on our ability to acquire operating home solar energy systems "in-bulk" from other companies. Industry data suggests there is a substantial existing base of operating home solar energy systems, providing us the opportunity to pursue acquisitions. Over the long-term, our continued ability to pursue acquisitions will be dependent on development of distributed energy assets, namely home solar energy systems, by third parties. This development may be impacted by numerous factors that influence homeowner demand for home solar energy systems including but not limited to macroeconomic dynamics, utility rates, climate change impacts and government policy and incentives.

Availability of Financing

Our ability to raise capital from third parties at reasonable terms is a critical element in supporting ownership of our existing home solar energy assets as well as enabling our future growth. We have historically utilized non-recourse, project-level debt as a primary source of capital for acquisitions. Our ability to raise debt either as means to refinance existing indebtedness or for future acquisitions may be impacted by general macroeconomic conditions, the health of debt capital markets, the interest rate environment and general concerns over its industry or specific concerns over our business.

Results of Operations

Comparison of the Years Ended December 31, 2023 and 2022

The results of operations related to our Drivetrain and XL Grid businesses, which were determined to be discontinued operations in the fourth quarter of 2022, are presented as net loss from discontinued operations in our consolidated statements of operations. As a result, the continuing operational results reflect the operations related to our corporate functions and the results of operations for Legacy Spruce Power since its acquisition on September 9, 2022.

Information with respect to the consolidated statements of operations for the years ended December 31, 2023 and 2022 are presented below:

	Years Ended December 31,			
	2023	2022	$ Change	% Change
(in thousands, except per share amounts)				
Revenues	$ 79,859	$ 23,194	$ 56,665	244 %
Operating expenses:				
Cost of revenues	37,813	9,949	27,864	280 %
Selling, general and administrative expenses	56,122	73,118	(16,996)	(23) %
Litigation settlements, net	27,465	—	27,465	100%
Gain on asset disposal	(4,724)	(580)	(4,144)	714 %
Total operating expenses	116,676	82,487	34,189	41 %
Loss from operations	(36,817)	(59,293)	22,476	(38) %
Other (income) expense:				
Interest income	(19,534)	(1,339)	(18,195)	1359 %
Interest expense, net	41,936	11,401	30,535	268 %
Other (income) expense, net	3,268	(16,676)	19,944	(120) %
Net loss from continuing operations	(62,487)	(52,679)	(9,808)	19 %
Net loss from discontinued operations	(4,123)	(40,112)	35,989	(90) %
Net loss	(66,610)	(92,791)	26,181	(28) %
Less: Net income (loss) attributable to redeemable noncontrolling interests and noncontrolling interests	(779)	1,140	(1,919)	(168) %
Net loss attributable to stockholders	$ (65,831)	$ (93,931)	$ 28,100	(30) %

Revenues

Revenues increased by $56.7 million, or 244.3%, to $79.9 million in 2023 as compared to 2022. The increase was due to a full year of PPA and SLA revenues from Legacy Spruce Power assets in 2023 compared to the prior year which included revenues for approximately four months subsequent to the acquisition of those assets effective September 9, 2022. The increase in revenue was also driven by incremental revenues related to the Tredegar Acquisition effective in August 2023, intangibles amortization related to unfavorable solar renewable energy agreements, and increased sales of SRECs in 2023. Revenues related to our Drivetrain and XL Grid operations are included in net loss from discontinued operations.

Cost of Revenues

Cost of revenues increased by $27.9 million, or 280.1%, to $37.8 million in 2023 as compared to 2022. The increase in cost of revenue correlates with the increase in revenues discussed above, in addition to increase in depreciation expense and certain operation and maintenance costs, including meter upgrade spend. Cost of revenues related to our Drivetrain and XL Grid operations are included in net loss from discontinued operations.

Selling, General and Administrative

Selling, general and administrative expenses decreased by $17.0 million, or 23.2%, to $56.1 million in 2023. The decrease was primarily due to the reduction of bonus expense, severance charges and other restructuring expenses in 2023 as compared to 2022. Selling, general and administrative expenses related to our Drivetrain and XL Grid businesses are included in net loss from discontinued operations.

Litigation Settlements, Net

Litigation settlements, net of $27.5 million incurred in 2023 relates to costs incurred for settlements on the SEC inquiry, shareholder lawsuits, and a breach of contract lawsuit, net of related insurance recoveries from third parties, for which we are currently pursuing settlements. See Note 15. Commitments and Contingencies in Part II, Item 8. Financial Statements and Supplementary Data for a description of our material pending legal proceedings.

Interest Income

Interest income of $19.5 million for 2023 relates to $11.5 million of interest income from the SEMTH Master Lease executed in March 2023 and $8.0 million of interest earned on U.S. Treasury securities. In comparison, interest income of $1.3 million for 2022 primarily related to interest earned on U.S. Treasury securities.

Interest Expense, Net

Interest expense, net of $41.9 million for 2023 primarily relates to (i) $49.6 million of interest expense related to the principal amounts of our debt instruments and (ii) $5.9 million related to the amortization of debt discount and deferred financing costs, both partially offset by $13.7 million of net realized gains from the change in fair value of interest rate swaps. In comparison, interest expense, net of $11.4 million for 2022 consisted of $13.5 million of interest expense related to the principal amounts of our debt instruments, partially offset by $2.1 million of net realized gains from the change in fair value of interest rate swaps. Interest expense related to the principal amounts of our outstanding debt increased in 2023 as compared to 2022 due to new debt assumed concurrently with the SEMTH Acquisition in March 2023 and incremental term loans from the SP2 Facility Amendment in August 2023. See Note 8. Non-Recourse Debt in Part II, Item 8. Financial Statements and Supplementary Data for further information on our debt.

Other (Income) Expense, Net

Other expense, net of $3.3 million for 2023 consists of $4.8 million of unrealized losses from the change in fair value of interest rate swaps, partially offset by $1.3 million of other income, net and $0.2 million of change in fair value of warrant liabilities, while other income, net of $16.7 million for 2022 primarily consisted of $5.6 million of unrealized gains from the change in fair value of interest rate swaps, $5.1 million of change in fair value of warrant liabilities and $4.5 million gain on the extinguishment of debt related to the wind-down of the New Market Tax Credit obligation.

Net Loss from Discontinued Operations

Net loss from discontinued operations of $4.1 million in 2023 and $40.1 million in 2022 includes the discontinued operations of our Drivetrain and XL Grid businesses. The net loss from discontinued operations in 2023 consists of a net loss from the Drivetrain business of $4.1 million. The net loss from discontinued operations in 2022 consists of a net loss from the Drivetrain business of $30.4 million, a net loss from the XL Grid business of $1.1 million and an impairment of goodwill of $8.6 million.

Liquidity and Capital Resources

Our cash requirements depend on many factors, including the execution of our business strategy and plan. We remain focused on carefully managing costs, including capital expenditures, maintaining a strong balance sheet and ensuring adequate liquidity. Our primary cash needs are debt service, acquisition of solar energy portfolios, operating expenses, working capital and capital expenditures to support the growth in our business. Working capital is impacted by the timing and extent of our business needs. As of December 31, 2023, we had working capital of $131.6 million, including cash and cash equivalents and restricted cash of $172.9 million. We had net losses attributable to stockholders of $65.8 million and $93.9 million for the years ended December 31, 2023 and 2022, respectively.

With the acquisition of Legacy Spruce Power in September 2022, we assumed all of the outstanding debt of Legacy Spruce Power, which had a principal balance of $542.5 million on the date of the acquisition. As of December 31, 2023, our debt balance was $618.8 million, net of $27.6 million of unamortized fair value adjustment and $0.3 million of unamortized deferred financing costs. Our debt consists of four senior debt facilities and a subordinate facility, of which the loan agreements require quarterly principal payments and the earliest maturity date is April 2026. For additional information on our debt, refer to Note 8. Non-Recourse Debt included within the accompanying audited consolidated financial statements.

Based on our current liquidity, we believe no additional capital will be needed to execute our current business plan over the next 12 months. We continually evaluate our cash needs to raise additional funds or seek alternative sources to invest in growth opportunities and other purposes.

Cash Flows Summary

Presented below is a summary of our operating, investing and financing cash flows:

	Years Ended December 31,	
(Amounts in thousands)	**2023**	**2022**
Net cash provided by (used in)		
Continuing operating activities	$ (31,714)	$ (47,717)
Discontinued operating activities	(1,947)	(15,772)
Continuing investing activities	(17,060)	(30,296)
Discontinued investing activities	325	1,290
Continuing financing activities	(16,807)	(19,088)
Discontinued financing activities	—	(99)
Net change in cash and cash equivalents and restricted cash	$ (67,203)	$ (111,682)

Cash Flows Used in Operating Activities

Historically and prior to the acquisition of Legacy Spruce Power, our cash flows from operating activities were significantly affected by our cash investments to support the growth of the business in areas such as research and development, selling, general and administrative expense and working capital. Prior to the acquisition of Legacy Spruce Power, operating cash inflows included cash from fleet electrification and related servicing, customer deposits and delivery of turnkey energy efficiency and electric vehicle charging stations. Subsequent to the acquisition of Legacy Spruce Power on September 9, 2022, operating cash inflows further included cash from power generated by our home solar energy systems and the servicing of long-term agreements for other institutional owners of home solar energy systems. These operating cash inflows were primarily offset by payments to suppliers for production materials and parts used in the manufacturing process, operating expenses, operating lease payments and interest payments on our outstanding debt. In the fourth quarter of 2022, we discontinued our Drivetrain and XL Grid businesses, of which the related cash flows are reflected as discontinued activities for the years presented.

The net cash used in continuing operating activities in 2023 was $31.7 million. Cash used in continuing operations decreased in 2023 compared to 2022 by $16.0 million primarily due to decreased stock-based compensation expenses, change in fair value of derivative instruments, offset primarily by increases in depreciation expense, accrued expenses and other current liabilities and interest income related to the SEMTH Master Lease.

The net cash used in continuing operating activities in 2022 was $47.7 million, which primarily consisted of high operating expenditures primarily due to legal fees, restructuring expenses and transaction expenses related to the acquisition of Legacy Spruce Power and the divestiture of the Drivetrain business. In addition, there were lower collections of accounts receivables due to reduced revenues in 2022, which were partially offset by lower purchases of inventory.

Cash Flows Used in Investing Activities

The net cash used in continuing investing activities in 2023 was $17.1 million, which primarily relates to (i) $43.1 million of aggregate net cash paid for acquisitions during 2023, consisting of $23.0 million for the SEMTH Acquisition and $20.1 million, net for the Tredegar Acquisition, partially offset by (ii) $20.2 million of proceeds from our investments under the SEMTH Master Lease and (iii) $6.3 million of proceeds from the sale of solar energy systems.

The net cash used in continuing investing activities in 2022 was $30.3 million, which consisted of cash paid for Legacy Spruce Power, net of cash acquired, of $32.6 million, partially offset by $2.3 million of proceeds from the sale of solar energy systems.

Cash Flows Used in Financing Activities

The net cash used in continuing financing activities in 2023 was $16.8 million, which primarily relates to (i) $32.8 million for the repayment of long-term debt and (ii) $5.4 million of shares repurchased under our Repurchase Program, both offset by (iii) $21.4 million of proceeds from the issuance of long-term debt under the SP2 Facility Amendment to fund the Tredegar Acquisition.

The net cash used in continuing financing activities in 2022 was $19.1 million, which primarily consisted of $9.3 million of long-term debt principal repayments, $8.3 million related to the buyout of redeemable non-controlling interest and $1.9 million of capital distributions to non-controlling interests, partially offset by $0.6 million of proceeds from the exercise of stock options in 2022.

Related Parties

We were party to a noncancelable lease agreement for office, research and development, and vehicle development and installation facilities with a holder of more than 5% of our Common Stock. The lease expired in the third quarter of 2022 and the related rent expense under the operating lease for the year ended December 31, 2022 was $0.1 million.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP. Preparation of these financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. Our most critical accounting policies and estimates are those most important to the portrayal of its financial condition and results of operations and which require us to make its most difficult and subjective judgments, often as a result of the need to make estimates regarding matters that are inherently uncertain. We have identified the following as its most critical accounting policies and judgments. Although Management believes that its estimates and assumptions are reasonable, they are based on information available when they are made and, therefore, may differ from estimates made under different assumptions or conditions.

Our significant accounting policies are discussed in Note 2. Summary of Significant Accounting Policies, included in accompanying audited consolidated financial statements, and should be reviewed in connection with the following discussion of accounting policies that require difficult, subjective and complex judgments.

Acquisitions

All acquisitions, regardless of whether a business combination or asset acquisition, are evaluated to determine whether or not the acquired entity is a variable interest entity (“VIE”), including an evaluation of whether there is sufficient equity at risk.

Business combinations are accounted for using the acquisition method of accounting. The purchase price of a business combination is measured at the estimated fair value of the assets acquired, equity instruments issued and liabilities assumed at the acquisition date. Any noncontrolling interests acquired are also initially measured at fair value. Costs that are directly attributable to the acquisition are expensed as incurred to general and administrative expense. Goodwill is recognized if the aggregate fair value of the total purchase consideration and the noncontrolling interests is in excess of the aggregate fair value of the assets acquired and liabilities assumed.

Asset acquisitions are measured based on the cost to us, including transaction costs. Asset acquisition costs, or the consideration transferred, are assumed to be equal to the fair value of the net assets acquired. If the consideration transferred is cash, measurement is based on the amount of cash paid to the seller, as well as transaction costs incurred. Consideration given in the form of non-monetary assets, liabilities incurred or equity instruments issued is measured based on either the cost to us or the fair value of the assets or net assets acquired, whichever is more clearly evident. The cost of an asset acquisition is allocated to the assets acquired based on their estimated fair values. Goodwill is not recognized in an asset acquisition. The Company concluded that SEMTH does not meet the definition of a business or variable interest entity.

The fair values of the assets acquired and liabilities assumed are based on a complex series of judgments about future events and uncertainties and rely heavily on estimates and assumptions. Significant estimates include, but are not limited to, discount rates and forecasted cash flows. These estimates are inherently uncertain and unpredictable.

Revenue Recognition

The Company's revenue is derived from our home solar energy portfolio, which primarily generates revenue through the sale to homeowners of power generated by our home solar energy systems pursuant to long-term agreements, the rental of solar equipment by homeowners pursuant to long-term agreements, and the sale of solar renewable energy credits to third parties. Previously, we also derived revenue from the Drivetrain operations which generated revenue from the sales of hybrid electric powertrain systems, and the XL Grid operations which generated revenues through turnkey energy efficiency, renewable technology and other energy solutions. As of and for the years ended December 31, 2023 and 2022, the Drivetrain business and XL Grid business are reported as discontinued operations.

Energy generation

Customers purchase electricity under PPAs or SLAs. Revenue is recognized from contracts with customers as performance obligations are satisfied at a transaction price reflecting an amount of consideration based upon an estimated rate of return which is expressed as the solar rate per kilowatt hour or a flat rate per month as defined in the customer contracts.

- *PPAs* - Under ASC 606, *Revenue from Contracts with Customers* ("ASC 606"), PPA revenue is recognized when generated based upon the amount of electricity delivered as determined by remote monitoring equipment at solar rates specified under the PPAs.

- *SLAs* - We have SLAs, which do not meet the definition of a lease under ASC 842, *Leases*, and are accounted for as contracts with customers under ASC 606. Revenue is recognized on a straight-line basis over the contract term as the obligation to provide continuous access to the solar energy system is satisfied. The amount of revenue recognized may not equal customer cash payments because the performance obligation has been satisfied ahead of cash receipt or evenly as continuous access to the solar energy system has been provided. The differences between revenue recognition and cash payments received are reflected in accounts receivable, other assets or deferred revenue, as appropriate.

Solar renewable energy credit revenues

We enter into contracts with third parties to sell SRECs generated by the solar energy systems for fixed prices. Certain contracts that meet the definition of a derivative may be exempted as normal purchase or normal sales transactions ("NPNS"). NPNS are contracts that provide for the purchase or sale of something other than a financial instrument or derivative instrument that will be delivered in quantities expected to be used or sold over a reasonable period in the normal course of business. Certain SREC contracts meet these requirements and are designated as NPNS contracts. Such SRECs are exempted from the derivative accounting and reporting requirements, and we recognize revenues in accordance with ASC 606. We recognize revenue for SRECs based on pricing predetermined within the respective contracts at a point in time when the SRECs are transferred. As SRECs can be sold separate from the actual electricity generated by the renewable-based generation source, we account for the SRECs it generates from its solar energy systems as governmental incentives with no costs incurred to obtain them and do not consider those SRECs output of the underlying solar energy systems.

Investment related to SEMTH master lease agreement and interest income

We account for our investment related to the SEMTH master lease agreement in accordance with Accounting Standards Codification ("ASC") 325-40, *Investments—Other—Beneficial Interests in Securitized Financial Assets*. We recognize accretable yield as interest income over the life of the related beneficial interest using the effective yield method, which is reflected within interest income in our consolidated statements of operations. On a recurring basis, we evaluate changes in the cash flows expected to be collected from the cash flows previously projected, and when favorable or adverse changes are deemed other than temporary, we prospectively update our expected cash flows accordingly.

Impairment of long-lived assets

We review long-lived assets, including solar energy systems, property and equipment, and intangible assets with definite lives, for impairment whenever events or changes in circumstances indicate that an asset group's carrying amount may not be recoverable. We group assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities and evaluate the asset group against the sum of the undiscounted future cash flows. If the undiscounted cash flows do not indicate the carrying amount of the asset group is recoverable, an impairment charge is measured as the amount by which the carrying amount of the asset group exceeds its fair value.

In the fourth quarter of 2022, we determined there was an indicator of impairment for intangible assets in our discontinued operations of the Drivetrain and XL Grid businesses and concluded the asset was not recoverable. Comparing the carrying value of the asset to the fair value, we determined the entire asset was impaired and recognized an impairment charge of $0.9 million, which is included in our discontinued operations results for the year ended December 31, 2022. There was no long-lived asset impairment charge during the year ended December 31, 2023.

Goodwill

Goodwill represents the excess of cost over the fair market value of net tangible and identifiable intangible assets of acquired businesses. Goodwill is not amortized but instead is annually tested for impairment, or more frequently if events or circumstances indicate that the carrying amount of goodwill may be impaired.

We perform our annual goodwill impairment assessment at October 1 each fiscal year, or more frequently if events or circumstances arise which indicate that goodwill may be impaired. An assessment can be performed by first completing a qualitative assessment on our single reporting unit. We can also bypass the qualitative assessment in any period and proceed directly to the quantitative impairment test, and then resume the qualitative assessment in any subsequent period. Qualitative indicators that may trigger the need for annual or interim quantitative impairment testing include, among other things, deterioration in macroeconomic conditions, declining financial performance, deterioration in the operational environment, or an expectation of selling or disposing of a portion of the reporting unit. Additionally, a significant change in business climate, a loss of a significant customer, increased competition, a sustained decrease in share price, or a decrease in estimated fair value below book value may trigger the need for interim impairment testing of goodwill.

If we believe that, as a result of our qualitative assessment, it is more likely than not that the fair value of the reporting unit is less than its carrying amount, the quantitative impairment test is required. The quantitative test involves comparing the fair value of the reporting unit with its carrying amount, including goodwill. If the carrying amount of the reporting unit exceeds its fair value, an impairment loss is recorded as a reduction to goodwill with a corresponding charge to earnings in the period the goodwill is determined to be impaired. The income tax effect associated with an impairment of tax-deductible goodwill is also considered in the measurement of the goodwill impairment. Any goodwill impairment is limited to the total amount of goodwill.

We evaluate the fair value of our reporting unit using the market and income approach. Under the market approach, we use multiples of EBITDA or revenues of the comparable guideline public companies by selecting a population of public companies with similar operations and attributes. Using this guideline public company data, a range of multiples of enterprise value to EBITDA or revenue is calculated. The income approach of computing fair value is based on the present value of the expected future economic benefits generated by the asset or business, such as cash flows or profits which will then be compared to its book value.

In the first quarter of 2022, we believed there were indicators that the carrying amount of its goodwill may be impaired due to a decline in our stock price and market capitalization. As a result, we performed an assessment of our goodwill for impairment. We elected to forego the qualitative test and proceeded to perform a quantitative test. We compared the book value of our single reporting unit to the fair value of its public float. The market capitalization was below our fair value by an amount in excess of our reported value of goodwill. As a result, we recorded a charge of $8.6 million to fully impair goodwill related to XL Fleet, which is included in our discontinued operations results for the year ended December 31, 2022. There was no goodwill impairment charge during the year ended December 31, 2023.

It is likely we may recognize further goodwill impairment losses in the future if, among other factors there is a decline in our overall financial performance such as declining cash flows or revenues, or there is a decline in our market capitalization or stock price.

Valuation of deferred tax assets

We account for income taxes using the asset and liability method, under which deferred tax liabilities and assets are recognized for the expected future tax consequences of temporary differences between financial statement carrying amounts and the tax basis of assets and liabilities and net operating loss and tax credit carryforwards. Deferred income taxes are provided for the temporary differences arising between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and operating loss carry-forwards and credits. Deferred tax assets and liabilities are measured using enacted rates in effect for the year in which the differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of changes in tax rates is recognized in the statements of operations in the period in which the enactment rate changes.

The ultimate recovery of deferred tax assets is dependent upon the amount and timing of future taxable income and other factors such as the taxing jurisdiction in which the asset is to be recovered. A high degree of judgment is required to determine if, and the extent to which, valuation allowances should be recorded against deferred tax assets. We have provided valuation allowances as of December 31, 2023 and 2022 aggregating $74.9 million and $69.4 million, respectively, against such assets based on our assessment of past operating results, estimates of future taxable income and the feasibility of tax planning strategies. Although we believe that our approach to estimates and judgments as described herein is reasonable, actual results could differ and we may be exposed to increases or decreases in income taxes that could be material.

Redeemable noncontrolling interests and noncontrolling interests

Noncontrolling interests represent third-party interests in the net assets of certain consolidated subsidiaries. We consolidate any VIE of which we are the primary beneficiary. We formed or acquired VIEs which are partially funded by tax equity investors in order to facilitate the funding and monetization of certain attributes associated with solar energy systems. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. A variable interest holder is required to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. We do not consolidate a VIE in which we have a majority ownership interest when we are not considered the primary beneficiary. We evaluate our relationships with the VIEs on an ongoing basis to determine if we are the primary beneficiary.

Our investments in Volta Solar Owner II, LLC and ORE F4 HoldCo, LLC as of December 31, 2023 (collectively, the “Funds”) were determined to be VIEs upon investment. As of December 31, 2022, we had investments in the Funds and Level Solar Fund IV LLC (collectively, the “Prior Funds”), which were individually determined to be VIEs upon investment. We subsequently purchased 100% of the membership interests in Level Solar Fund IV LLC during 2023 and it ceased being a VIE upon purchase.

We considered the provisions within the contractual arrangements that grant us power to manage and make decisions that affect the operation of the VIEs, including determining the solar energy systems contributed to the VIEs, and the operation and maintenance of the solar energy systems. We consider the rights granted to the other investors under the contractual arrangements to be more protective in nature rather than substantive participating rights. As such, we were determined to be the primary beneficiary, and the assets, liabilities and activities of the Funds and Prior Funds (before any ceased being a VIE) were consolidated by us. The distribution rights and priorities for the Funds and Prior Funds (before any ceased being a VIE) as set forth in their respective operating agreements differ from the underlying percentage ownership interests of the members. As a result, we allocate income or loss to the noncontrolling interest holders of the Funds and Prior Funds (before any ceased being a VIE) utilizing the hypothetical liquidation of book value ("HLBV") method, in which income or loss is allocated based on the change in each member's claim on the net assets at the end of each reporting period, adjusted for any distributions or contributions made during such periods. The HLBV method is commonly applied to investments where cash distribution percentages vary at different points in time and are not directly linked to an equity member's ownership percentage.

The HLBV method is a balance sheet-focused approach. Under this method, a calculation is prepared at each reporting date to determine the amount that each member would receive if the entity were to liquidate all of its assets and distribute the resulting proceeds to its creditors and members based on the contractually defined liquidation priorities. The difference between the calculated liquidation distribution amounts at the beginning and the end of the reporting period, after adjusting for capital contributions and distributions, is used to derive each member's share of the income or loss for the period. Factors used in the HLBV calculation include GAAP income (loss), taxable income (loss), capital contributions, ITCs, distributions and the stipulated targeted investor return specified in the subsidiaries' operating agreements. Changes in these factors could have a significant impact on the amounts that investors would receive upon a hypothetical liquidation. The use of the HLBV method to allocate income (loss) to the noncontrolling interest holders may create volatility in the consolidated statements of operations as the application of HLBV can drive changes in net income or loss attributable to noncontrolling interests from period to period. We classify certain noncontrolling interests with redemption features that are not solely within our control outside of permanent equity in the consolidated balance sheets. Redeemable noncontrolling interests are reported using the greater of the carrying value at each reporting date as determined by the HLBV method or the estimated redemption value at the end of each reporting period. Estimating the redemption value of the redeemable noncontrolling interests requires the use of significant assumptions and estimates, such as projected future cash flows.

Interest Rate Swaps

We utilize interest rate swaps to manage interest rate risk on existing and planned future debt issuance s. These swaps are not designated as cash flow hedges or fair value hedges. The fair value of the interest rate swaps are calculated by discounting the future net cash flows to the present value based on the terms and conditions of the agreements and the forward interest rate curves. As these inputs are based on observable data and valuations of similar instruments, the interest rate derivatives are primarily categorized as Level 2 in the fair value hierarchy. The fair value of interest rate swaps are recorded on the consolidated balance sheets. Realized gains and losses on interest rate swaps are recognized in interest expense, net on the consolidated statements of operations. Unrealized gains and losses on interest rate swaps are reflected in the consolidated statements of operations and as a non-cash reconciling item in operating activities on the consolidated statements of cash flows.

New and Recently Adopted Accounting Pronouncements

Refer to Note 2. Summary of Significant Accounting Policies to the consolidated financial statements, included below in Item 8. Financial Statements and Supplementary Data.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information under this item.

Item 8. Financial Statements and Supplementary Data

Our consolidated financial statements are presented beginning on page F-1 following this caption.

Index to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Spruce Power Holding Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Spruce Power Holding Corporation (the "Company") as of December 31, 2023, the related consolidated statements of operations, changes in stockholders' equity, and cash flows for the year ended December 31, 2023, 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, 2023, and the results of its operations and its cash flows for the year ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

The consolidated financial statements of the Company for the year ended December 31, 2022, before the effects of the adjustments to retrospectively apply the reverse stock split discussed in Note 2 to the financial statements, were audited by other auditors whose report, dated March 30, 2023, expressed an unqualified opinion on those statements. We have also audited the adjustments to the 2022 consolidated financial statements to retrospectively apply the reverse stock split in 2023, as discussed in Note 2 to the financial statements. In our opinion, such retrospective adjustments are appropriate and have been properly applied. However, we were not engaged to audit, review, or apply any procedures to the 2022 consolidated financial statements of the Company other than with respect to the retrospective adjustments, and accordingly, we do not express an opinion or any other form of assurance on the 2022 consolidated financial statements taken as a whole.

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 audit. 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 audit 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 audit, 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 audit 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 audit 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 audit provides a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters 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 matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

SEMTH Acquisition – Refer to Note 4 to the Financial Statements

Critical Audit Matter Description

In March 2023, the Company completed the acquisition of SS Holdings 2017, LLC and its subsidiaries (“SEMTH”) resulting in the acquisition of 20-year use rights to customer payment streams. The Company concluded that SEMTH does not meet the definition of a business or a variable interest entity.

We identified the SEMTH Acquisition as a critical audit matter because of the significant judgment made by the Company to determine that SEMTH has sufficient equity at risk and thus was not a variable interest entity. This required a high degree of auditor judgment and an increased extent of effort, including the need to involve specialists and senior members of the engagement team.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures to evaluate the accounting treatment of the SEMTH Acquisition included the following, among others:

- With the assistance of professionals in our firm having expertise in business combinations and consolidation, we evaluated the Company's conclusion that SEMTH does not meet the definition of a business per ASC 805, *Business Combinations*, or a variable interest entity per ASC 810, *Consolidation*.
- With the assistance of fair value specialists, we evaluated the reasonableness of the assumptions used in the cash flows used in the equity at risk analysis, including testing the mathematical accuracy of the calculation.
- We evaluated the reasonableness of the Company's projections of revenue by comparing the assumptions used in the projections to long-term agreements and historical data.

Revenue – Refer to Note 2 to the Financial Statements

Critical Audit Matter Description

The Company's revenue is primarily derived from the sale of solar energy to residential homeowners pursuant to long-term agreements, the rental of solar equipment to residential homeowners pursuant to long-term agreements, and the sale of solar renewable energy credits to third-parties. The Company recognizes revenue in accordance with ASC 606, *Revenue from Contracts with Customers* .

We identified revenue as a critical audit matter as it required an increased extent of effort, including the need to involve senior members of the engagement team.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures to evaluate revenue included the following, among others:

- We performed detail testing procedures to evaluate the Company's conclusion regarding the application of ASC 606 for contracts related to energy generation, both the sale of solar energy and the rental of solar equipment, and solar renewable energy credits.
- We obtained the Company's assessment of whether there have been significant changes in facts or circumstances that require a reassessment of the accounting treatment under ASC 606.
    - We evaluated the Company's assessment of any significant changes in facts or circumstances, including the Company's policy related to the collectability of consideration.
    - We tested the Company's identification of contracts that were concluded to no longer be collectable under ASC 606.
    - We tested the mathematical accuracy of the impact to revenue for those contracts that were concluded to no longer being collectable under ASC 606.
- We performed detail testing procedures to test revenue recorded for energy generation, both the sale of solar energy and the rental of solar equipment, and solar renewable energy credits.

/s/ Deloitte & Touche LLP

Houston, TX
April 8, 2024

We have served as the Company's auditor since 2023.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of
Spruce Power Holding Corporation
(formerly known as XL Fleet Corp.)

Opinion on the Financial Statements

We have audited, before the effects of the adjustments to retrospectively apply the reverse stock split described in Note 2, the accompanying consolidated balance sheet of Spruce Power Holding Corporation (formerly known as XL Fleet Corp.) (the “Company”) as of December 31, 2022, the related consolidated statements of operations, stockholders’ equity and cash flows the year then ended, and the related notes (the 2022 financial statements before the effects of the reverse stock split discussed in Note 2 are not presented herein) (collectively referred to as the “financial statements”). In our opinion, the 2022 financial statements before the effects of the reverse stock split discussed in Note 2, present fairly, in all material respects, the financial position of the Company as of December 31, 2022, and the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. 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 audit 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 audit 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 audit 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 audit 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 audit provides a reasonable basis for our opinion.

We were not engaged to audit, review, or apply any procedures to the adjustments to retrospectively apply the reverse stock split described in Note 2 and, accordingly, we do not express an opinion or any other form of assurance about whether such adjustments are appropriate and have been properly applied. Those adjustments were audited by other auditors.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters 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 matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Initial measurement of fair value of assets related to a business combination

The Company completed the acquisition of all of the membership interests of Spruce Holding Company 1 LLC, Spruce Holding Company 2 LLC, Spruce Holding Company 3 LLC, and Spruce Manager LLC The Company has accounted for this acquisition as a business combination under ASC Topic 805 “Business Combinations.” Accordingly, the purchase price was allocated to the assets acquired and liabilities assumed based on their respective fair values.

We identified the initial fair value measurement of intangible assets as a critical audit matter because of the significant estimates and assumptions management makes to fair value these assets for purposes of recording the acquisition. This required a high degree of auditor judgment and an increased extent of effort when performing audit procedures to evaluate the reasonableness of management’s initial estimates of cash flows including the need to involve our fair value specialists.

Our audit procedures related to these forecasts included the following, among others:

- Testing the source information underlying the estimates
- With the assistance of our fair value specialists:
  - Evaluating the reasonableness of the valuation methodology
  - Developing a range of independent estimates for the discount rates and comparing those to the discount rates selected by management

/s/ Marcum LLP

Marcum LLP

We have served as the Company's auditor from 2020 to 2023.
Melville, NY
March 30, 2023

PCAOB: 688

Spruce Power Holding Corporation
Consolidated Balance Sheets

	As of December 31,	
(In thousands, except share and per share amounts)	**2023**	**2022**
Assets		
Current assets		
Cash and cash equivalents	$ 141,354	$ 220,321
Restricted cash	31,587	19,823
Accounts receivable, net of allowance of $ 1.7 million and $ 12.2 million as of December 31, 2023 and 2022, respectively	9,188	8,336
Interest rate swap assets, current	11,333	10,183
Prepaid expenses and other current assets	9,879	5,316
Current assets of discontinued operations	—	10,977
Total current assets	203,341	274,956
Investment related to SEMTH master lease agreement	143,095	—
Property and equipment, net	484,406	396,168
Interest rate swap assets, non-current	16,550	22,069
Intangible assets, net	10,196	—
Deferred rent assets	2,454	1,626
Right-of-use assets, net	5,933	2,802
Goodwill	28,757	128,548
Other assets	257	383
Long-term assets of discontinued operations	32	—
Total assets	$ 895,021	$ 826,552
Liabilities, redeemable noncontrolling interests and stockholders' equity		
Current liabilities		
Accounts payable	$ 1,120	$ 2,904
Non-recourse debt, current	27,914	25,314
Accrued expenses and other current liabilities	40,634	21,509
Deferred revenue, current	878	39
Lease liability, current	1,166	834
Current liabilities of discontinued operations	—	9,097
Total current liabilities	71,712	59,697
Non-recourse debt, non-current	590,866	474,441
Deferred revenue, non-current	1,858	452
Lease liability, non-current	5,731	2,426
Warrant liabilities	17	256
Unfavorable solar renewable energy agreements, net	6,108	—
Interest rate swap liabilities, non-current	843	—
Other long-term liabilities	3,047	10
Long-term liabilities of discontinued operations	170	294
Total liabilities	680,352	537,576
Commitments and contingencies (Note 15)		
Redeemable noncontrolling interests	—	85
Stockholders' equity:		

Common stock, $ 0.0001 par value; 350,000,000 shares authorized at December 31, 2023 and 2022; 19,093,186 and 18,292,536 shares issued and outstanding at December 31, 2023, respectively, and 18,046,903 issued and outstanding at December 31, 2022	2	2
Additional paid-in capital	475,654	473,289
Accumulated deficit	(257,888)	(193,342)
Treasury stock at cost, 800,650 shares and 0 at December 31, 2023 and 2022, respectively	(5,424)	—
Noncontrolling interests	2,325	8,942
Total stockholders' equity	214,669	288,891
Total liabilities, redeemable noncontrolling interests and stockholders' equity	$ 895,021	$ 826,552

See Notes to Consolidated Financial Statements.

Spruce Power Holding Corporation
Consolidated Statements of Operations

(In thousands, except per share and share amounts)	Years Ended December 31, 2023	2022
Revenues	$ 79,859	$ 23,194
Operating expenses:		
Cost of revenues	37,813	9,949
Selling, general and administrative expenses	56,122	73,118
Litigation settlements, net	27,465	—
Gain on asset disposal	(4,724)	(580)
Total operating expenses	116,676	82,487
Loss from operations	(36,817)	(59,293)
Other (income) expense:		
Interest income	(19,534)	(1,339)
Interest expense, net	41,936	11,401
Gain on extinguishment of debt	—	(4,527)
Change in fair value of obligation to issue shares of common stock to sellers of World Energy	—	(535)
Change in fair value of warrant liabilities	(239)	(5,148)
Change in fair value of interest rate swaps	4,816	(5,554)
Other income, net	(1,309)	(912)
Net loss from continuing operations	(62,487)	(52,679)
Net loss from discontinued operations (including loss on disposal of $ 3,083 for the year ended December 31, 2023)	(4,123)	(40,112)
Net loss	(66,610)	(92,791)
Less: Net income (loss) attributable to redeemable noncontrolling interests and noncontrolling interests	(779)	1,140
Net loss attributable to stockholders	$ (65,831)	$ (93,931)
Net loss from continuing operations per share, basic and diluted	$ (3.40)	$ (2.95)
Net loss from discontinued operations per share, basic and diluted	$ (0.22)	$ (2.25)
Net loss attributable to stockholders per share, basic and diluted	$ (3.58)	$ (5.27)
Weighted-average shares outstanding, basic and diluted	18,391,436	17,836,500

See Notes to Consolidated Financial Statements.

Spruce Power Holding Corporation

Consolidated Statements of Changes in Stockholders' Equity

	Year Ended December 31, 2023							
(In thousands, except share data)	Redeemable Noncontrolling Interests	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Accumulated Deficit	Treasury Stock Shares	Treasury Stock Amount	Non controlling Interests	Total Stockholders' Equity
Balance at December 31, 2022	$ 85	18,046,903	$ 2	473,289	$ (193,342)	—	$ —	$ 8,942	$ 288,891
Exercise of stock options	—	489,436	—	1,004	—	—	—	—	1,004
Purchase accounting measurement period adjustments	240	—	—	(1,813)	—	—	—	(5,490)	(7,303)
Issuance of restricted stock	—	531,029	—	—	—	—	—	—	—
Issuance of common stock	—	25,818	—	150	—	—	—	—	150
Share repurchases	—	—	—	—	—	800,650	(5,424)	—	(5,424)
Cumulative-effect adjustment of ASC 326 adoption	—	—	—	—	1,285	—	—	—	1,285
Stock-based compensation expense	—	—	—	2,885	—	—	—	—	2,885
Net income (loss)	3	—	—	—	(65,831)	—	—	(782)	(66,613)
Buyout of redeemable noncontrolling interests	(55)	—	—	—	—	—	—	—	—
Capital distributions to noncontrolling interests	(134)	—	—	—	—	—	—	(345)	(345)
Equity related to buyout of redeemable noncontrolling interest	(139)	—	—	139	—	—	—	—	139
Balance at December 31, 2023	$ —	19,093,186	$ 2	475,654	$ (257,888)	800,650	$ (5,424)	$ 2,325	$ 214,669

(In thousands, except share data)	Redeemable Noncontrolling Interests	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Treasury Stock Shares	Treasury Stock Amount	Non controlling Interests	Total Stockholders' Equity
					Year Ended December 31, 2022				
Balance at December 31, 2021	$ —	17,567,584	$ 2	$ 461,219	$ (99,411)	—	$ —	$ —	$ 361,810
Exercise of stock options	—	333,764	—	630	—	—	—	—	630
Issuance of restricted stock	—	133,055	—	—	—	—	—	—	—
Issuance of shares as contingent consideration relating to Quantum business acquisition	—	12,500	—	186	—	—	—	—	186
Stock-based compensation expense	—	—	—	9,996	—	—	—	—	9,996
Net income (loss)	846	—	—	—	(93,931)	—	—	294	(93,637)
Noncontrolling interests related to acquisition of Legacy Spruce Power	7,159	—	—	—	—	—	—	12,164	12,164
Buyout of noncontrolling interests	(6,517)	—	—	1,258	—	—	—	(3,024)	(1,766)
Capital distributions to noncontrolling interests	(1,403)	—	—	—	—	—	—	(492)	(492)
Balance at December 31, 2022	$ 85	18,046,903	$ 2	$ 473,289	$ (193,342)	—	$ —	$ 8,942	$ 288,891

See Notes to Consolidated Financial Statements.

Spruce Power Holding Corporation
Consolidated Statements of Cash Flows

(In thousands)	Years Ended December 31, 2023	2022
Operating activities:		
Net loss	$ (66,610)	$ (92,791)
Add back: Net loss from discontinued operations	4,123	40,112
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	2,885	9,996
Bad debt expense	1,841	1,839
Amortization of deferred revenue	(91)	(34)
Depreciation and amortization expense	21,586	6,456
Accretion expense	300	—
Change in fair value of obligation to issue shares of common stock	—	(535)
Change in fair value of interest rate swaps	4,816	(5,554)
Change in fair value of warrant liabilities	(239)	(5,148)
Interest income related to SEMTH master lease agreement	(11,486)	—
Gain on extinguishment of debt	—	(4,527)
Gain on disposal of assets	(4,724)	(580)
Change in operating right-of-use assets	120	134
Amortization of debt discount and deferred financing costs	5,863	1,482
Changes in operating assets and liabilities:		
Accounts receivable, net	85	553
Deferred rent assets	(828)	(1,626)
Prepaid expenses and other current assets	(2,390)	(1,571)
Other assets	126	—
Accounts payable	(1,784)	(1,696)
Accrued expenses and other current liabilities	13,624	5,278
Other long-term liabilities	5	—
Deferred revenue	1,064	495
Net cash used in continuing operating activities	(31,714)	(47,717)
Net cash used in discontinued operating activities	(1,947)	(15,772)
Net cash used in operating activities	(33,661)	(63,489)
Investing activities:		
Proceeds from sale of solar energy systems	6,297	2,289
Proceeds from investment related to SEMTH master lease agreement	20,239	—
Cash paid for acquisitions, net of cash acquired	(43,097)	(32,585)
Purchases of other property and equipment	(499)	—
Net cash used in continuing investing activities	(17,060)	(30,296)
Net cash provided by discontinued investing activities	325	1,290
Net cash used in investing activities	(16,735)	(29,006)
Financing activities:		
Proceeds from issuance of long-term debt	21,396	—
Payment of deferred financing costs	(391)	—
Repayments of long-term debt	(32,843)	(9,302)

Repayments under financing leases	(165)	(238)
Proceeds from issuance of common stock	150	—
Proceeds from exercise of stock options	1,004	630
Share repurchases	(5,424)	—
Capital distributions to redeemable noncontrolling interests and noncontrolling interests	(479)	(1,895)
Buyout of redeemable non-controlling interest	(55)	(8,283)
Net cash used in continuing financing activities	(16,807)	(19,088)
Net cash used in discontinued financing activities	—	(99)
Net cash used in financing activities	(16,807)	(19,187)
Net change in cash and cash equivalents and restricted cash:	(67,203)	(111,682)
Cash and cash equivalents and restricted cash, beginning of period	240,144	351,826
Cash and cash equivalents and restricted cash, end of period	$ 172,941	$ 240,144
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 37,482	$ 12,367
Supplemental disclosures of noncash investing and financing information:		
Right-of-use assets obtained in exchange for lease liability	$ 933	$ 1,850
Settlement of operating lease liability	$ 436	$ 685
Settlement of finance lease liability	$ 43	$ —
Settlement of contingent liability through issuance of shares	$ —	$ 186

See Notes to Consolidated Financial Statements.

Note 1. Organization and Description of Business

Description of Business

Spruce Power Holding Corporation and its subsidiaries ("Spruce Power" or the "Company") is a leading owner and operator of distributed solar energy assets across the United States (the "U.S."), offering subscription-based services to approximately 75,000 home solar assets and customer contracts, making renewable energy more accessible to everyone.

The Company is engaged in the ownership and maintenance of home solar energy systems for homeowners in the U.S. The Company provides clean, solar energy typically at savings compared to traditional utility energy. The Company's primary customers are homeowners and the Company's core solar service offerings generate revenues primarily through (i) the sale of electricity generated by its home solar energy systems to homeowners pursuant to long-term agreements, which requires the Company's subscribers to make recurring monthly payments, (ii) third party contracts to sell solar renewable energy credits ("SRECs") generated by the solar energy systems for fixed prices and (iii) the servicing of those agreements for other institutional owners of home solar energy systems. In addition, the Company generates cash flows and earns interest income from an investment through a master lease agreement.

The Company holds subsidiary fund companies, defined below as the Funds, that own and operate portfolios of home solar energy systems, which are subject to solar lease agreements ("SLAs") and power purchase agreements ("PPAs", together with the SLAs, "Customer Agreements") with residential customers who benefit from the production of electricity generated by the solar energy systems. The solar energy systems may qualify for subsidies, renewable energy credits and other incentives as provided by various states and local agencies. These benefits have generally been retained by the Company's subsidiaries that own the systems, with the exception of the investment tax credit ("ITCs") under Section 48 of the Internal Revenue Code, as amended, (the "IRC"), which were generally passed through to the various financing partners of the solar energy systems.

The Company also offers services which include asset management services and operating and maintenance services for home solar energy systems.

Corporate History and Discontinued Operations

Historically, the Company had provided fleet electrification solutions for commercial vehicles in North America, offering its systems for vehicle electrification (the "Drivetrain" segment) and through its energy efficiency and infrastructure solutions business, offering and installing charging stations to enable customers to develop the charging infrastructure required for their electrified vehicles (the "XL Grid" segment). In the first quarter of 2022, the Company initiated a strategic review of its overall business operations which included assessing its offerings, strategy, processes and growth opportunities. As a result of the strategic review, in the first quarter of 2022, the Company made the following decisions relating to the restructuring of its Drivetrain business: (i) the elimination of a substantial majority of the Company's hybrid drivetrain products; (ii) the elimination of its plug-in hybrid electric vehicles products; (iii) the reduction in the size of the Company's workforce by approximately 50 employees; (iv) the closure of the Company's production center and warehouse in Quincy, IL; (v) the closure of the Company's engineering activities in its Boston office; and (vi) the termination of the Company's partnership with eNow.

Following the strategic review, the Company decided to pursue transformational mergers and acquisition ("M&A") opportunities, which included the implementation of a process to institutionalize the M&A effort, resulting in the formation of an investment committee comprised of senior members of the Company's executive team and members of its Board of Directors. The objective of the investment committee was to continue the exploration of value-generative opportunities in the decarbonization and energy transition ecosystem, focused on three core requirements, (i) a business that makes an impact on decarbonization, (ii) a leader in an established, growing market segment and (iii) a company that generates positive earnings before interest, taxes, depreciation and amortization ("EBITDA").

As a result of these efforts, on September 9, 2022, the Company acquired 100 % of the membership interests of Spruce Holding Company 1 LLC, Spruce Holding Company 2 LLC, Spruce Holding Company 3 LLC and Spruce Manager LLC (collectively and together with their subsidiaries, "Legacy Spruce Power") (See Note 3. Business Combinations). Legacy Spruce Power was a privately held owner and operator of home solar energy systems in the U.S. at the time of the transaction, with approximately 51,000 customer subscribers as of December 31, 2022. Spruce Power sells the power generated by solar energy systems to its homeowners pursuant to long-term agreements that require subscribers to make recurring monthly payments.

In November 2022, the Company changed its corporate name from "XL Fleet Corp." to "Spruce Power Holding Corporation." Additionally, the Company changed its ticker symbol from "XL" to "SPRU."

With the completion of the acquisition of Legacy Spruce Power, the Company analyzed strategic alternatives related to its Drivetrain business. In December 2022, the Company commenced the exit of its Drivetrain business and sold a portion of the business for an immaterial amount to Shyft Group USA ("Shyft"), which closed in January 2023. Shyft also (i) acquired certain technical equipment and assumed the Company's Wixom, Michigan facility, (ii) offered employment to certain engineers and other sales personnel and (iii) assumed completion of the Company's pilot development agreement with the Department of Defense related to vehicle hybridization (with the Company retaining rights to potential future royalties from the program). In the fourth quarter of 2022, the Company also sold certain battery inventory and its legacy hybrid technology to RMA Group, an automotive and equipment supplier in Southeast Asia.

After the acquisition of Legacy Spruce Power, the Company also commenced a review of its XL Grid business to evaluate its strategic fit with Legacy Spruce Power, and in the fourth quarter of 2022, the Company entered into a non-binding letter of intent for the sale of World Energy Efficiency Services, LLC ("World Energy") for an immaterial amount. The divestiture of World Energy closed in January 2023 and the Company subsequently ceased its XL Grid operations.

Both the Drivetrain and XL Grid operations are presented as discontinued operations in the consolidated financial statements.

Note 2. Summary of Significant Accounting Policies

Basis of consolidated financial statement presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and include the accounts of its wholly owned subsidiaries and variable interest entities ("VIEs"), for which the Company was the primary beneficiary. All intercompany transactions and balances have been eliminated in consolidation. Certain prior year amounts have been reclassified to conform to the Company's presentation as of and for the year ended December 31, 2023 and such reclassifications had no effect on the Company's previously reported financial position, results of operations, or cash flows.

On March 28, 2023, the Company was notified by the New York Stock Exchange (the "NYSE") that it was not in compliance with certain listing requirements since the average closing price of its common stock was less than $1.00 over a consecutive 30 day trading period. Subsequently, on October 6, 2023, the Company effected a 1-for-8 reverse stock split with respect to its issued and outstanding shares of common stock (the "Reverse Stock Split"). Excluding the par value and the number of authorized shares of the Company's common stock, all share, per share amounts, and the values of the common stock outstanding and related effect on additional paid in capital included in this Form 10-K have been retrospectively presented as if the Reverse Stock Split had been effective from the beginning of the earliest period presented.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the balance sheet date, as well as reported amounts of expenses during the reporting period. The Company's most significant estimates and judgments involve (i) inventory reserves, (ii) deferred income taxes, (iii) warranty reserves, (iv) valuation of stock-based compensation, (v) valuation of warrant liability, (vi) the useful lives of certain assets and liabilities, (vii) the allowance for current expected credit losses and (viii) the valuation of business combinations, including the fair values and useful lives of acquired assets and assumed liabilities, goodwill and the fair value of purchase consideration of asset acquisitions. Management bases its estimates on historical experience and on various other assumptions believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results could differ from those estimates, and such differences could be material to the Company's financial statements.

Variable interest entities

The Company consolidates any variable interest entity ("VIE") of which it is the primary beneficiary. The Company formed or acquired VIEs which are partially funded by tax equity investors in order to facilitate the funding and monetization of certain attributes associated with solar energy systems. The typical condition for a controlling financial interest ownership is holding a majority of the voting interests of an entity; however, a controlling financial interest may also exist in entities, such as VIEs, through arrangements that do not involve controlling voting interests. A variable interest holder is required to consolidate a VIE if that party has the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and the obligation to absorb losses of the VIE that could potentially be significant to the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. The Company does not consolidate a VIE in which it has a majority ownership interest when the Company is not considered the primary beneficiary. The Company evaluates its relationships with the VIEs on an ongoing basis to determine if it is the primary beneficiary.

As of December 31, 2022, the Company had its initial investment in Level Solar Fund IV LLC ("Level Solar Fund IV") and similar investments in the Funds as defined below (collectively, the "Prior Funds"), which were each determined to be a VIE upon investment. During 2023, the Company purchased 100 % of the membership interests in Level Solar Fund IV (See Note 13. Redeemable Noncontrolling Interests and Noncontrolling Interests) and it ceased being a VIE upon purchase. As of December 31, 2023, the Company had its investments in Volta Solar Owner II, LLC and ORE F4 HoldCo, LLC (collectively, the "Funds").

The Company considered the provisions within the contractual arrangements that grant it power to manage and make decisions that affect the operation of the VIEs, including determining the solar energy systems contributed to the VIEs, and the operation and maintenance of the solar energy systems. The Company considers the rights granted to the other investors under the contractual arrangements to be more protective in nature rather than substantive participating rights. As such, the Company was determined to be the primary beneficiary and the assets, liabilities and activities of the Funds and Prior Funds were consolidated by the Company.

Redeemable noncontrolling interests and noncontrolling interests

The distribution rights and priorities for the Funds and Prior Funds (before any ceased being a VIE) as set forth in their respective operating agreements differ from the underlying percentage ownership interests of the members. As a result, the Company allocates income or loss to the noncontrolling interest holders of the Funds and Prior Funds (before any ceased being a VIE) utilizing the hypothetical liquidation of book value ("HLBV") method, in which income or loss is allocated based on the change in each member's claim on the net assets at the end of each reporting period, adjusted for any distributions or contributions made during such periods. The HLBV method is commonly applied to investments where cash distribution percentages vary at different points in time and are not directly linked to an equity member's ownership percentage.

The HLBV method is a balance sheet-focused approach. Under this method, a calculation is prepared at each reporting date to determine the amount that each member would receive if the entity were to liquidate all of its assets and distribute the resulting proceeds to its creditors and members based on the contractually defined liquidation priorities. The difference between the calculated liquidation distribution amounts at the beginning and the end of the reporting period, after adjusting for capital contributions and distributions, is used to derive each member's share of the income or loss for the period. Factors used in the HLBV calculation include GAAP income (loss), taxable income (loss), capital contributions, ITCs, capital distributions and the stipulated targeted investor return specified in the subsidiaries' operating agreements. Changes in these factors could have a significant impact on the amounts that investors would receive upon a hypothetical liquidation.

The Company classifies certain noncontrolling interests with redemption features that are not solely within the Company's control outside of permanent equity in the consolidated balance sheets. Redeemable noncontrolling interests are reported using the greater of the carrying value at each reporting date as determined by the HLBV method or the estimated redemption value at the end of each reporting period. Estimating the redemption value of the redeemable noncontrolling interests requires the use of significant assumptions and estimates, such as projected future cash flows. Subsequent to the purchase of 100 % of the membership interests in Level Solar Fund IV in 2023, the Company had no redeemable noncontrolling interest as of December 31, 2023.

Cash and cash equivalents

The Company considers all highly liquid investments with a maturity of three months or less at the time of purchase to be cash equivalents. Cash and cash equivalents include cash held in banks, money market accounts and U.S. Treasury securities. Cash equivalents are carried at cost, which approximates fair value due to their short-term nature. The Company's cash and cash equivalents are placed with high-credit quality financial institutions and issuers, and at times exceed federally insured limits. To date, the Company has experienced no credit losses relating to its cash and cash equivalents.

Concentration of credit risks and revenue

Financial instruments which potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents. At times, such cash may be in excess of the FDIC limit. At December 31, 2023 and 2022, the Company had cash in excess of the $250,000 federally insured limit. The Company believes it is not exposed to any significant credit risk on cash and cash equivalents as most of the balances are kept in treasury bills, which are government backed securities.

As of and for the year ended December 31, 2023 and 2022, the Company had no customers that represented at least 10% of the Company's revenues or its accounts receivable balances.

Restricted cash

Restricted cash held at December 31, 2023 and 2022 of $ 31.6 million and $ 19.8 million, respectively, primarily consists of cash that is subject to restriction due to provisions in the Company's financing agreements and the operating agreements of the Funds and Prior Funds. The carrying amount reported in the consolidated balance sheets for restricted cash approximates its fair value.

The following table provides a reconciliation of cash and cash equivalents and restricted cash reflected on the consolidated balance sheets to the total amounts shown within the consolidated statements of cash flows for each year:

	As of December 31,	
(Amounts in thousands)	**2023**	**2022**
Cash and cash equivalents	$ 141,354	$ 220,321
Restricted cash	31,587	19,823
Total cash, cash equivalents and restricted cash	$ 172,941	$ 240,144

Accounts receivable, net

Accounts receivable primarily represent amounts due from the Company's customers. Accounts receivable is recorded net of allowance for expected credit losses in accordance with the current expected credit losses standard ("CECL"), defined below, which is determined by the Company's assessment of the collectability of customer accounts based on the best available data at the time of the assessment. Management reviews the allowance by considering factors such as historical experience, contractual term, aging category and current economic conditions that may affect customers. The following table presents the changes in the allowance for credit losses recorded within accounts receivable, net on the consolidated balance sheets:

	As of December 31,	
(Amounts in thousands)		**2023**
Balance at the beginning of the period	$	12,164
Impact of ASC 326 adoption		(1,285)
Write-off of uncollectible accounts		(11,447)
Provision recognized upon valuation of assets acquired		420
Provision for current expected credit losses		1,841
Balance at the end of the period	$	1,693

Derivative instruments and hedging activities

The Company utilizes interest rate swaps to manage interest rate risk on existing and planned future debt issuances. The fair value of all derivative instruments are recognized as assets or liabilities at the balance sheet date on the consolidated balance sheets. The fair value of the interest rate swaps are calculated by discounting the future net cash flows to the present value based on the terms and conditions of the agreements and the forward interest rate curves. As these inputs are based on observable data and valuations of similar instruments, the interest rate derivatives are primarily categorized as Level 2 in the fair value hierarchy.

Prepaid expenses and other current assets

Prepaid expenses and other current assets include prepaid insurance, prepaid rent, and supplies, which are expected to be recognized or realized within the next 12 months.

Investment related to SEMTH master lease agreement and interest income

The Company accounts for its investment related to the SEMTH, as defined below, master lease agreement in accordance with Accounting Standards Codification ("ASC") 325-40, *Investments—Other—Beneficial Interests in Securitized Financial Assets*. The Company recognizes accretable yield as interest income over the life of the related beneficial interest using the effective yield method, which is reflected within interest income in the consolidated statements of operations in the amount of $ 11.5 million for the year ended December 31, 2023. On a recurring basis, the Company evaluates changes in the cash flows expected to be collected from the cash flows previously projected, and when favorable or adverse changes are deemed other than temporary, the Company prospectively updates its expectation of cash flows to be collected and recalculates the amount of accretable yield for the related beneficial interest.

Property and equipment, net

Property and equipment, net consists of solar energy systems and other property and equipment.

Solar energy systems, net

Solar energy systems, net consists of home solar energy systems which are subject to long-term Customer Agreements and asset retirement costs ("ARC"). Solar energy systems are recorded at their fair value upon acquisition, while ARCs are capitalized as part of the carrying amount of the solar energy systems and depreciated over the remaining useful life. Subsequently, any impairment charges that may arise are recognized and the impairment loss reduces the carrying amount of the asset to its recoverable amount. For all acquired systems, the Company calculates depreciation using the straight-line method over the remaining useful life as of the acquisition date based on a 30-year useful life from the date the asset was placed in service. When a solar energy system is sold or otherwise disposed of, a gain (or loss) is recognized for the amount of cash received in excess of the net book value of the solar energy system (or vice versa), at which time the related solar energy system is removed from the consolidated balance sheets.

Other property and equipment, net

Other property and equipment, net is stated at cost less accumulated depreciation, or if acquired in a business combination, at fair value as of the date of acquisition. Depreciation is calculated using the straight-line method, based upon the following estimated useful lives:

Equipment	5 years
Furniture and fixtures	3 years
Computer and related equipment	2 years
Software	2 years
Vehicles	5 years
Leasehold improvements	Lesser of useful life of the asset or remaining life of the lease

Leasehold improvements are capitalized, while replacements, maintenance and repairs, which do not improve or extend the life of the respective asset, are expensed as incurred. When property and equipment is retired or otherwise disposed of, the related cost and accumulated depreciation are removed from the accounts, and any gain or loss on the disposition is recorded in the consolidated statements of operations as a component of other income, net.

Intangible assets, net

The Company's intangible assets include solar renewable energy credit agreements, performance based incentive agreements, and a trade name. The Company amortizes its intangible assets that have finite lives based on the pattern in which the economic benefit of the asset is expected to be utilized. The useful life of the Company's intangible assets generally range between three years and 30 years. The useful life of intangible assets are assessed and assigned based on the facts and circumstances specific to the assets. The Company recognizes the amortization of (i) solar renewable energy credit agreements and performance based incentive agreements as a reduction to revenue and (ii) the trade name as amortization expense within selling, general and administrative expenses.

Impairment of long-lived assets

The Company reviews long-lived assets, including solar energy systems, other property and equipment, and intangible assets with definite lives for impairment whenever events or changes in circumstances indicate that an asset group's carrying amount may not be recoverable. The Company groups assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities and evaluates the asset group against the sum of the undiscounted future cash flows. If the undiscounted cash flows do not indicate the carrying amount of the asset group is recoverable, an impairment charge is measured as the amount by which the carrying amount of the asset group exceeds its fair value.

In the fourth quarter of 2022, the Company determined there was an indicator of impairment for intangible assets in its discontinued operations of the Drivetrain and XL Grid businesses and concluded the asset was not recoverable. Comparing the carrying value of the asset to its fair value, the Company determined the entire asset was impaired and recognized an impairment charge of $ 0.9 million, which is reflected within net loss from discontinued operations in the consolidated statements of operations for the year ended December 31, 2022 (See Note 20. Discontinued Operations). There was no long-lived asset impairment charge during the year ended December 31, 2023.

Leases

The Company determines if an arrangement is a lease, or contains a lease, at the inception of the arrangement and evaluates whether the lease is an operating lease or a finance lease at the commencement date. The Company's assessment is based on: (i) whether the contract involves the use of a distinct identified asset, (ii) whether the Company obtained the right to substantially all the economic benefit from the use of the asset throughout the period, and (iii) whether the Company has the right to direct the use of the asset.

The Company recognizes lease right-of-use ("ROU") assets and lease liabilities for operating and finance leases with initial terms greater than 12 months. ROU assets represent the Company's right to use an asset for the lease term, while lease liabilities represent the Company's obligation to make the related lease payments. The ROU assets for all leases are recognized based on the present value of fixed lease payments over the lease term at the lease commencement date. The lease liabilities of all leases are calculated as the present value of fixed payments not yet paid at the measurement date, however subsequent to the measurement date, the finance lease liabilities are presented at amortized cost using the effective interest method.

The Company generally uses its incremental borrowing rate as the discount rate for leases unless an interest rate is implicitly stated in the leases. The Company's incremental borrowing rate is determined using a portfolio approach based on the rate of interest that the Company would have to pay to borrow an amount equal to the lease payments on a collateralized basis over a similar term. The lease term for all of the Company's leases includes the noncancelable period of the lease, in addition to any additional periods covered by either the Company's option to extend the lease, which the Company is reasonably certain to exercise, or the option to extend the lease controlled by the lessor. All ROU assets are reviewed periodically for impairment.

Lease expense for operating leases consists of the lease payments plus any initial direct costs and is recognized on a straight-line basis over the lease term. Lease expense for finance leases consists of the amortization of the asset on a straight-line basis over the shorter of the lease term or its useful life and interest expense determined on an amortized cost basis, with the lease payments allocated between a reduction of the lease liability and interest expense. Variable lease payments that are not based on an index or a rate, such as common area maintenance fees, taxes and insurance, are expensed as incurred.

Asset retirement obligations

Asset retirement obligations ("ARO") can arise from contractual or regulatory requirements to perform certain asset retirement activities at the time the solar energy systems are to be disposed. The Company recognizes AROs at the point an obligating event takes place. The liability is initially measured at fair value based on the present value of estimated removal costs and subsequently adjusted for changes in the underlying assumptions and accretion expense. The corresponding ARCs are considered retired when permanently taken out of service, such as, through a sale or disposal. The Company may revise the ARO based on actual experiences, changes in certain customer-specific estimates and other cost estimate changes. If there are changes in estimated future costs, those changes will be recorded as either a reduction or addition in the carrying amount of the remaining unamortized ARC and the ARO will either increase or decrease in depreciation and accretion expense amounts prospectively. Inherent in the calculation of the fair value of AROs are numerous assumptions and judgments, including the ultimate settlement amounts, inflation factors, credit adjusted discount rates, and timing of settlement. As of December 31, 2023 and 2022, ARO was $ 3.0 million and $ 0 million , respectively. For the years ended December 31, 2023 and 2022, accretion expenses were $ 0.3 million and $ 0 million , respectively.

Asset acquisitions

The Company accounts for assets acquired based on the consideration transferred by the Company, including direct and incremental transaction costs incurred by the Company as a result of the acquisition. An asset acquisition's cost or the consideration transferred by the Company is assumed to be equal to the fair value of the net assets acquired. If the consideration transferred is cash, measurement is based on the amount of cash the Company paid to the seller, as well as transaction costs incurred by the Company. Consideration given in the form of nonmonetary assets, liabilities incurred or equity interests issued is measured based on either the cost to the Company or the fair value of the assets or net assets acquired, whichever is more clearly evident. The cost of an asset acquisition is allocated to the net assets acquired based on their estimated relative fair values. The Company engages third-party appraisal firms to assist in the fair value determination, however management is responsible for, and ultimately determines the fair value. Goodwill is not recognized in an asset acquisition.

Business combinations

The Company accounts for the acquisition of a business using the acquisition method of accounting. Amounts paid to acquire a business are allocated to the assets acquired and liabilities assumed based on their fair values at the date of acquisition. The Company engages third-party appraisal firms to assist in the fair value determination, which management uses to determine the fair value. The Company determines the fair value of purchase price consideration, including contingent consideration, and acquired intangible assets based on valuations received from the appraisal firm that used information and assumptions provided by Management. The Company allocates any excess purchase price over the fair value of the net tangible and intangible assets acquired to goodwill. The results of operations of acquired businesses are included in the Company's financial statements from the date of acquisition forward. Acquisition-related costs are expensed in periods in which the costs are incurred.

Impairment of goodwill

Goodwill represents the excess of cost over the fair market value of net tangible and identifiable intangible assets of acquired businesses. Goodwill is not amortized, however it is annually tested for impairment, or more frequently if events or circumstances indicate that the carrying amount of goodwill may be impaired. The Company has historically recorded goodwill in connection with its business combinations.

The Company performs its annual goodwill impairment assessment on October 1 of each fiscal year, or more frequently if events or circumstances arise which indicate that goodwill may be impaired. An assessment can be performed by first completing a qualitative assessment of the Company's single reporting unit. The Company can also bypass the qualitative assessment in any period and proceed directly to the quantitative impairment test, and then resume the qualitative assessment in any subsequent period. Qualitative indicators that may trigger the need for annual or interim quantitative impairment testing include, among other things, deterioration in macroeconomic conditions, declining financial performance, deterioration in the operational environment, or an expectation of selling or disposing of a portion of the reporting unit. Additionally, a significant change in business climate, a loss of a significant customer, increased competition, a sustained decrease in share price, or a decrease in estimated fair value below book value may trigger the need for interim impairment testing of goodwill.

If the Company believes that, as a result of its qualitative assessment, it is more likely than not that the fair value of the reporting unit is less than its carrying amount, the quantitative impairment test is required. The quantitative test involves comparing the fair value of the reporting unit with its carrying amount, including goodwill. If the carrying amount of the reporting unit exceeds its fair value, an impairment loss is recorded as a reduction to goodwill with a corresponding charge to earnings in the period the goodwill is determined to be impaired. The income tax effect associated with an impairment of tax-deductible goodwill is also considered in the measurement of the goodwill impairment. Any goodwill impairment is limited to the total amount of goodwill.

The Company evaluates the fair value of the Company's reporting unit using the market and income approach. Under the market approach, the Company uses multiples of EBITDA or revenues of the comparable guideline public companies by selecting a population of public companies with similar operations and attributes. Using this guideline public company data, a range of multiples of enterprise value to EBITDA or revenue is calculated. The income approach of computing fair value is based on the present value of the expected future economic benefits generated by the asset or business, such as cash flows or profits which will then be compared to its book value.

In the first quarter of 2022, the Company believed there were indicators that the carrying amount of its goodwill may be impaired due to a decline in the Company's stock price and market capitalization. As a result, the Company performed an assessment of its goodwill for impairment. The Company elected to forego the qualitative test and proceeded to perform a quantitative test. The Company compared the book value of its single reporting unit to the fair value of its public float. The market capitalization was below the fair value of the Company by an amount in excess of its reported value of goodwill. As a result, the Company recorded a charge of $ 8.6 million to fully impair its goodwill related to XL Fleet Corp., which is reflected within net loss from discontinued operations in the consolidated statements of operations for the year ended December 31, 2022 (See Note 20. Discontinued Operations). There was no goodwill impairment charge during the year ended December 31, 2023.

Warranties

Customers who purchased the Company's Drivetrain systems were provided limited-assurance-type warranties for equipment and work performed under the contracts. The warranty period typically extends for three years following transfer of control of the equipment. The warranties solely relate to correction of product defects during the warranty period, which is consistent with similar warranties offered by competitors. Customers of XL Grid were provided limited-assurance-type warranties for a term of one year for installation work performed under its contracts.

The Company accrued the estimated cost of product warranties for unclaimed charges based on historical experiences and expected results. Should product failure rates and material usage costs differ from these factors, estimated revisions to the estimated warranty liability will be required. The Company periodically assesses the adequacy of its recorded product warranty liabilities and adjusts the balances as required. Warranty expense is recorded as a component of discontinued operations in the consolidated statements of operations. With the Company's exit from the Drivetrain business and the subsequent sale of World Energy, the Company will not enter into any additional warranty obligations and expects the existing warranty obligation to substantially run-off over the subsequent 15-month period.

The following is a roll forward of the Company's accrued warranty liability:

	As of December 31,	
(Amounts in thousands)	**2023**	**2022**
Balance at the beginning of the period	$ 1,125	$ 2,547
Accrual for warranties issued	—	116
Transfer of inventory to servicers	(498)	—
Accrual related to World Energy	(25)	—
Changes in estimates for preexisting warranties	—	(955)
Warranty fulfillment charges	—	(583)
Balance at the end of the period	$ 602	$ 1,125

The Company's warranty liability is included in accrued expenses and other current liabilities on the consolidated balance sheets.

Warrant liabilities

As of December 31, 2023 and 2022, the Company had outstanding private warrants, which are related to the December 2020 merger and organization of legacy XL Hybrids Inc. ("Legacy XL") to become XL Fleet Corp. With the merger, the Company assumed private placement warrants to purchase 529,167 shares of common stock, with an exercise price of $ 92.00 per share (the "Private Warrants"). The Private Warrants do not meet the criteria for equity classification and must be recorded as liabilities. As the Private Warrants met the definition of a derivative, they were measured at fair value at inception and at each reporting date with changes in fair value recognized in the consolidated statements of operations. The Private Warrants were valued using a Black-Scholes model, with significant inputs consisting of risk-free interest rate, remaining term, expected volatility, exercise price, and the Company's stock price (See Note 11. Fair Value Measurements).

Unfavorable solar renewable energy agreements

The Company amortizes its unfavorable solar renewable energy agreements that have finite lives based on the pattern in which the economic benefit of the liability is relieved. The useful life of the Company's liabilities generally range between three years and six years . The useful life of these liabilities are assessed and assigned based on the facts and circumstances specific to the agreement. The Company recognizes the amortization of unfavorable solar renewable energy agreements as revenues in the consolidated statements of operations.

Contingencies

The Company is unable to anticipate the ultimate outcome of all pending legal proceedings. When it is probable that a loss has occurred and the loss amount can be reasonably estimated, the Company records liabilities for loss contingencies. In certain cases, the Company may be covered by one or more corporate insurance policies, resulting in insurance loss recoveries. When such recoveries are in excess of a loss recognized in the Company's financial statements, the Company recognizes a gain contingency at the earlier of when the gain has been realized or when it is realizable, however when the Company expects recovery of proceeds up to the amount of the loss recognized, a receivable, which offsets the related loss contingency, is recognized when realization of the claim for recovery is determined to be probable.

Fair value measurements

The fair value of the Company's financial assets and liabilities reflects Management's estimate of amounts that the Company would have received in connection with the sale of the assets or paid in connection with the transfer of the liabilities in an orderly transaction between market participants at the measurement date. For assets and liabilities measured at fair value on a recurring and nonrecurring basis, a three-level hierarchy of measurements based upon observable and unobservable inputs is used to arrive at fair value. Observable inputs are developed based on market data obtained from independent sources, while unobservable inputs reflect the Company's assumptions about valuation based on the best information available in the circumstances. Depending on the inputs, the Company classifies each fair value measurement as follows:

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

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, the level in the fair value hierarchy must be determined based on the lowest level input that is significant to the fair value measurement. An assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and consideration of factors specific to the asset or liability.

The Company's financial instruments consist of cash and cash equivalents, restricted cash, accounts receivable, net, accounts payable, accrued expenses and other current liabilities, long-term debt, interest rate swaps and warrant liabilities. The carrying value of cash and cash equivalents, restricted cash, accounts receivable, accounts payable and accrued expenses and other current liabilities each approximates fair value due to the short-term nature of those instruments. See Note 11. Fair Value Measurements for additional information on assets and liabilities measured at fair value.

Stock-based compensation

The Company grants stock-based awards to certain employees, directors and non-employee consultants. Awards issued under the Company's stock-based compensation plans include stock options and restricted stock units. For transactions in which the Company obtains employee services in exchange for an award of equity instruments, the cost of the services are measured based on the grant date fair value of the award. The Company recognizes the cost over the period during which an employee is required to provide services in exchange for the award, known as the requisite service period (usually the vesting period). Costs related to plans with graded vesting are generally recognized using a straight-line method.

Stock Options

The Company uses the Black-Scholes option pricing model to determine the fair value of stock-based awards and recognizes the compensation cost on a straight line basis over the requisite service period of the awards for employee, which is typically the four-year vesting period of the award, and effective contract period specified in the award agreement for non-employee. The fair value of common stock is determined based on the closing price of the Company's common stock on the NYSE at each award grant date.

The determination of the fair value of stock-based payment awards utilizing the Black-Scholes model is affected by the stock price and a number of assumptions, including expected volatility, expected life, risk- free interest rate and expected dividends. The Company does not have a significant history of trading its common stock as it was not a public company until December 21, 2020, and as such expected volatility was estimated using historical volatilities of comparable public entities. The expected life of the awards is estimated based on a simplified method, which uses the average of the vesting term and the original contractual term of the award. The risk-free interest rate assumption is based on observed interest rates appropriate for the expected life of the awards. The dividend yield assumption is based on history and expectation of paying no dividends. Forfeitures are accounted for as they occur.

Restricted Stock Units

Restricted stock units generally vest over the requisite service periods (vesting on a straight–line basis). The fair value of a restricted stock unit award is equal to the closing price of the Company's common stock on the NYSE on the grant date. The Company accounts for the forfeiture of equity awards as they occur.

Revenues

The Company's revenue is derived from its home solar energy portfolio, which primarily generates revenue through the sale to homeowners of power generated by the home solar energy systems and the rental of solar equipment by certain homeowners, pursuant to long-term agreements. Pursuant to ASC 606 defined below, the Company has elected the "right to invoice" practical expedient, and revenues for the performance obligations related to energy generation and servicing revenue are recognized as services are rendered based upon the underlying contractual arrangements.

The following table presents the detail of the Company's revenues as reflected within the consolidated statements of

operations for the years ended December 31, 2023 and 2022:

	Years Ended December 31,	
(Amounts in thousands)	2023	2022
PPA revenues	$ 36,360	$ 8,756
SLA revenues	28,462	11,270
Solar renewable energy credit revenues	7,219	1,576
Government incentives	254	245
Servicing revenues	767	770
Intangibles amortization, unfavorable solar renewable energy agreements	3,593	—
Other revenue	3,204	577
Total	$ 79,859	$ 23,194

Energy generation

Customers purchase solar energy from the Company under PPAs or SLAs, both defined above. Revenue is recognized from contracts with customers as performance obligations are satisfied at a transaction price reflecting an amount of consideration based upon an estimated rate of return which is expressed as the solar rate per kilowatt hour or a flat rate per month as defined in the customer contracts.

- *PPA revenues* - Under ASC 606, *Revenue from Contracts with Customers* ("ASC 606") issued by the Financial Accounting Standards Board ("FASB"), PPA revenue is recognized when generated based upon the amount of electricity delivered as determined by remote monitoring equipment at solar rates specified under the PPAs.

- *SLA revenues* - The Company has SLAs, which do not meet the definition of a lease under ASC 842, *Leases*, and are accounted for as contracts with customers under ASC 606. Revenue is recognized on a straight-line basis over the contract term as the obligation to provide continuous access to the solar energy system is satisfied. The amount of revenue recognized may not equal customer cash payments due to the performance obligation being satisfied ahead of cash receipt or evenly as continuous access to the solar energy system has been provided. The differences between revenue recognition and cash payments received are reflected as deferred rent assets on the consolidated balance sheets.

Solar renewable energy credit revenues

The Company enters into contracts with third parties to sell SRECs generated by the solar energy systems for fixed prices. Certain contracts that meet the definition of a derivative may be exempted as normal purchase or normal sales transactions ("NPNS"). NPNS are contracts that provide for the purchase or sale of something other than a financial instrument or derivative instrument that will be delivered in quantities expected to be used or sold over a reasonable period in the normal course of business. Certain SREC contracts meet these requirements and are designated as NPNS contracts. Such SRECs are exempted from the derivative accounting and reporting requirements, and the Company recognizes revenues in accordance with ASC 606. The Company recognizes revenue for SRECs based on pricing predetermined within the respective contracts at a point in time when the SRECs are transferred. As SRECs can be sold separate from the actual electricity generated by the renewable-based generation source, the Company accounts for the SRECs it generates from its solar energy systems as governmental incentives with no costs incurred to obtain them and do not consider those SRECs output of the underlying solar energy systems. The Company classifies these SRECs as inventory held until sold and delivered to third parties. As the Company did not incur costs to obtain these governmental incentives, the inventory carrying value for the SRECs was $ 0 as of December 31, 2023 and 2022.

Government incentives

The Company participates in residential solar investment programs, which offer a performance-based incentive ("PBI") for certain of its solar energy systems that are associated with the programs ("eligible systems"). PBIs are accounted for under ASC 606 and are earned based upon the actual electricity produced by the eligible systems.

Servicing revenues

The Company earns operating and maintenance revenue from third-party solar fund customers at pre-determined rates for various operating and maintenance and asset management services as specified in Maintenance Service Agreements (“MSAs”) and Operating Service Agreements (“OSAs”). The MSAs and OSAs contain multiple performance obligations, including routine maintenance, nonroutine maintenance, renewable energy certificate management, inventory management, delinquent account collections and customer account management.

Deferred revenue

Deferred revenue consists of amounts for which the criteria for revenue recognition have not yet been met and includes prepayments received for unfulfilled performance obligations that will be recognized on a straight-line basis over the remaining term of the respective customer agreements. Deferred revenue, in the aggregate, as of December 31, 2023 and 2022 was $ 2.7 million and $ 0.5 million, respectively. During the year ended December 31, 2023, the Company recognized revenues of less than $ 0.1 million related to deferred revenue as of December 31, 2022.

Cost of revenues

Cost of revenues primarily consists of the depreciation expense relating to the solar energy systems, costs of third parties used to service the systems and any cost associated with meter swaps.

Income taxes

The Company accounts for income taxes using the asset and liability method under which deferred tax liabilities and assets are recognized for the expected future tax consequences of temporary differences between financial statement carrying amounts and the tax basis of assets and liabilities and net operating loss and tax credit carryforwards. Deferred income taxes are provided for the temporary differences arising between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and net operating loss carry-forwards and credits. Deferred tax assets and liabilities are measured using enacted rates in effect for the year in which the differences are expected to be recovered or settled. The effect of changes in tax rates on deferred tax assets and liabilities is recognized in the consolidated statements of operations in the period in which the enactment rate changes. The ultimate recovery of deferred tax assets is dependent upon the amount and timing of future taxable income and other factors, such as the taxing jurisdiction in which the asset is to be recovered. Deferred tax assets and liabilities are reduced through the establishment of a valuation allowance if, based on available evidence, it is more likely than not that the deferred tax assets will not be realized.

Uncertain tax positions taken or expected to be taken in a tax return are accounted for using the more likely than not threshold for financial statement recognition and measurement. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. For the years ended December 31, 2023 and 2022, there were no uncertain tax positions taken or expected to be taken in the Company’s tax returns.

In the normal course of business, the Company is subject to regular audits by U.S. federal and state and local tax authorities. With few exceptions, the Company is no longer subject to federal, state or local tax examinations by tax authorities in its major jurisdictions for tax years prior to 2020. However, net operating loss carryforwards remain subject to examination to the extent they are carried forward and impact a year that is open to examination by tax authorities.

The Company did not recognize any tax related interest or penalties during the periods presented in the accompanying consolidated financial statements, however, would record any such interest and penalties as a component of the provision for income taxes.

There has historically been no federal or state provision for income taxes since the Company has historically incurred net operating losses and maintains a full valuation allowance against its net deferred tax assets. For the years ended December 31, 2023 and 2022, the Company recognized no provision for income taxes consistent with its losses incurred and the valuation allowance against its deferred tax assets. As a result, the Company's effective income tax rate was 0 % for the years ended December 31, 2023 and 2022.

Net income (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 during the period, without consideration for potentially dilutive securities. Diluted net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of shares of common stock and potentially dilutive securities outstanding during the period determined using the treasury stock and if-converted methods. For purposes of the diluted income (loss) per share calculation, stock options, restricted stock units, restricted stock unit awards and warrants are considered to be potentially dilutive securities. Potentially dilutive securities are excluded from the calculation of diluted income (loss) per share when their effect would be anti-dilutive.

Segment reporting

Segment reporting is based on the management approach, following the method that management organizes the Company's reportable segments for which separate financial information is made available to, and evaluated regularly by, the Company's chief operating decision maker ("CODM") in allocating resources and in assessing performance. The Company's CODM is its Chief Executive Officer ("CEO"). In the fourth quarter of 2022, the Company determined that the Drivetrain and XL Grid operations were discontinued operations, which resulted in the Company having only one reportable segment.

Related parties

A party is considered to be related to the Company if the party directly or indirectly or through one or more intermediaries, controls, is controlled by, or is under common control with the Company. Related parties also include principal owners of the Company, its management, the board of directors, members of the immediate families of principal owners of the Company, its management, the board of directors and other parties with which the Company may deal with if one party controls or can significantly influence the management or operating policies of the other to an extent that one of the transacting parties might be prevented from fully pursuing its own separate interests. A party which can significantly influence the management or operating policies of the transacting parties or that has an ownership interest in one of the transacting parties and can significantly influence the other to an extent that one or more of the transacting parties might be prevented from fully pursuing its own separate interests is also a related party.

Recent Accounting Pronouncements

In December 2023, the FASB issued Accounting Standards Update ("ASU") 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures,* ("ASU 2023-09"), which requires enhancements regarding the transparency and decision usefulness of income tax disclosures. ASU 2023-09 is effective for the Company on December 31, 2025. The Company will adopt this ASU as of December 31, 2025 and will prospectively apply its requirements to income tax disclosures presented in the notes to the consolidated financial statements in the period of adoption.

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvement to Reportable Segment Disclosures,* ("ASU 2023-07"), which requires enhanced disclosures for reportable segments, primarily in relation to significant segment expenses, even in the event an entity has a single reportable segment in accordance with Topic 280. ASU 2023-07 is effective for the Company on December 31, 2024. The Company will adopt this ASU as of December 31, 2024 and will retrospectively apply its requirements to all prior periods based on the significant segment expense categories identified and disclosed in its consolidated financial statements in the period of adoption.

In October 2021, the FASB issued ASU 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*, ("ASU 2021-08"), which requires contract assets and contract liabilities acquired in a business combination to be recognized in accordance with ASC 606. ASU 2021-08 is effective for the Company beginning January 1, 2023. The Company adopted this ASU effective January 1, 2023 and has prospectively accounted for its customer contracts acquired in business combinations in accordance with ASC 606.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses of Financial Instruments*, ("ASU 2016-13" or "CECL") which, together with subsequent amendments, amended the requirement on the measurement and recognition of expected credit losses for financial assets held, replaced the incurred loss model for financial assets measured at amortized cost, and required entities to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. ASU 2016-13 is effective for the Company beginning January 1, 2023. The Company adopted this ASU effective January 1, 2023 using the modified retrospective approach for its trade accounts receivable, which resulted in a cumulative-effect adjustment to stockholders' equity of approximately $ 1.3 million as of that date. Results for reporting periods prior to January 1, 2023 continue to be presented in accordance with previously applicable GAAP, while results for subsequent reporting periods are presented under ASC 326.

The following table presents the impact of the adoption of ASU 2016-13 on the consolidated balance sheets as of January 1, 2023:

(Amounts in thousands)		Accounts Receivable, Net
Balance at the beginning of the period (pre-ASC 326 adoption)	$	8,336
Impact of ASC 326 adoption		1,285
Balance at the beginning of the period (post-ASC 326 adoption)	$	9,621

Note 3. Business Combination

Legacy Spruce Power

On September 9, 2022 (the "Acquisition Date"), the Company acquired Legacy Spruce Power for $ 32.6 million, which consisted of cash payments of $ 61.8 million less cash and restricted cash acquired of $ 29.2 million. Management evaluated which entity should be considered the accounting acquirer in the transaction by giving consideration to the form of consideration transferred, the composition of the equity holders, the composition of voting rights of the Board of Directors, continuity of management structure, and size of the respective organizations. Based on the evaluation of the applicable factors, Management noted that all factors, with the exception of the relative size of organization, were indicators that the Company was the acquiring entity resulting in Management's conclusion that for accounting purposes, the Company acquired Legacy Spruce Power.

The acquisition was accounted for as a business combination. The Company allocated the Legacy Spruce Power purchase price to tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values as of the Acquisition Date. The excess of the purchase price over those fair values was recorded as goodwill.

The Company's evaluations of the facts and circumstances available as of the Acquisition Date, to assign fair values to assets acquired and liabilities, remained ongoing subsequent to the Acquisition Date. As the Company completed further analysis of assets including solar systems, intangible assets, as well as noncontrolling interests and debt, additional information on the assets acquired and liabilities assumed became available. Changes in information related to the value of net assets acquired changed the amount of the purchase price initially assigned to goodwill, and as a result, the fair values set forth below were subject to adjustments as additional information was obtained and valuations completed. These provisional adjustments were recognized during the reporting period in which the adjustments were determined. The Company has finalized its purchase price allocation as of September 8, 2023.

Accounting for business combinations requires management to make significant estimates and assumptions, especially at the Acquisition Date, including the Company's estimates of the fair value of solar systems, production based incentives, solar renewable energy agreements, non-controlling interest, trade name and debt, where applicable. The Company believes the assumptions and estimates are based on information obtained from the management of the acquired companies and are inherently uncertain. Critical estimates in valuing solar systems under the income approach include future expected cash flows and discount rate. Unanticipated events and circumstances may occur that may affect the accuracy or validity of such assumptions, estimates or actual results.

The following table summarizes the purchase price allocation of the fair value of assets acquired and liabilities assumed in the acquisition of Legacy Spruce Power, as adjusted, during the measurement period:

(Amounts in thousands)	Initial Purchase Price Allocation	Measurement Period Adjustments	Updated Purchase Price Allocation
Total purchase consideration:			
Cash, net of cash acquired, and restricted cash	$ 32,585	$ —	$ 32,585
Allocation of consideration to assets acquired and liabilities assumed:			
Accounts receivable, net	10,995	—	10,995
Prepaid expenses and other current assets	6,768	(2,405)	4,363
Solar energy systems	406,298	89,268	495,566
Other property and equipment	337	—	337
Intangible assets	—	11,980	11,980
Interest rate swap assets	26,698	—	26,698
Right-of-use asset	3,279	(328)	2,951
Other assets	358	(102)	256
Goodwill	158,636	(129,879)	28,757
Accounts payable	(2,620)	(22)	(2,642)
Unfavorable solar renewable energy agreements	—	(10,500)	(10,500)
Accrued expenses	(13,061)	(241)	(13,302)
Lease liability	(3,382)	42	(3,340)
Long-term debt	(510,002)	2,772	(507,230)
Other liabilities	(335)	292	(43)
Redeemable noncontrolling interests and noncontrolling interests	(51,384)	39,123	(12,261)
Total assets acquired and liabilities assumed	$ 32,585	$ —	$ 32,585

As reflected in the preceding table, as a result of third party valuation reports received in the first quarter of 2023, the Company adjusted solar energy systems and intangible assets with corresponding changes to goodwill. In the first quarter of 2023, due to a change in the provisional amounts assigned to intangible assets and solar energy systems, the Company recognized $ 0.4 million of revenue, $ 1.9 million of depreciation expense and $ 0.4 million of trade name amortization, of which $ 0.5 million of revenue, $ 0.9 million of depreciation expense and $ 0.3 million of trade name amortization related to the previous year.

During the first quarter of 2023, the Company adjusted the fair value of its noncontrolling interest and its redeemable noncontrolling interest in the Company's financials, which resulted in related downward revision of $ 5.5 million and upward revision of $ 0.2 million, respectively. Additional paid in capital was also downward revised by $ 1.8 million, which included the fair value adjustment associated with the purchase of 100 % of the membership interests in Ampere Solar Owner IV, LLC, ORE F5A HoldCo, LLC, ORE F6 HoldCo, LLC, RPV Fund 11 LLC and RPV Fund 13 LLC, Sunserve Residential Solar I, LLC's and Level Solar Fund III, LLC in 2022.

The gross intangibles acquired are amortized over their respective estimated useful lives as follows:

(Amounts in thousands)	Asset	Liability	Estimated Life (in years)
Solar renewable energy agreements	$ 340	$ 10,500	3 to 6
Performance based incentives agreements	3,240	—	13
Trade name	8,400	—	30
Total intangibles acquired	$ 11,980	$ 10,500	

The weighted-average useful life of the intangibles identified above is approximately 16 years, which approximates the period over which the Company expects to gain the estimated economic benefits.

Goodwill represents the excess of the purchase consideration over the estimated fair value of the net assets acquired. Goodwill is primarily attributable to the Company's ability to leverage and use its existing capital and access to capital markets along with Legacy Spruce Power's established operations and M&A capabilities to grow the Spruce Power business.

Supplemental disclosure of pro forma information

The following unaudited pro forma financial information represents the combined results of the operations of the Company, including Legacy Spruce Power, as if the acquisition of Legacy Spruce Power on the Acquisition Date had occurred as of January 1, 2021. The results of operations related to the Company’s Drivetrain and XL Grid businesses, which were determined to be discontinued operations in the fourth quarter of 2022, are presented as net loss from discontinued operations. The unaudited pro forma revenues and pro forma net income (loss) reflect the continuing operational results of the Company’s corporate functions and the results of operations for Legacy Spruce Power. The unaudited pro forma financial information is not necessarily indicative of what the consolidated results of operations actually would have been had the respective acquisitions been completed on January 1, 2021. In addition, the unaudited pro forma financial information does not purport to project the future results of operations of the combined Company.

The following table presents the Company's pro forma combined results of operations for the year ended December 31, 2022:

	Year Ended December 31,
(Amounts in thousands, except per share data)	2022
Revenues	$ 79,253
Net loss from continuing operations	$ (28,870)
Net loss from discontinued operations	(40,112)
Net loss	$ (68,982)
Per share amounts:	
Net loss from continuing operations - basic and diluted	$ (1.62)
Net loss from discontinued operations - basic and diluted	$ (2.25)

Note 4. Acquisitions

SEMTH Master Lease Agreement

In furtherance of its growth strategy, on March 23, 2023, the Company completed the acquisition of all the issued and outstanding interests in SEMTH from certain funds, pursuant to a membership interest purchase and sale agreement dated March 23, 2023 (the "SEMTH Acquisition"). The SEMTH related asset includes 20 -year use rights to customer payment streams of approximately 22,500 home SLAs and PPAs (the "SEMTH Master Lease"). The Company acquired SEMTH for approximately $ 23.0 million of cash, net of cash received, and assumed $ 125.0 million of outstanding senior indebtedness (See Note 8. Non-Recourse Debt) and interest rate swaps with Deutsche Bank AG, New York Bank (See Note 9. Interest Rate Swaps) held by SEMTH and its subsidiaries at the close of the acquisition.

The Company concluded that SEMTH does not meet the definition of a business or variable interest entity. The purchase of SEMTH's future revenue has been accounted for as an acquisition of financial assets. Under the acquisition method, the purchase price was allocated to the assets acquired and liabilities assumed based on their relative fair value. All fair value measurements of assets acquired and liabilities assumed were based on significant estimates and assumptions, including Level 3 (unobservable) inputs, which require judgment. Estimates and assumptions include the projected timing and amount of future cash flows, discount rates reflecting risk inherent in future cash flows and future utility prices.

For the purposes of establishing the fair value of the Company's investment in the SEMTH Master Lease, its analysis considered cash flows beginning in March 2023 (the effective date of the transaction). The Company estimated the fair value of its investment in the SEMTH Master Lease to be approximately $ 146.9 million on the transaction date.

Tredegar Acquisition

On August 18, 2023, the Company acquired approximately 2,400 home solar assets and contracts from a publicly traded, regulated utility company for $ 20.9 million (the "Tredegar Acquisition"). The home solar assets acquired have an average remaining contract life of approximately 11 years. The Tredegar Acquisition was funded by term loans from the concurrent amendment of the Company's existing debt facility as of the acquisition date (See Note 8. Non-Recourse Debt**)**.

The Tredegar Acquisition has been accounted for as an acquisition of assets, wherein the total consideration paid was allocated to the assets acquired and liabilities assumed based on their relative fair value. The Company's determination of the fair value of assets acquired and liabilities assumed was based on an independent third-party valuation, which involved significant estimates and assumptions, including Level 3 (unobservable) inputs, using the income method approach to value long-lived assets. The Company engages third-party appraisal firms to assist in the fair value determination, however management is responsible for, and ultimately determines the fair value. The Company estimated the fair value of the Tredegar Acquisition to be approximately $ 21.2 million, inclusive of transaction costs of $ 0.3 million, of which $ 19.6 million was allocated to the solar energy systems .

Note 5. Property and Equipment, Net

Property and equipment consisted of the following as of December 31, 2023 and 2022:

	As of December 31,	
(Amounts in thousands)	**2023**	**2022**
Solar energy systems	$ 513,526	$ 401,754
Less: Accumulated depreciation	(29,594)	(5,928)
Solar energy systems, net	$ 483,932	$ 395,826
Equipment	$ 157	$ 48
Furniture and fixtures	461	294
Computers and related equipment	218	222
Software	8	6
Leasehold improvements	59	65
Gross other property and equipment	903	635
Less: Accumulated depreciation	(429)	(293)
Other property and equipment, net	$ 474	$ 342
Property and equipment, net	$ 484,406	$ 396,168

Depreciation expense related to solar energy systems is included within cost of revenues in the consolidated statements of operations, and for the years ended December 31, 2023 and 2022 was $ 23.8 million and $ 6.5 million, respectively. Depreciation expense related to other property and equipment is included within selling, general and administrative expenses in the consolidated statements of operations, and for the years ended December 31, 2023 and 2022 was $ 0.4 million and $ 0.8 million, respectively.

Note 6. Intangible Assets, Net

The following table presents the detail of intangible assets, net as recorded in the consolidated balance sheets as of December 31, 2023:

	As of December 31,
(Amounts in thousands)	**2023**
Intangible assets:	
Solar renewable energy agreements	$ 340
Performance based incentives agreements	3,240
Trade name	8,400
Gross intangible assets	11,980
Less: Accumulated amortization	(1,784)
Intangible assets, net	$ 10,196

Amortization of intangible assets for the year ended December 31, 2023 was $ 1.8 million, of which $ 0.8 million and $ 1.0 million were recorded within revenues and selling, general and administrative expenses, respectively. As of December 31, 2023, expected amortization of intangible assets for each of the five succeeding fiscal years and thereafter is as follows:

	As of December 31,
(Amounts in thousands)	2023
2024	$ 1,483
2025	1,039
2026	1,091
2027	950
2028	853
Thereafter	4,780
Total	$ 10,196

Note 7. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following as of December 31, 2023 and 2022:

	As of December 31,	
(Amounts in thousands)	2023	2022
Accrued interest	$ 8,587	$ 6,586
Professional fees	2,386	1,749
Accrued contingencies (See Note 15 Commitments and Contingencies)	21,300	2,300
Accrued compensation and related benefits	3,237	6,526
Accrued expenses, other	4,372	3,696
Accrued taxes, stock-based compensation	752	—
Accrued settlements	—	451
Deferred purchase price consideration, World Energy	—	201
Accrued expenses and other current liabilities	$ 40,634	$ 21,509

Note 8. Non-Recourse Debt

The following table provides a summary of the Company's debt as of December 31, 2023 and 2022:

		As of December 31,	
(Amounts in thousands)	Due	2023	2022
SVB Credit Agreement, SP1 Facility [(1)]	April 2026	$ 214,803	$ 232,786
Second SVB Credit Agreement, SP2 Facility [(1)]	May 2027	85,231	70,314
KeyBank Credit Agreement, SP3 Facility [(1)]	November 2027	58,962	64,181
Second KeyBank Credit Agreement [(1)]	April 2030	162,725	165,887
Deutsche Bank Credit Agreement, SP4 Facility	August 2025	125,000	—
Less: Unamortized fair value adjustment [(1)]		(27,600)	(33,413)
Less: Unamortized deferred financing costs		(341)	—
Total debt		618,780	499,755
Less: Non-recourse debt, current		(27,914)	(25,314)
Non-recourse debt, non-current		$ 590,866	$ 474,441

(1) In connection with the acquisition of Legacy Spruce Power effective September 9, 2022, the Company assumed long-term debt instruments valued at approximately $ 507.2 million as of that date. In connection with accounting for the business combination, the Company adjusted the carrying value of this long-term debt to its fair value as of the Acquisition Date. This fair value adjustment resulted in a reduction of the carrying value of the debt by $ 35.2 million. This adjustment to fair value is being amortized to interest expense over the life of the related debt instruments using the effective interest method. Amortization expense for the fair value adjustment for the years ended December 31, 2023 and 2022 was $ 5.9 million and $ 1.8 million, respectively.

SVB Credit Agreement

The SVB Credit Agreement (the "SP 1 Facility"), executed with Silicon Valley Bank ("SVB"), a division of First-Citizens Bank & Trust Company, includes a debt service reserve letter of credit (the "SP 1 LC") with related amounts outstanding of $ 6.1 million as of December 31, 2023. Amounts outstanding under the SP 1 LC bear interest of 2.25 % per annum and unused amounts bear interest at 0.50 % per annum. The term loans under the SP 1 Facility require quarterly principal payments, paid a month in arrears, with the remaining balance due in a single payment in April 2026 and bear interest at the Secured Overnight Financing Rate (the "SOFR") plus the applicable margin. The applicable margin is 2.25 % per annum for the first three years, 2.375 % per annum from the third anniversary through the sixth anniversary and 2.5 % per annum starting on the sixth anniversary. The effective interest rate on the SP 1 Facility as of December 31, 2023 was 7.96 %.

The obligations of the Company under the SP 1 Facility are secured by substantially all of the assets and equity interest in the Company. The SP 1 Facility requires the Company to be in compliance with various covenants, including debt service coverage ratios and as of December 31, 2023, the Company was in compliance with the required covenants under the SP 1 Facility.

Second SVB Credit Agreement

The Second SVB Credit Agreement (the "SP 2 Facility") includes a debt service reserve letter of credit (the "SP 2 LC"). Amounts outstanding under the SP 2 LC bear interest of 2.30 % per annum and unused amounts bear interest at 0.50 % per annum. The term loans under the SP 2 Facility require quarterly principal payments, mature in April 2027 and bear interest at the SOFR plus the applicable margin. The applicable margin is 2.30 % per annum for the first three years, 2.425 % per annum from the third anniversary through the sixth anniversary and 2.55 % per annum starting on the sixth anniversary.

On August 18, 2023, the Company entered into a second amendment to the SP2 Facility with SVB, which provided the Company (i) incremental term loans with a principal amount of approximately $ 21.4 million, of which proceeds were primarily used to fund the Tredegar Acquisition (See Note 4. Acquisition) and (ii) incremental letters of credit in the aggregate amount of approximately $ 2.7 million (collectively, the "SP2 Facility Amendment"). Excluding the aforementioned amounts, all other terms of the original SP2 Facility remain unchanged. The SP2 Facility Amendment was treated as a debt modification under ASC 470-50, *Debt—Modifications and Extinguishments*. The Company also incurred related $ 0.4 million of deferred financing costs, which is being amortized to interest expense over the term of the loan. Related unamortized deferred financing costs were $ 0.3 million as of December 31, 2023.

Amounts outstanding under the SP 2 LC, as amended, were $ 7.0 million as of December 31, 2023. The effective interest rate on the SP 2 Facility as of December 31, 2023 was 8.04 %. The obligations of the Company under the SP 2 Facility are secured by substantially all of the assets and equity interest in one of the Company's subsidiaries. The SP 2 Facility requires the Company to be in compliance with various covenants, including debt service coverage ratios, and as of December 31, 2023, the Company was in compliance with the required covenants under the SP 2 Facility.

Key Bank Credit Agreement

The Key Bank Credit Agreement (the "SP 3 Facility"), executed with KeyBank National Association, includes a debt service reserve letter of credit (the "SP 3 LC") with related amounts outstanding of $ 4.1 million as of December 31, 2023. Amounts outstanding under the SP 3 LC bear interest of 3.00 % per annum. The term loans under the SP 3 Facility require quarterly principal payments, mature in November 2027 and bear interest at the SOFR plus the applicable margin. The applicable margin is 3.00 % per annum for the first three years, 3.125 % per annum from the third anniversary through the fifth anniversary and 3.25 % per annum starting on the fifth anniversary. The effective interest rate on the SP 3 Facility as of December 31, 2023 was 8.66 %.

The obligations of the Company under the SP 3 Facility are secured by substantially all of the assets and equity interest in one of the Company's subsidiaries. The SP 3 Facility requires the Company to be in compliance with various covenants, including debt service coverage ratios, and as of December 31, 2023, the Company was in compliance with those required covenants under the SP 3 Facility.

Second Key Bank Credit Agreement

The Second Key Bank Credit Agreement, executed with Key Bank National Association as the administrative agent and certain third parties as the lenders, includes term loans which require quarterly principal payments, mature in April 2030 and bear interest at 8.25 % per annum. The effective interest rate on term loans under the Second Key Bank Agreement as of December 31, 2023 was 8.25 %. The obligations of the Company under the Second Key Bank Agreement are secured by substantially all of the assets and equity interest in certain of the Company's subsidiaries. The Second Key Bank Credit Agreement requires the Company to be in compliance with various covenants, including debt service coverage ratios, and as of December 31, 2023, the Company was in compliance with those required covenants under the Second Key Bank Credit Agreement.

Deutsche Bank Credit Agreement

As part of the acquisition of SEMTH (See Note 4. Acquisition) in March 2023, the Company assumed debt with Deutsche Bank AG, New York Bank ("Deutsche Bank"). Prior to the SEMTH Acquisition, SET Borrower 2022, LLC ("SET Borrower"), a wholly owned subsidiary of SEMTH, entered into a credit agreement effective June 10, 2022 (the "Closing Date") with Deutsche Bank as the facility agent, which consisted of a term loan of $ 125.0 million (the "SP4 Facility") and is collateralized by all of the assets and property of SET Borrower. The term loan bears interest at the SOFR rate, plus the applicable margin. For the period from the Closing Date through the first twelve months, the applicable margin is 2.25 % per annum, 2.50 % for the following six months, and 2.75 % for the next six months, and 3.00 % through the maturity date. The effective interest rate on the SP4 Facility as of December 31, 2023 was 7.09 %. The term loan requires quarterly payments, which began on August 17, 2022 and should the outstanding loan balance exceed the borrowing base on such calculation date, the remaining balance would become due in a single payment in August 2025.

The SP4 Facility requires the Company to be in compliance with various affirmative and negative covenants and as of December 31, 2023, the Company was in compliance with the covenants under the SP 4 Facility.

As of December 31, 2023, the principal maturities of the Company's debt were as follows:

	As of December 31,
Amounts in thousands)	2023
024	$ 27,915
025	153,566
026	191,982
027	110,533
028	—
hereafter	162,725
Total	$ 646,721

Note 9. Interest Rate Swaps

In connection with the acquisition of Legacy Spruce Power, the Company assumed interest rate swaps from agreements Legacy Spruce Power executed with four financial institutions. The purpose of the swap agreements is to convert the floating interest rate on the Company's debt obligation under its credit agreements to a fixed rate. As of December 31, 2023 and 2022, the notional amount of the interest rate swaps covers approximately 95 % and 97 % of the balance of the Company's floating rate term loans, respectively.

As of December 31, 2023, the following interest rate swaps are outstanding (in thousands):

#	Notional Amount	Fixed Rate	Effective Date	Early Termination Date	Maturity Date	Total Fair Value Asset (Liability)
1	$ 12,459	0.78 %	4/30/2020	4/30/2026	1/31/2031	$ 1,231
2	12,459	0.75 %	4/30/2020	4/30/2026	1/31/2031	1,243
3	12,459	0.73 %	4/30/2020	4/30/2026	1/31/2031	1,273
4	4,406	1.57 %	10/31/2019	4/30/2026	1/31/2031	332
5	7,711	1.62 %	10/31/2019	4/30/2026	1/31/2031	564
6	7,711	1.56 %	10/31/2019	4/30/2026	1/31/2031	587
7	7,711	1.59 %	10/31/2019	4/30/2026	1/31/2031	572
8	41,464	2.39 %	7/31/2019	4/30/2026	10/31/2031	1,914
9	41,464	2.33 %	7/31/2019	4/30/2026	10/31/2031	2,029
10	23,693	2.34 %	7/31/2019	4/30/2026	10/31/2031	1,144
11	41,464	2.36 %	7/31/2019	4/30/2026	10/31/2031	1,962
12	28,837	0.69 %	01/31/2023	11/13/2027	10/31/2032	3,646
13	28,837	0.73 %	01/31/2023	11/13/2027	10/29/2032	3,601
14	17,647	2.83 %	07/12/2022	5/14/2027	04/30/2032	554
15	44,418	0.40 %	07/12/2022	5/14/2027	10/31/2031	5,557
16 (1)	110,151	3.27 %	06/14/2022	8/18/2025	11/17/2033	1,288
17 (1)	18,998	4.24 %	08/18/2023	—	01/31/2032	(457)
	$ 461,889					$ 27,040

(1) The amounts reflect, respectively, the Deutsche Bank swap assumed by the Company as part of the SEMTH Acquisition and an additional swap related to the SP2 Facility Amendment transacted concurrently with the Tredegar Acquisition to hedge the floating rate of the incremental term loans (See Note 8. Non-Recourse Debt).

During the year ended December 31, 2023, the aggregate change in the fair value of the interest rate swaps was $ 8.9 million, of which $ 4.8 million related to unrealized losses as reflected in the consolidated statements of operation and $ 13.7 million related to realized gains and is recognized within interest expense, net.

During the year ended December 31, 2022, the aggregate change in the fair value of the interest rate swaps was $ 7.7 million, of which $ 5.6 million related to unrealized gains as reflected in the consolidated statements of operation and $ 2.1 million related to realized gains and is recognized within interest expense, net in the consolidated statements of operations.

See Note 11. Fair Value Measurements for further information on the Company's determination of the fair value of its interest rate swaps.

Note 10. Right-of-Use Assets and Lease Liabilities

The Company's operating leases are primarily office space, while finance leases are certain office equipment. The Company's related Right-of-Use ("ROU") assets and lease liabilities are comprised of the following as of each period end:

	As of December 31,	
(Amounts in thousands)	**2023**	**2022**
Operating leases:		
Right-of-use assets	$ 5,933	$ 2,686
Lease liability, current	1,166	781
Lease liability, non-current	5,731	2,365
Finance leases:		
Right-of-use assets	$ —	$ 116
Lease liability, current	—	53
Lease liability, non-current	—	61

Other information related to leases is presented below:

	Years Ended December 31,	
(Amounts in thousands)	**2023**	**2022**
Other information:		
Operating lease cost	$ 1,451	$ 297
Variable lease cost	518	—
Sublease income	542	—
Operating cash flows from operating right-of-use assets	1,969	352
Initial recognition of operating right-of-use assets	933	—
Remeasurement of operating right-of-use assets	1,280	—

During the year ended December 31, 2023, the Company (i) recognized $ 0.9 million of operating right-of-use assets and lease liabilities due to a new lease for the relocation of its corporate office in September 2023, (ii) remeasured its operating right-of-use assets due to changes in the lease terms of certain underlying leases, resulting in an aggregate increase in the related right-of-use assets and lease liabilities of approximately $ 1.3 million, and (iii) settled certain operating leases, which were either terminated or assumed by a third party, in the amount of approximately $ 0.4 million (presented in the consolidated statements of cash flows) and a related net gain of less than $ 0.1 million included within (gain) loss on asset disposal in the consolidated statements of operations.

In addition, during the year ended December 31, 2023, the Company purchased the equipment related to its existing finance leases for approximately $ 0.1 million, thereby settling all outstanding finance lease liabilities as of December 31, 2023. The Company also recognized a related loss of approximately $ 0.1 million included within (gain) loss on asset disposal in the consolidated statements of operations.

The Company was a party to a noncancelable lease agreement for office, research and development, and vehicle development and installation facilities with a holder of more than 5% of the Company's Common Stock, of which the lease expired in the third quarter of 2022. The related operating lease costs for the year ended December 31, 2022 was $ 0.1 million.

	As of December 31,	
	2023	2022
Weighted-average remaining lease term – operating leases (in months)	68.3	49.8
Weighted-average discount rate – operating leases	7.2 %	2.9 %

As of December 31, 2023, the annual minimum lease payments of the Company's operating lease liabilities were as follows (in thousands):

	As of December 31,
(Amounts in thousands)	2023
2024	$ 1,616
2025	1,269
2026	1,206
2027	1,258
2028	1,397
Thereafter	1,768
Total future minimum lease payments, undiscounted	8,514
Less: Imputed interest	(1,617)
Present value of future minimum lease payments	$ 6,897

Note 11. Fair Value Measurements

The Company uses various assumptions and methods in estimating the fair values of its financial instruments.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The Private Warrants are valued using a Black-Scholes model, pursuant to the inputs provided in the table below:

	Assumptions for Assets and Liabilities Measured at Fair Value on a Recurring Basis	
Input	**December 31, 2023**	**December 31, 2022**
Risk-free rate	4.242 %	1.11 %
Remaining term in years	1.98	3.98
Expected volatility	82.0 %	88.8 %
Exercise price	$ 92.00	$ 92.00
Fair value of common stock	$ 4.42	$ 26.48

The Company's interest rate swaps are not traded on a market exchange and the fair values are determined using a valuation model based on a discounted cash flow analysis. This analysis reflects the contractual terms of the interest rate swap agreements and uses observable market-based inputs, including estimated future SOFR interest rates. The fair value of the Company's interest rate swap is the net difference in the discounted future fixed cash payments and the discounted expected variable cash receipts. The variable cash receipts are based on the expectation of future interest rates and are observable inputs available to a market participant. The interest rate swap valuation is classified as Level 2 of the fair value hierarchy.

The following table sets forth the Company's assets and liabilities which are measured at fair value on a recurring basis by level within the fair value hierarchy:

	Fair Value Measurements as of December 31, 2023			
(Amounts in thousands)	**Level I**	**Level II**	**Level III**	**Total**
Asset:				
Interest rate swaps	$ —	$ 27,883	$ —	$ 27,883
Money market accounts	21,475	—	—	21,475
U.S. Treasury securities	108,964	—	—	108,964
Total	$ 130,439	$ 27,883	$ —	$ 158,322
Liabilities:				
Debt	$ —	$ 628,177	$ —	$ 628,177
Private Warrants	—	—	17	17
Total	$ —	$ 628,177	$ 17	$ 628,194

	Fair Value Measurements as of December 31, 2022			
(Amounts in thousands)	**Level I**	**Level II**	**Level III**	**Total**
Asset:				
Interest rate swaps	$ —	$ 32,252	$ —	$ 32,252
Money market accounts	164	—	—	164
U.S. Treasury securities	211,027	—	—	211,027
Total	$ 211,191	$ 32,252	$ —	$ 243,443
Liabilities:				
Debt	$ —	$ 533,168	$ —	$ 533,168
Private Warrants	—	—	256	256
Fair value of obligation to issue shares of common stock to sellers of World Energy	—	—	151	151
Total	$ —	$ 533,168	$ 407	$ 533,575

The following is a roll forward of the Company's Level 3 liability instruments:

	Years Ended December 31,	
	2023	**2022**
Balance at the beginning of the period	$ 407	$ 8,895
Fair value adjustments – warrant liability	(239)	(5,148)
Fair value adjustments and settlements of liability, net – World Energy [(1)]	(151)	(1,390)
Fair value adjustment of contingent consideration and settlements of liability, net – Quantum contingent consideration [(1)]	—	(1,950)
Balance at the end of the period	$ 17	$ 407

(1) Related to discontinued operations.

Note 12. Stock-Based Compensation Expense

Stock-based compensation expense for stock options and restricted stock units for the years ended December 31, 2023 and 2022 was $ 2.9 million and $ 10.0 million, respectively. As of December 31, 2023, there was $ 7.1 million of unrecognized compensation cost, respectively, related to stock options and restricted stock units which is expected to be recognized over the remaining vesting periods, with a weighted-average period of 2.8 years.

Stock Options

The Company grants stock options to certain employees that will vest over a period of one to four years . A summary of stock option award activity for the years ended December 31, 2023 and 2022 was as follows:

Options	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term
Outstanding at December 31, 2021	1,217,161	$ 11.20	7.2
Granted	5,435	15.60	
Exercised	(333,102)	1.92	
Cancelled or forfeited	(128,086)	35.36	
Outstanding at December 31, 2022	761,408	$ 11.12	2.7
Granted	—	—	
Exercised	(489,436)	1.94	
Cancelled or forfeited	(78,816)	51.48	
Outstanding at December 31, 2023	193,156	$ 17.89	5.8
Exercisable at December 31, 2023	191,635	$ 17.50	5.8

The aggregate intrinsic value of stock options outstanding as of December 31, 2023 and 2022 was $ 0.3 million and $ 3.3 million, respectively. Cash received from options exercised for the years ended December 31, 2023 and 2022 was approximately $ 0.9 million and $ 0.6 million, respectively.

There were no stock options issued during the year ended December 31, 2023. The fair value of stock options issued during the year ended December 31, 2022 was measured with the following assumptions:

	2022
Expected volatility	78.1 - 88.2 %
Expected term (in years)	6.25
Risk-free interest rate	0.1 - 1.3 %
Expected dividend yield	0.0 %

Restricted Stock Units

The Company grants restricted stock units to certain employees that will generally vest over a period of four years . The fair value of restricted stock unit awards is estimated by the fair value of the Company's common stock at the date of grant. Restricted stock units activity during the years ended December 31, 2023 and 2022 was as follows:

	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Non-vested, at December 31, 2021	75,554	$ 48.48
Granted	1,404,870	9.60
Vested	(132,792)	14.40
Cancelled or forfeited	(118,543)	21.60
Non-vested, at December 31, 2022	1,229,089	$ 10.40
Granted	693,506	6.36
Vested	(531,029)	12.55
Cancelled or forfeited	(289,471)	10.10
Non-vested, at December 31, 2023	1,102,095	$ 7.74

Restricted Stock Award Modifications

In connection with the sale of the Company's Drivetrain business to Shyft which closed in January 2023, the Company modified certain stock awards to employees of the Drivetrain business who were terminated in December 2022 and subsequently commenced employment at Shyft. The modification consisted of the acceleration of the vesting of all awards including stock options and restricted stock units scheduled to vest in 2023, which would have otherwise been forfeited. The vesting date of these awards was accelerated to December 31, 2022, resulting in an incremental stock based compensation expense of $ 0.3 million in 2022.

CEO's Ladder Restricted Stock Unit Award

On September 9, 2022, in connection with the acquisition of Legacy Spruce Power and his appointment as the Company's President, the Company granted to its CEO a restricted stock unit award (the "Ladder RSUs") of 208,333 shares of common stock. The Ladder RSUs vest in 10 % increments on the dates the Plan administrator certifies the applicable milestone stock prices have been achieved or exceeded, provided that the CEO remains employed on the date of certification and such achievement occurs within ten years of the date of the grant.

The Company used a Monte Carlo simulation valuation model to determine the fair value of the award as of the Acquisition Date, which is presently accounted for as a liability. The following inputs were used in the simulation: grant date stock price of $ 9.36 per share, annual volatility of 85.0 %, risk-free interest rate of 3.3 % and dividend yield of 0.0 %. For each tranche, a fair value was calculated as well as a derived service period which represents the median number of years it is expected to take for the Ladder RSUs to meet their corresponding milestone stock price excluding the simulation paths that result in the Ladder RSUs not vesting within the 10 -year term of the agreement. Each tranche's fair value will be amortized ratably over the respective derived service period.

The fair value and derived service period of each tranche was as follows:

Stock Price Tranche	Fair Value	Derived Service Period (in years)
$ 25.84	$ 8.88	1.72
42.96	8.48	2.71
60.00	8.24	3.30
77.12	7.92	3.70
94.16	7.76	4.11
111.28	7.52	4.42
128.32	7.28	4.64
145.44	7.12	4.78
162.48	6.96	5.00
179.60	6.80	5.10

The Company recognized expense related to the Ladder RSUs of approximately $ 0.5 million and $ 0.1 million for the years ended December 31, 2023 and 2022.

Note 13. Redeemable Noncontrolling Interest and Noncontrolling Interests

In November 2022, the Company purchased the remaining membership interests in Ampere Solar Owner IV, LLC, RPV Fund 13, LLC and Level Solar Fund III, LLC for aggregate cash payments of $ 4.6 million. In August 2023, the Company also purchased the remaining membership interests in Level Solar Fund IV for approximately $ 0.1 million, thereby owning 100 % of the membership interests and eliminating its only remaining redeemable noncontrolling interest upon the purchase.

The following table summarizes the Company's noncontrolling interests as of December 31, 2023:

Tax Equity Entity	Date Class A Member Admitted
ORE F4 Holdco, LLC	August 2014
Volta Solar Owner II, LLC	August 2017

The tax equity entities were structured at inception so that the allocations of income and loss for tax purposes will flip at a future date. The terms of the tax equity entities' operating agreements contain allocations of taxable income (loss), Section 48(a) ITCs and cash distributions that vary over time and adjust between the members on an agreed date (referred to as the flip date). The operating agreements specify either a date certain flip date or an internal rate of return ("IRR") flip date. The date certain flip date is based on the passage of a fixed period of time as defined in the operating agreements for each entity. The IRR flip date is the date on which the tax equity investor has achieved a contractual rate of return. From inception through the flip date, the Class A members' allocation of taxable income (loss) and Section 48(a) ITCs is generally 99 % and the Class B members' allocation of taxable income (loss) and Section 48(a) ITCs is generally 1 %. After the related flip date (or, if the tax equity investor has a deficit capital account, typically after such deficit has been eliminated), the Class A members' allocation of taxable income (loss) will typically decrease to 5 % (or, in some cases, a higher percentage if required by the tax equity investor) and the Class B members' allocation of taxable income (loss) will increase by an inverse amount.

The historical redeemable noncontrolling interests and noncontrolling interests are comprised of Class A units, which represent the tax equity investors' interest in the tax equity entities. Both the Class A members and Class B members may have call options to allow either member to redeem the other member's interest in the tax equity entities upon the occurrence of certain contingent events, such as bankruptcy, dissolution/liquidation and forced divestitures of the tax equity entities. Additionally, the Class B members may have the option to purchase all Class A units, which is typically exercisable at any time during the periods specified under their respective governing documents, and, in regards to the tax equity entities historically classified as redeemable noncontrolling interests, they had the contingent obligation to purchase all Class A units if the Class A members exercise their right to withdraw, which is typically exercisable at any time during the nine-month period commencing upon the applicable flip date. The carrying values of the Company's historical redeemable noncontrolling interests were equal to or greater than the estimated redemption values as of December 31, 2022. The Company had no redeemable noncontrolling interests as of December 31, 2023.

Total assets on the consolidated balance sheets include $ 38.0 million as of December 31, 2023 and $ 47.8 million as of December 31, 2022 of assets held by the Company's VIEs, which can only be used to settle obligations of the VIEs.

Total liabilities on the consolidated balance sheets include $ 0.8 million as of December 31, 2023 and $ 0.8 million as of December 31, 2022 of liabilities that are the obligations of the Company's VIEs.

Note 14. Restructuring

Subsequent to the acquisition of Legacy Spruce Power, the Company commenced the evaluation of personnel and processes of various corporate functions between Spruce Power and legacy XL Fleet Corp. to optimize the Company's future corporate structure and implemented certain restructuring actions.

As a result of exiting the Drivetrain business and corporate restructuring actions, the Company recognized, in the aggregate, restructuring and related charges of approximately $ 21.6 million during the year ended December 31, 2022, which included (i) $ 4.4 million of severance charges paid in 2022 or 2023, (ii) $ 5.0 million impact of accelerated vesting of certain equity awards and (iii) $ 12.3 million of charges related to inventory obsolescence. During the year ended December 31, 2023, the Company recognized incremental restructuring charges of approximately $ 0.7 million related to severance charges, all of which were paid in 2023. The severance charges and accelerated vesting of equity awards are included in selling, general and administrative expenses within the Company's consolidated statements of operations for the years ended December 31, 2023 and 2022. Inventory obsolescence charges are included in net loss from discontinued operations within the Company's consolidated statements of operations for the year ended December 31, 2022.

The following table summarizes the activity during the years ended December 31, 2023 and 2022 for the Company's restructuring liability:

	Years Ended December 31,	
(Amounts in thousands)	2023	2022
Balance at the beginning of the period	$ 3,428	$ —
Employee termination charges	719	4,435
Payments made during the period	(4,147)	(1,007)
Balance at the end of the period	$ —	$ 3,428

Note 15. Commitments and Contingencies

Sponsorship Commitment

In February 2021, the Company agreed to a sponsorship agreement with several entities related to the UBS Arena, Belmont Park and the NY Islanders Hockey Club. Pursuant to that agreement, the Company was designated an “Official Electric Transportation Partner of UBS Arena” with various associated marketing and branding rights, including the development of electric vehicle charging stations. The sponsorship agreement had a term of three years with a sponsor fee of approximately $ 0.5 million per year, of which approximately $ 0.3 million and $ 0.2 million were paid in June 2021 and January 2022, respectively. One of the Company’s directors is a co-owner of the NY Islanders Hockey Club. During the second quarter of 2022, the Company exercised its option to terminate the final two years of the agreement and incurred no further sponsor fees.

Legal Proceedings

The Company is periodically involved in legal proceedings and claims arising in the normal course of business, including proceedings relating to intellectual property, employment and other matters. Management believes the outcome of these proceedings will not have a significant adverse effect on the Company’s financial position, operating results, or cash flows.

Securities Class Action Proceedings

On March 8, 2021, two putative securities class action complaints were filed against the Company, and certain of its current and former officers and directors in the federal district court for the Southern District of New York. Those cases were ultimately consolidated under C.A. No. 1:21-cv-2002, and a lead plaintiff was appointed in June 2021. On July 20, 2021, an amended complaint was filed alleging that certain public statements made by the defendants between October 2, 2020, and March 2, 2021, violated Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated thereunder. Following negotiations with a mediator, in September 2023, the Company and the plaintiffs agreed on a settlement in principle in the aggregate amount of $ 19.5 million (the “Settlement Amount”), and on December 6, 2023, the lead plaintiff and the defendants entered into a stipulation and agreement of settlement requiring the Company to pay the Settlement Amount to resolve the class action litigation and the related legal fees and administration costs. Furthermore, on January 18, 2024, the court preliminarily approved the proposed settlement as being fair, reasonable, and adequate, and scheduled a hearing for April 30, 2024, to, among other things, consider whether to approve the proposed settlement. The Company expects the Settlement Amount to be offset by approximately $ 4.5 million of related loss recoveries from the Company’s directors and officers liability insurance policies with third parties, which the amount is included in prepaid expenses and other current assets on the consolidated balance sheet as of December 31, 2023. The Company accrued for the $ 19.5 million Settlement Amount as of December 31, 2023 (See Note 7. Accrued Expenses and Other Current Liabilities) and paid the $ 15.0 million net settlement amount to the settlement claims administrator in February 2024.

On September 20, 2021, and October 19, 2021, two class action complaints were filed in the Delaware Court of Chancery against certain of the Company's current officers and directors, and the Company's sponsor of its special purpose acquisition company merger, Pivotal Investment Holdings II LLC. These actions were consolidated as in re XL Fleet Corp. (Pivotal) Stockholder Litigation, C.A. No. 2021-0808, and an amended complaint was filed on January 31, 2022. The amended complaint alleges various breaches of fiduciary duty against the Company and/or its officers, several allegedly misleading statements made in connection with the merger, and aiding and abetting breaches of fiduciary duty in connection with the negotiation and approval of the December 21, 2020 merger and organization of Legacy XL to become XL Fleet Corp. The Company believes the allegations asserted in both class action complaints are without merit and is vigorously defending the lawsuit. At this time, the Company is unable to estimate potential losses, if any, related to the lawsuit.

Shareholder Derivative Actions

On June 23, 2022, the Company received a shareholder derivative complaint filed in the U.S. District Court for the District of Massachusetts, captioned Val Kay derivatively on behalf of nominal defendant XL Fleet Corp., against all current directors and former officers and directors, C.A. No. 1:22-cv-10977. The action was filed by a shareholder purportedly on XL Fleet Corp.'s behalf, and raises claims for contribution, as well as claims for breach of fiduciary duty, waste of corporate assets, unjust enrichment, and abuse of control. On December 8, 2023, the parties submitted a joint status report advising the court that they had reached a settlement-in-principle to settle this action, the Reali v. Griffin, et al. action, the Tucci v. Ledecky, et al. action, and a stockholder litigation demand (collectively, the "Derivative Matters"). Plaintiffs filed a motion for preliminary approval of the settlement on March 1, 2024, which is pending a decision from the court. The settlement provides for certain corporate governance enhancements and no monetary payments. Plaintiffs also intend to submit a petition for attorneys' fees, which defendants intend on opposing. At this time, the Company is unable to estimate potential losses, if any, related to the potential fee petition.

In March 2023, two shareholder derivative actions were filed in the U.S. District Court for the District of Delaware (the "Delaware Derivative Actions"). One action is captioned Reali v. Griffin, et al., C.A. No. 1:23-cv-00289 and the other action is captioned Tucci v. Ledecky, et al., C.A. 1:23-cv-00322. These actions were consolidated and captioned In re Spruce Power Holding Corporation Shareholder Derivative Litigation, C.A. No. 1:23-cv-00289. As noted above, the consolidated action is part of a settlement agreement that has been filed in the U.S. District Court for the District of Massachusetts.

In August 2023, an additional derivative action was filed in the U.S. District Court for the Southern District of New York, captioned Boyce v. Ledecky, et al., C.A. No. 1:23-cv-8591. On March 11, 2024, all defendants filed motions to dismiss the complaint in its entirety, which are pending before the court. The settlement agreement for the Derivative Matters described above contains a release that would apply to claims in this action if the settlement agreement is approved by the U.S. District Court for the District of Massachusetts. On March 22, 2024, Boyce agreed to voluntarily dismiss the lawsuit.

Securities and Exchange Commission Civil Enforcement Action

On January 6, 2022, the Company received a subpoena from the Division of Enforcement of the SEC requesting, among other things, information and documents concerning the XL Fleet Corp. business combination with Legacy XL, the Company's sales pipeline and revenue projections, California Air Resources Board approvals, and other related matters. In June 2023, the SEC proposed an Offer of Settlement for the purpose of resolving the proposed SEC action against the Company. Following negotiations with the SEC staff, in September 2023, the Company reached a settlement with the SEC pursuant to which the Company did not admit or deny the SEC's allegations regarding the above-referenced issues. In connection with the settlement, in October 2023, the Company (among other things) paid a civil monetary penalty of $ 11.0 million which, subject to the discretion of the SEC, will be made available to eligible legacy shareholders through a Fair Fund, termed and administered by the SEC.

US Bank

On February 9, 2023, US Bank, through its affiliate, Firstar Development, LLC ("Firstar"), filed a motion for summary judgment in lieu of a complaint in New York Supreme Court (the trial level in New York) alleging that the Company failed to fulfill its reimbursement obligations under a 2019 tax recapture guaranty agreement between the parties arising from the alleged recapture by the Internal Revenue Service of tax credits taken by Firstar as an investor in the Company's subsidiary, Ampere Solar Owner I, LLC. On May 23, 2023, the Company reached a settlement agreement with Firstar, as the plaintiff, for $ 2.3 million whereby the plaintiff discharged all claims filed against the Company.

BMZ USA, Inc.

On February 11, 2022, BMZ USA Inc. ("BMZ"), a battery manufacturer, sued Legacy XL for breach of contract, alleging that Legacy XL failed to timely purchase the full allotment of batteries required under a certain master supply agreement between the parties. In January 2024, BMZ obtained a judgment for $ 3.9 million against XL Hybrids, Inc. The Company is appealing the ruling while simultaneously pursuing a settlement. The Company currently estimates the potential loss to be approximately $ 1.2 million, which has been accrued for as of December 31, 2023 (See Note 7. Accrued Expenses and Other Current Liabilities).

Plastic Omnium

Plastic Omnium is the assignee of the contractual rights of Actia Corp. under a certain battery purchase order between Legacy XL and Actia Corp. On March 17, 2023, Plastic Omnium sued Legacy XL and the Company for breach of contract, alleging that Legacy XL ordered a total of 1,000 batteries from Plastic Omnium, paid for 455 of those batteries, and then reneged on 545 of those products. While Plastic Omnium admits it never actually delivered the remaining 545 products, it claims it purchased materials to complete the order, and as a result, Legacy XL and the Company are liable for at least approximately $ 2.5 million. The Company believes the allegations asserted in this action lack substantial merit, and as a result, is vigorously defending the lawsuit. At this time, the Company is unable to estimate potential losses, if any, related to the lawsuit.

Master SREC Purchase and Sale Agreement

The Company has forward sales agreements, which are related to a certain number of SRECs, to be generated from the Company's solar energy systems located in Maryland, Massachusetts, Delaware, and New Jersey to be sold at fixed prices over varying terms of up to 20 years. In the event the Company does not deliver such SRECs to the counterparty, the Company could be forced to pay additional penalties and fees as stipulated within the contracts.

Guarantees

In connection with the acquisition of RPV Holdco 1, LLC, a wholly owned subsidiary of the Company, guaranty agreements were established in May 2020 by and between Spruce Holding Company 1, LLC, Spruce Holding Company 2, LLC, and Spruce Holding Company 3, LLC ("Spruce Guarantors") and the investor members in certain of the Funds and Prior Funds. The Spruce Guarantors entered into guarantees in favor of the tax equity investors wherein they guaranteed the payment and performance of Solar Service Experts, LLC, a wholly owned subsidiary of the Company, under the Spruce Power 2 Maintenance Services Agreement and the Class B Member under the Limited Liability Company Agreement ("LLCA"). These guaranties are subject to a maximum of the aggregate amount of capital contributions made by the Class A Member under the LLCA.

Indemnities and Guarantees

During the normal course of business, the Company has made certain indemnities and guarantees under which it may be required to make payments in relation to certain transactions. The duration of the Company's indemnities and guarantees varies, however the majority of these indemnities and guarantees are limited in duration. Historically, the Company has not been obligated to make significant payments for such obligations, does not anticipate future payments, and as such, no liabilities have been recorded for these indemnities and guarantees as of December 31, 2023 and 2022.

ITC Recapture Provisions

The IRS may disallow and recapture some, or all, of the ITCs due to improperly calculated basis after a project has been placed in service ("Recapture Event"). If a Recapture Event occurs, the Company is obligated to pay the applicable Class A Member a recapture adjustment, which includes the amounts the Class A Members are required to repay the IRS, including interest and penalties, as well as any third-party legal and accounting fees incurred by the Class A Members in connection with the Recapture Event, as specified in the operating agreements. Such a payment by the Company to the Class A Members is not to be considered a capital contribution to the fund per the operating agreements, nor would it be considered a distribution to the Class A Members. With the exception of the tax matter related to Ampere Solar Owner I, LLC noted above, a Recapture Event was not deemed probable by the Company, therefore no related accrual has been recorded as of December 31, 2023 and 2022.

Insurance Claims and Recoveries related to Maui Fires

In August 2023, a series of wildfires broke out in Hawaii, predominantly on the island of Maui, resulting in real and personal property and natural resource damage, personal injuries and loss of life and widespread power outages. The Company is currently assessing the impact of these wildfires on its home solar systems and customer contracts in the area; however, the Company has not been able to validate the extent of the related damage due to limited access to the area. Based on the Company's current assessment, the Company wrote off approximately $0.1 million during the year ended December 31, 2023, which is reflected within gain (loss) on asset disposal in the consolidated statements of operations. No material loss claims have been reported to date or recognized within the consolidated financial statements as of December 31, 2023. In addition, the Company has not recorded any related insurance recoveries as of December 31, 2023. The Company does not expect this event to have a material impact on its financial position, operating results or cash flows.

Note 16. Stockholders' Equity

Common Stock

As of December 31, 2023 and 2022, the Company had 350,000,000 authorized shares of Common Stock. The holders of Common Stock are entitled to vote on all matters and are entitled to the number of votes equal to the number of shares of Common Stock held. Common stockholders are entitled to dividends when and if declared by the Board of Directors.

The following shares of Common Stock are reserved for future issuance as of December 31, 2023:

Warrants issued and outstanding	529,931
Restricted stock units issued and outstanding	1,102,094
Stock options issued and outstanding	193,156
Total	1,825,181

Reverse Stock Split

On October 6, 2023, the Company effected the Reverse Stock Split. Prior to the effective time of the Reverse Stock Split, the Company had 151,441,768 and 145,595,792 shares of common stock issued and outstanding, respectively, and upon the Reverse Stock Split, the Company had approximately 18,930,196 and 18,199,449 shares of common stock issued and outstanding, respectively. The par value and the number of authorized shares of the common stock were not adjusted in connection with the Reverse Stock Split. The value of the Company's common stock outstanding and the related effect on additional paid in capital, all references to stock options, restricted stock units, private warrants, per share data, and related information contained within these consolidated financial statements have been retrospectively adjusted to reflect the effect of the Reverse Stock Split for all periods presented. Subsequent to the Reverse Stock Split, each stockholder's percentage ownership interest in the Company and proportional voting power remained unchanged.

No fractional shares of the Company's common stock were issued in connection with the Reverse Stock Split. In late October 2023, certain stockholders entitled to fractional shares as a result of the Reverse Stock Split received aggregate cash payments of approximately $ 0.01 million in lieu of receiving fractional shares.

Share Repurchase Program

On May 9, 2023, the Company's Board of Directors authorized a share repurchase program (the "Repurchase Program") for the repurchase of up to $ 50.0 million of the Company's outstanding common stock through May 15, 2025. The shares may be repurchased from time to time in open market transactions or privately negotiated transactions at the Company's discretion, subject to market conditions and other factors, including regulatory considerations.

The Repurchase Program does not require the Company to purchase a minimum number of shares, and may be suspended, modified or discontinued at any time without prior notice. During the year ended December 31, 2023, the Company repurchased 0.8 million shares of common stock under the Repurchase Program in open market transactions at a weighted-average price of $ 6.77 per share for an aggregate purchase price of $ 5.4 million, inclusive of transaction costs. As of December 31, 2023, $ 44.7 million remained available for future share repurchases under the Repurchase Program.

Note 17. Net Loss Per Share

The following is a reconciliation of the numerator and denominator used to calculate basic and diluted earnings per share for the years ended December 31, 2023, and 2022:

	Years Ended December 31,	
(Amounts in thousands, except share data)	**2023**	**2022**
Numerator:		
Net loss attributable to stockholders	$ (65,831)	$ (93,931)
Denominator:		
Weighted average shares outstanding, basic and diluted	18,391,436	17,836,500
Net loss attributable to stockholders per share, basic and diluted	$ (3.58)	$ (5.27)

For the years presented, potentially dilutive outstanding securities, which include stock options, restricted stock units and warrants, have been excluded from the computation of diluted net loss per share as their effect would be anti-dilutive for each year presented. As such, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share are the same for each year presented.

Note 18. Income Taxes

Net deferred income tax assets consist of the following components as of December 31, 2023 and 2022:

	As of December 31,	
(Amounts in thousands)	**2023**	**2022**
Deferred tax assets (liabilities):		
Net operating loss carryforwards	$ 114,028	$ 70,296
Accrued settlements	5,216	—
Pass-through equity interests	8,830	—
Fair market value adjustments	(12,763)	—
Tax credit carryforwards	1,643	1,643
Reserves	3,429	3,352
Stock-based compensation	2,350	2,843
Depreciation and amortization	(55,130)	(19,109)
Interest expense carryforward	6,979	8,697
Right of use assets	442	179
Other	(156)	1,452
Total deferred tax assets, net	74,868	69,353
Less valuation allowance	(74,868)	(69,353)
Net deferred tax assets	$ —	$ —

A reconciliation of the provision for income taxes with the amounts computed by applying the statutory Federal income tax to income before provision for income taxes is as follows:

	Years Ended December 31,	
	2023	**2022**
U.S. federal statutory rate	21.0 %	21.0 %
State taxes, net of federal benefit	6.4 %	4.9 %
Change in fair value of warrant liability	0.1 %	1.6 %
Option and RSU expense	0.4 %	0.2 %
Other	(8.6)%	(1.5)%
True-up to prior years' return	7.8 %	0.8 %
Change in valuation allowance	(9.2)%	(37.1)%
Purchase accounting	(17.9)%	10.1 %
Effective tax rate	— %	— %

The Company utilizes an asset and liability approach for financial accounting and reporting for income taxes. The provision for income taxes is based upon income or loss after adjustment for those permanent items that are not considered in the determination of taxable income. Deferred income taxes represent the tax effects of differences between the financial reporting and tax basis of the Company's assets and liabilities at the enacted tax rates in effect for the years in which the differences are expected to reverse.

The Company evaluates the recoverability of deferred tax assets and establishes a valuation allowance when it is more likely than not that some portion or all the deferred tax assets will not be realized. Management makes judgments as to the interpretation of the tax laws that might be challenged upon an audit and cause changes to previous estimates of tax liability. In Management's opinion, adequate provisions for income taxes have been made. If actual taxable income by tax jurisdiction varies from estimates, additional allowances or reversals of reserves may be necessary.

Tax benefits are recognized only for tax positions that are more likely than not to be sustained upon examination by tax authorities. The amount recognized is measured as the largest amount of benefit that is greater than 50% likely to be realized upon settlement. A liability for "unrecognized tax benefits" is recorded for any tax benefits claimed in the Company's tax returns that do not meet these recognition and measurement standards. For the years ended December 31, 2023 and 2022, no liability for unrecognized tax benefits was required to be reported.

The Company has provided a full valuation allowance against its net deferred tax assets since realization of any future benefit from deductible temporary differences and net operating loss cannot be sufficiently assured. Management of the Company has evaluated the positive and negative evidence bearing upon the reliability of its deferred tax assets, which are comprised principally of net operating loss carryforwards and research and development credits. Under the applicable accounting standards, Management has considered the Company's history of losses and concluded that it is more likely than not that the Company will not recognize the benefits of federal and state deferred tax assets. During the years ended December 31, 2023 and 2022, the Company increased its valuation allowance by $ 5.5 million and $ 34.4 million, respectively.

As of December 31, 2023, the Company had federal and state net operating loss ("NOL") carryforwards of $ 434.7 million and $ 395.9 million, respectively, and approximately $ 31.3 million of the federal NOL carryforward will expire at various dates commencing on 2029 and through 2037 and approximately $ 403.4 million were generated between the years ended December 31, 2018 and 2022 and have an indefinite life. At December 31, 2023, the Company has federal tax credits of approximately $ 1.6 million. These federal tax credits are available to reduce future taxable income and expire at various dates commencing 2031 through 2041. Utilization of the NOLs and tax credit carryforwards may be subject to a substantial annual limitation under Section 382 of the IRC due to ownership change limitations that have occurred previously or that could occur in the future. These ownership changes may limit the amount of net operating loss and tax credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. The Company has not determined whether an ownership change under section 382 has occurred or whether such limitation exists.

The Company files income tax returns in the U.S. federal jurisdiction and various states. With few exceptions, the Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2020. The Company follows a comprehensive model for the recognition, measurement, presentation and disclosure in consolidated financial statements of uncertain tax positions that have been taken or expected to be taken on a tax return. No liability related to uncertain tax positions is recorded in the consolidated financial statements as of December 31, 2023 and 2022.

Note 19. Defined Contribution Plan

The Company has adopted a 401(k) plan to provide all eligible employees a means to accumulate retirement savings on a tax-advantaged basis. The 401(k) plan requires participants to be at least 21 years old. In addition to the traditional 401(k), eligible employees are given the option of making an after- tax contribution to a Roth 401(k) or a combination of both. Plan participants may make before-tax elective contributions up to the maximum percentage of compensation and dollar amount allowed under the IRC. Participants are allowed to contribute, subject to IRS limitations on total annual contributions from 1 % to 90 % of eligible earnings. The plan provides for automatic enrollment at a 3 % deferral rate of an employee's eligible wages. The Company provides safe harbor matching contributions equal to 100 % on the first 3 % of an employee's eligible earnings deferred and an additional 50 % on the next 2 % of an employee's eligible earnings deferred. Employee elective deferrals and safe harbor matching contributions are 100 % vested at all times.

In connection with the acquisition of Legacy Spruce Power, the Company adopted the Spruce Power 401(k) plan which contains features similar to those of the XL Fleet Corp. 401(k) plan, except that (i) Participants are allowed to contribute, subject to IRS limitations, on total annual contributions from 1 % to 80 % of eligible earnings and (ii) the safe harbor non-elective contribution is equal to 3 % of employee's compensation.

The Company recognized expenses related to its 401(k) plans of approximately $ 0.7 million and $ 0.8 million for the years ended December 31, 2023 and 2022, respectively.

Note 20. Discontinued Operations

In the fourth quarter of 2022, the Company discontinued the operations of its Drivetrain and XL Grid operations. The following table provides supplemental details of the Company's discontinued operations contained within the consolidated statements of operations for the years ended December 31, 2023 and 2022:

	Years Ended December 31,	
(Amounts in thousands)	**2023**	**2022**
Net loss from discontinued operations:		
XL Grid	$ —	$ (1,092)
Drivetrain	(4,123)	(30,414)
Impairment of goodwill	—	(8,606)
Total	$ (4,123)	$ (40,112)

XL Grid

The following table presents financial results of XL Grid operations:

	Years Ended December 31,	
(Amounts in thousands)	**2023**	**2022**
Revenues	$ 149	$ 12,279
Operating expenses:		
Cost of revenues - inventory and other direct costs	148	8,577
Selling, general, and administrative expenses	743	4,794
Gain on asset disposal	(742)	—
Total operating expenses	149	13,371
Net loss from discontinued operations	$ —	$ (1,092)

Drivetrain

The following table presents financial results of Drivetrain operations:

	Years Ended December 31,	
(Amounts in thousands)	**2023**	**2022**
Revenues	$ 42	$ 2,419
Operating expenses:		
Cost of revenues - inventory and other direct costs	106	14,038
Engineering, research, and development	—	9,819
Selling, general, and administrative expenses	—	8,041
Loss on asset disposal	4,071	935
Other (income)	(12)	—
Total operating expenses	4,165	32,833
Net loss from discontinued operations	$ (4,123)	$ (30,414)

The following table presents aggregate carrying amounts of assets and liabilities of discontinued operations contained within the consolidated balance sheets:

	As of December 31,	
(Amounts in thousands)	**2023**	**2022**
Assets from discontinued operations:		
Drivetrain	$ 32	$ 3,604
XL Grid	—	7,373
Total assets from discontinued operations	$ 32	$ 10,977
Liabilities from discontinued operations:		
Drivetrain	$ 170	$ 5,743
XL Grid	—	3,648
Total liabilities from discontinued operations	$ 170	$ 9,391

Note 21. Subsequent Events

Management has reviewed all events subsequent to December 31, 2023 and prior to the filing of these consolidated financial statements, and except as referenced within the notes to the consolidated financial statements, the Company has determined there have been no events that have occurred that would require adjustments or disclosures within the consolidated financial statements.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this report, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures as promulgated by Rules 13a-15(e) and 15d-15(e) of the Exchange Act under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer. Based upon that evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were not effective as of that date, due to the material weaknesses in internal control over financial reporting described below.

The Company did not maintain an effective control environment based on the criteria established in the Committee of Sponsoring Organizations ("COSO") Framework, and its relevant components, which resulted in deficiencies that constitute material weaknesses, either individually or in the aggregate.

Control Environment

The Company failed to maintain a sufficient complement of qualified personnel to perform control activities. The lack of sufficient appropriately qualified personnel contributed to our failure to: (i) design and implement certain risk-mitigating internal controls; and (ii) consistently operate our internal controls. The control environment material weaknesses contributed to material weaknesses within our system of internal control over financial reporting in the Control Activities component of the COSO Framework.

Control Activities

The Company did not maintain effective control activities based on the criteria established in the COSO Framework and identified the following control deficiencies that constitute material weaknesses from the lack of effectively designed and implemented controls, either individually or in the aggregate:

- review and approval of manual journal entries, including implementing appropriate segregation of duties
- complex transactions, inclusive of accounting for business combinations and the Company's investment related to the SEMTH master lease agreement and the related interest income
- revenue recognition, including the review of the contracts upon inception and/or acquisition and the accounting for revenue recognition under ASC 606, *Revenue from Contracts with Customers.*

These deficiencies in control activities contributed to the potential for there to have been material accounting errors in multiple financial statement account balances and disclosures that would not have been prevented or detected timely.

However, after giving full consideration to these material weaknesses, and the additional analyses and other procedures that were performed to ensure that the Company's consolidated financial statements included in this Annual Report on Form 10-K were prepared in accordance with GAAP, management has concluded that our consolidated financial statements present fairly, in all material respects, our financial position, results of operations and cash flows for the periods disclosed in conformity with GAAP.

Remediation Plan

The Company is committed to maintaining strong internal control over financial reporting. In response to the material weaknesses described above, management, with the oversight of the Audit Committee, is taking comprehensive actions to remediate the above material weaknesses. The remediation plan includes the following:

- developing a training program and educating control owners concerting financial statement risk and principles of the Internal Control - Integrated Framework issued by COSO;
- hired and are continuing to hire professionals with the appropriate skills to perform control activities, including those involving complex and/or non-routine transactions;

- designing and implementing additional and/or enhanced controls in the areas of account reconciliations, contract accounting, revenue recognition, and financial statement analysis prepared in conformity with GAAP and manual journal entries; and
- designing and implementing controls to address the identification, accounting, review and reporting of complex and/or non-routine transactions.
- enhancing system controls to address and enforce Segregation of Duties Framework;

While Management believes that these efforts will improve the Company's internal control over financial reporting, the implementation of these measures is ongoing and will require validation and testing of the design and operating effectiveness of internal controls over a sustained period of financial reporting cycles.

Management believes the Company is making progress toward achieving the effectiveness of its internal controls and disclosure controls. The actions that Management is taking are subject to ongoing Management review, as well as audit committee oversight. Management will continue to assess the effectiveness of its internal control over financial reporting and take steps to remediate the known material weaknesses expeditiously.

Remediation of Previously-Identified Material Weakness in Internal Control over Financial Reporting Related to Information Technology General Controls

The Company previously disclosed in its December 31, 2022 Annual Report a material weakness i n internal control over financial reporting, related to the ineffective design and implementation of Information Technology General Controls (“ITGC”). The Company’s ITGC deficiencies included improperly designed controls pertaining to user access rights and segregation of duties over systems that are critical to the Company’s system of financial reporting. Based upon remediation efforts implemented during the year, Management has concluded that the design and implementation of ITGC to be operating effectively as of December 31, 2023.

Changes in Internal Control over Financial Reporting

Other than the material weaknesses and the remediation of the general IT control material weakness discussed above, there have been no other changes in our internal control over financial reporting during the quarter ended December 31, 2023 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management’s Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. As defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of the Company’s financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. Because of its inherent limitations, the Company’s internal control over financial reporting may not prevent or detect all misstatements, including the possibility of human error, the circumvention or overriding of controls, or fraud. Effective internal control over financial reporting can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. 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.

A material weakness is a control deficiency, or a combination of control deficiencies in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company’s annual or interim financial statements will not be prevented or detected on a timely basis.

Management assessed the effectiveness of the Company’s internal control over financial reporting as of December 31, 2023 based on the criteria established by the COSO Framework.

As a result of the material weaknesses described above, Management has concluded that, as of December 31, 2023, the Company’s internal control over financial reporting was ineffective.

Report of Independent Registered Public Accounting Firm

Because Spruce Power is a non-accelerated filer, the Company's independent registered public accounting firm is not required to express an opinion on the effectiveness of the Company's internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

None.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance

The information required by this Item will be set forth in the sections headed “Management and Corporate Governance” and “Delinquent Section 16(a) Reports” in the Proxy Statement for the 2024 annual meeting of stockholders which will be filed within 120 days after the end of the fiscal year and is incorporated in this report by reference.

The Company has adopted a code of ethics for directors, officers (including its principal executive officer, principal financial officer and principal accounting officer) and employees, known as Our Corporate Code of Conduct and Ethics and Whistleblower Policy. A copy of Our Corporate Code of Conduct and Ethics and Whistleblower Policy is available on the Company's website at www.sprucepower.com under the Governance, Documents and Charters section of our Investors page. The Company will promptly disclose on its website (i) the nature of any amendment to the policy that applies to the Company's principal executive officer, principal financial officer and principal accounting officer or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals, the name of such person who is granted the waiver and the date of the waiver.

The Audit Committee of the Company’s Board of Directors is an “audit committee” for purposes of Section 3(a)(58)(A) of the Securities Exchange Act of 1934. The members of the Audit Committee are John P. Miller (Chair), Christopher Hayes and Jonathan Ledecky.

Item 11. Executive Compensation

The information required by this Item will be set forth in the section headed “ *Executive Officer and Director Compensation*” in the Proxy Statement for the 2024 annual meeting of stockholders which will be filed within 120 days after the end of the fiscal year and is incorporated in this report by reference.

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

The information required by this Item will be set forth in the section headed “ *Security Ownership of Certain Beneficial Owners and Management* ” in the Proxy Statement for the 2024 annual meeting of stockholders which will be filed within 120 days after the end of the fiscal year and is incorporated in this report by reference.

Information regarding the Company's equity compensation plans will be set forth in the section headed “ *Executive Officer and Director Compensation - Equity Compensation Plan Information*” in the Proxy Statement for the 2024 annual meeting of stockholders which will be filed within 120 days after the end of the fiscal year and is incorporated in this report by reference.

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

The information required by this Item will be set forth in the sections headed “ *Certain Relationships and Related Person Transactions* ” and *“Management and Corporate Governance - Our Board of Directors”* in the Proxy Statement for the 2024 annual meeting of stockholders which will be filed within 120 days after the end of the fiscal year and is incorporated in this report by reference.

Item 14. Principal Accountant Fees and Services

The information required by this Item will be set forth in the section headed *“Proposal No. 2 — Ratification of Selection of Independent Registered Public Accounting Firm*” in the Proxy Statement for the 2024 annual meeting of stockholders which will be filed within 120 days after the end of the fiscal year and is incorporated in this report by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) Documents filed as part of this report.

1. The following financial statements of Spruce Power Holding Corporation and Reports of Deloitte & Touche LLP and Marcum LLP, Independent Registered Public Accounting Firms, are included in this report:

2. List of financial statement schedules:

All schedules have been omitted because they are not applicable, or the required information is shown in the financial statements or notes thereto.

3. List of Exhibits required by Item 601 of Regulation S-K. See part (b) below.

(b) Exhibits.

Exhibit No.	Description	Included	Form	Filing Date
2.1	Membership Interest Purchase and Sale Agreement, dated as of September 9, 2022, by and between the Company, SF Solar Blocker 2 LLC, SF Solar Blocker 3 LLC, Spruce Holding Company 3 Holdco LLC and HPS Investment Partners, LLC	By Reference	8-K	September 15, 2022
3.1	Second Amended and Restated Certificate of Incorporation.	By Reference	8-K	December 23, 2020
3.2	Certificate of Amendment to the Second Amended and Restated Certificate of Incorporation	By Reference	8-K	October 6, 2023
3.3	Certificate of Amendment changing name of Registrant to Spruce Power Holding Corporation	By Reference	8-K	November 14, 2022
3.4	Certificate of Amendment to the Second Amended and Restated Certificate of Incorporation	By Reference	8-K	October 6, 2023
3.5	Amended and Restated Bylaws, as amended as of November 10, 2022	By Reference	8-K	November 14, 2022
4.1	Description of Registered Securities	By Reference	10-K	March 31, 2021
10.1	Amended and Restated Credit Agreement, dated August 18, 2023 among Spruce Power 2, LLC, as Borrower, Silicon Valley Bank, a division of First-Citizens Bank & Trust Company as Administrative Agent and the Issuing Bank, and the lenders from time to time party thereto.	By Reference	10-Q	November 13, 2023

Exhibit No.	Description	Included	Form	Filing Date
10.2†	Supply Agreement, dated as of July 19, 2019, by and between XL Hybrids, Inc. and Parker-Hannifin Corporation.	By Reference	S-4/A	November 10, 2020
10.3	Form of Subscription Agreement.	By Reference	8-K	September 18, 2020
10.4	Registration Rights Agreement.	By Reference	S-4	October 2, 2020
10.5	Spruce Power Holding Corp. 2020 Equity Incentive Plan.	Herewith		
10.6	Spruce Power Holding Corp. 2020 Equity Incentive Plan Form of Stock Option Agreement.	Herewith		
10.7	Spruce Power Holding Corp. 2020 Equity Incentive Plan Form of Restricted Stock Unit Agreement.	Herewith		
10.8	Form of Indemnification Agreement between the Registrant and each officer and director.	By Reference	8-K	December 23, 2020
10.9	Amended and Restated Credit Agreement, dated October 29, 2019, among Kilowatt Systems, LLC, Volta MH Owner II, LLC, Greenday Finance I LLC and SpruceKismet, LLC, as Co-Borrowers, Silicon Valley Bank, as Administrative Agent, ING Capital LLC and Silicon Valley Bank as Issuing Banks, and the financial institutions from time to time party thereto as lenders, as conformed for each of Omnibus Amendment and Consent, dated as of March 5, 2020, Amendment to Credit Agreement, dated as of May 29, 2020, and Omnibus Amendment and Consent, dated March 18, 2021.	By Reference	8-K	September 15, 2022
10.10	Amended and Restated Credit Agreement, dated July 12, 2022, among Spruce Power 2, LLC, as Borrower, Silicon Valley Bank, as Administrative Agent and the Issuing Bank, and the lenders from time to time party thereto.	By Reference	8-K	September 15, 2022
10.11	Credit Agreement, dated November 13, 2020, among Spruce Power 3, LLC, as Borrower, KeyBank National Association, as Administrative Agent and Issuing Bank, and the lenders from time to time party thereto.	By Reference	8-K	September 15, 2022
10.12	Omnibus Amendment and Accession dated April 8, 2022, among KWS Solar Term Parent 1 LLC, KWS Solar Term Parent 2 LLC and KWS Solar Term Parent 3 LLC, as Co-Borrowers, KeyBank National Association, as Administrative Agent, and the lenders from time to time party thereto.	By Reference	8-K	September 15, 2022
10.13	Waiver and Second Amendment to Amended and Restated Credit Agreement, dated July 12, 2022, among KWS Solar Term Parent 1 LLC, KWS Solar Term Parent 2 LLC, KWS Solar Term Parent 3 LLC and Spruce Power 3 Holdco, LLC, as Co-Borrowers, KeyBank National Association, as Administrative Agent, and the lenders from time to time party thereto.	By Reference	8-K	September 15, 2022
10.14	Executive Employment Agreement, dated September 9, 2022, by and between XL Fleet Corp. and Christian Fong.	By Reference	8-K	September 15, 2022
10.15	Restricted Stock Award Grant under the Registrant's 2020 Equity Incentive Plan, dated September 9, 2022, to Christian Fong by XL Fleet Corp.	By Reference	8-K	September 15, 2022
10.16	Offer Letter, dated October 25, 2018, by and between Spruce Lending Inc. and Sarah Weber Wells	By Reference	8-K	May 11, 2023

Exhibit No.	Description	Included	Form	Filing Date
10.17	Enhanced Severance Letter, dated April 27, 2022, between the Company and Sarah Weber Wells	By Reference	8-K	May 11, 2023
10.18	Offer Letter, dated as of May 18, 2022, by and between XL Fleet Corp. and Stacey Constas	By Reference	10-K	March 30, 2023
10.19	Severance Letter, dated October 26, 2022, between the Company and Stacey Constas	By Reference	8-K	October 28, 2022
10.20	Executive Severance Policy	By Reference	10-Q	August 9, 2022
21	Subsidiaries of the Registrant	Herewith		
23.1*	Consent of Marcum LLP, independent registered public accounting firm	Herewith		
23.2*	Consent of Deloitte & Touche LLP, independent registered public accounting firm	Herewith		
31.1*	Certification of Principal Executive Officer Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities and Exchange Act of 1934, as amended, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Herewith		
31.2*	Certification of Principal Financial Officer Pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities and Exchange Act of 1934, as amended, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Herewith		
32.1^*	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Herewith		
32.2^*	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Herewith		
97*	Spruce Power Holding Corporation Clawback Policy	Herewith		
101.INS*	Inline XBRL Instance Document	Herewith		
101.SCH*	Inline XBRL Taxonomy Extension Schema Document	Herewith		
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document	Herewith		
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document	Herewith		
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document	Herewith		
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document	Herewith		
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).	Herewith		

* Filed herewith

*+ Schedule and exhibits to this exhibit omitted pursuant to Regulation S-K Item 601(b)(2). The Company agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.

† Certain confidential portions of this exhibit were omitted by means of marking such portions with asterisks because the identified confidential portions (i) are not material and (ii) would be competitively harmful if publicly disclosed.

# Indicates management contract or compensatory plan or arrangement.

^ In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 34-47986, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Annual Report on Form 10-K and will not be deemed “filed” for purposes of Section 18 of the Exchange Act or deemed to be incorporated by reference into any filing under the Exchange Act or the Securities Act of 1933 except to the extent that the registrant specifically incorporates it by reference.

Item 16. Form 10-K Summary

Not applicable

SIGNATURES

In accordance with Section 13 or 15(d) of the Exchange Act, the registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

SPRUCE POWER HOLDING CORPORATION

Date: April 8, 2024

By: */s/ Christian Fong*
Name: Christian Fong
Title: Chief Executive Officer
(Principal Executive Officer)

SPRUCE POWER HOLDING CORPORATION

Date: April 8, 2024

By: */s/ Sarah Weber Wells*
Name: Sarah Weber Wells
Title: Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Person	Capacity	Date
/s/ Christian Fong Christian Fong	Chief Executive Officer and Director (Principal Executive Officer)	April 8, 2024
/s/ Sarah Weber Wells Sarah Weber Wells	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 8, 2024
/s/ Christopher Hayes Christopher Hayes	Director and Chair of the Board	April 8, 2024
/s/ Kevin Griffin Kevin Griffin	Director	April 8, 2024
/s/ Jonathan J. Ledecky Jonathan J. Ledecky	Director	April 8, 2024
/s/ John P. Miller John P. Miller	Director	April 8, 2024
/s/ Eric Tech Eric Tech	Director	April 8, 2024

Exhibit 10.5

SPRUCE POWER HOLDING CORP.

2020 EQUITY INCENTIVE PLAN

1. DEFINITIONS. Unless otherwise specified or unless the context otherwise requires, the following terms, as used in this Spruce Power Holding Corp. 2020 Equity Incentive Plan, have the following meanings:

Administrator means the Board of Directors, unless it has delegated power to act on its behalf to the Committee, in which case the term "Administrator" means the Committee.

Affiliate means a corporation or other entity, which, for purposes of Section 424 of the Code, is a parent or subsidiary of the Company, direct or indirect.

Agreement means a written or electronic document setting forth the terms of a Stock Right delivered pursuant to the Plan, in such form as the Administrator shall approve.

Board of Directors means the Board of Directors of the Company.

Cause means, with respect to a Participant (a) dishonesty with respect to the Company or any Affiliate, (b) insubordination, substantial malfeasance or non-feasance of duty, (c) unauthorized disclosure of confidential information, (d) breach by a Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or similar agreement between the Participant and the Company or any Affiliate, and (e) conduct substantially prejudicial to the business of the Company or any Affiliate; provided, however, that any provision in an agreement between a Participant and the Company or an Affiliate, which contains a conflicting definition of Cause for termination and which is in effect at the time of such termination, shall supersede this definition with respect to that Participant. The determination of the Administrator as to the existence of Cause will be conclusive on the Participant and the Company.

Change of Control means the occurrence of any of the following events:

Ownership. Any "Person" (as such term is used in Sections 13(d) and 14(d) of the Exchange Act) becomes the "Beneficial Owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities (excluding for this purpose any such voting securities held by the Company or its Affiliates or by any employee benefit plan of the Company) pursuant to a transaction or a series of related transactions which the Board of Directors does not approve; or

Merger/Sale of Assets. (A) A merger or consolidation of the Company whether or not approved by the Board of Directors, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or the parent of such entity) more than 50% of the total voting power represented by the voting securities of the Company or such surviving entity or parent of such corporation, as the case may be, outstanding immediately after such merger or consolidation; or (B) the sale or disposition by the Company of all or substantially all of the Company's assets in a transaction requiring shareholder approval; or

Change in Board Composition. A change in the composition of the Board of Directors, as a result of which fewer than a majority of the directors are Incumbent Directors. "Incumbent Directors" shall mean directors who either (A) are directors of the Company as of the date this Plan was initially adopted, or (B) are elected, or nominated for election, to the Board of Directors with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination (but shall not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of directors to the Company).

provided, that if any payment or benefit payable hereunder upon or following a Change of Control would be required to comply with the limitations of Section 409A(a)(2)(A)(v) of the Code in order to avoid an additional tax under Section 409A of the Code, such payment or benefit shall be made only if such Change of Control constitutes a change in ownership or control of the Company, or a change in ownership of the Company's assets in accordance with Section 409A of the Code.

Code means the United States Internal Revenue Code of 1986, as amended including any successor statute, regulation and guidance thereto.

Committee means the committee of the Board of Directors, if any, to which the Board of Directors has delegated power to act under or pursuant to the provisions of the Plan.

Common Stock means shares of the Company's Class A common stock.

Company means Spruce Power Holding Corp., a Delaware corporation.

Consultant means any natural person who is an advisor or consultant who provides bona fide services to the Company or its Affiliates, provided that such services are not in connection with the offer or sale of securities in a capital raising transaction, and do not directly or indirectly promote or maintain a market for the Company's or its Affiliates' securities.

Corporate Transaction means a merger, consolidation, or sale of all or substantially all of the Company's assets or the acquisition of all of the outstanding voting stock of the Company in a single transaction or a series of related transactions by a single entity other than a transaction to merely change the state of incorporation.

Disability or Disabled means permanent and total disability as defined in Section 22(e)(3) of the Code.

Employee means any employee of the Company or of an Affiliate (including, without limitation, an employee who is also serving as an officer or director of the Company or of an Affiliate), designated by the Administrator to be eligible to be granted one or more Stock Rights under the Plan.

Exchange Act means the United States Securities Exchange Act of 1934, as amended.

Fair Market Value of a Share of Common Stock means:

If the Common Stock is listed on a national securities exchange or traded in the over-the-counter market and sales prices are regularly reported for the Common Stock, the closing or, if not applicable, the last price of the Common Stock on the composite tape or other comparable reporting system for the trading day on the applicable date and if such applicable date is not a trading day, the last market trading day prior to such date;

If the Common Stock is not traded on a national securities exchange but is traded on the over-the-counter market, if sales prices are not regularly reported for the Common Stock for the trading day referred to in clause (1), and if bid and asked prices for the Common Stock are regularly reported, the mean between the bid and the asked price for the Common Stock at the close of trading in the over-the-counter market for the most recent trading day on which Common Stock was traded on the applicable date and if such applicable date is not a trading day, the last market trading day prior to such date; and

If the Common Stock is neither listed on a national securities exchange nor traded in the over-the-counter market, such value as the Administrator, in good faith, shall determine in compliance with applicable laws.

ISO means a stock option intended to qualify as an incentive stock option under Section 422 of the Code.

Non-Q ualified Option means a stock option which is not intended to qualify as an ISO.

Option means an ISO or Non-Qualified Option granted under the Plan.

Participant means an Employee, director or Consultant of the Company or an Affiliate to whom one or more Stock Rights are granted under the Plan. As used herein, "Participant" shall include "Participant's Survivors" where the context requires.

Performance-Based Award means a Stock Grant or Stock-Based Award which vests based on the attainment of written Performance Goals as set forth in Paragraph 9 hereof.

Performance Goals means performance goals determined by the Committee in its sole discretion and set forth in an Agreement. The satisfaction of Performance Goals shall be subject to certification by the Committee. The Committee has the authority to take appropriate action with respect to the Performance Goals (including, without limitation, making adjustments to the Performance Goals or determining the satisfaction of the Performance Goals in connection with a Corporate Transaction) provided that any such action does not otherwise violate the terms of the Plan.

Plan means this Spruce Power Holding Corp. 2020 Equity Incentive Plan.

Securities Act means the United States Securities Act of 1933, as amended.

Shares means shares of the Common Stock as to which Stock Rights have been or may be granted under the Plan or any shares of capital stock into which the Shares are changed or for which they are exchanged within the provisions of Paragraph 3 of the Plan. The Shares issued under the Plan may be authorized and unissued shares or shares held by the Company in its treasury, or both.

Stock-Based Award means a grant by the Company under the Plan of an equity award or an equity based award, which is not an Option or a Stock Grant.

Stock Grant means a grant by the Company of Shares under the Plan.

Stock Right means a right to Shares or the value of Shares of the Company granted pursuant to the Plan -- an ISO, a Non-Qualified Option, a Stock Grant or a Stock-Based Award.

Survivor means a deceased Participant's legal representatives and/or any person or persons who acquired the Participant's rights to a Stock Right by will or by the laws of descent and distribution.

2. PURPOSES OF THE PLAN. The Plan is intended to encourage ownership of Shares by Employees and directors of and certain Consultants to the Company and its Affiliates in order to attract and retain such people, to induce them to work for the benefit of the Company or of an Affiliate and to provide additional incentive for them to promote the success of the Company or of an Affiliate. The Plan provides for the granting of ISOs, Non-Qualified Options, Stock Grants and Stock-Based Awards.

3. SHARES SUBJECT TO THE PLAN.

(a) The number of Shares which may be issued from time to time pursuant to this Plan shall be the sum of: (i) 12,800,000 shares of Common Stock and (ii) any shares of Common Stock that are represented by awards granted under the Company's XL Hybrids, Inc. 2010 Equity Incentive Plan that are forfeited, expire or are cancelled without delivery of shares of Common Stock or which result in the forfeiture of shares of Common Stock back to the Company on or after December 21, 2020, or the equivalent of such number of Shares after the Administrator, in its sole discretion, has interpreted the effect of any stock split, stock dividend, combination, recapitalization or similar transaction in accordance with Paragraph 25 of this Plan, all of which Shares are eligible to be issued as ISOs; provided, however, that no more than 11,763,439 Shares shall be added to the Plan pursuant to subsection (ii).

(b) Notwithstanding Subparagraph (a) above, on the first day of each fiscal year of the Company during the period beginning with the fiscal year immediately following the fiscal year during which the Plan is first approved by the Company's shareholders, and ending on the second day of fiscal year 2030, the number of Shares that may be issued from time to time pursuant to the Plan, shall be increased by an amount equal to the lesser of (i) 5% of the number of outstanding shares of Common Stock on such date and (ii) an amount determined by the Administrator. Notwithstanding the foregoing, the maximum number of Shares that may be issued as ISOs under the Plan shall be 260,000,000.

(c) If an Option ceases to be "outstanding", in whole or in part (other than by exercise), or if the Company shall reacquire (at not more than its original issuance price) any Shares issued pursuant to a Stock Grant or Stock-Based Award, or if any Stock Right expires or is forfeited, cancelled, or otherwise terminated or results in any Shares not being issued, the unissued or reacquired Shares which were subject to such Stock Right shall again be available for issuance from time to time pursuant to this Plan. Without limiting the generality of the foregoing, the number of Shares underlying any awards under the Plan that are retained or repurchased on the exercise of an Option or the vesting or issuance of any Stock Right to cover the exercise price or tax withholding required by the Company in connection with vesting shall be added back to the Shares available for issuance under the Plan; provided, however that, in the case of ISOs, the foregoing provisions shall be subject to any limitations under the Code.

4. ADMINISTRATION OF THE PLAN. The Administrator of the Plan will be the Board of Directors, except to the extent the Board of Directors delegates its authority to the Committee, in which case the Committee shall be the Administrator. Subject to the provisions of the Plan, the Administrator is authorized to:

(a) Interpret the provisions of the Plan and all Stock Rights and to make all rules and determinations which it deems necessary or advisable for the administration of the Plan;

(b) Determine which Employees, directors and Consultants shall be granted Stock Rights;

(c) Determine the number of Shares for which a Stock Right or Stock Rights shall be granted; provided, however, that in no event shall the aggregate grant date fair value (determined in accordance with ASC 718) of Stock Rights to be granted and any other cash compensation paid to any non-employee director in any calendar year, exceed $750,000, increased to $1,000,000 in the year in which such non-employee director initially joins the Board of Directors;

(d) Specify the terms and conditions upon which a Stock Right or Stock Rights may be granted provided that no dividends or dividend equivalents shall be paid on any Stock Right prior to the vesting of the underlying Shares.

(e) Amend any term or condition of any outstanding Stock Right, provided that (i) such term or condition as amended is not prohibited by the Plan; (ii) any such amendment shall not impair the rights of a Participant under any Stock Right previously granted without such Participant's consent or in the event of death of the Participant the Participant's Survivors; and (iii) any such amendment shall be made only after the Administrator determines whether such amendment would cause any adverse tax consequences to the Participant, including, but not limited to, the annual vesting limitation contained in Section 422(d) of the Code and described in Paragraph 6(b)(iv) below with respect to ISOs and pursuant to Section 409A of the Code;

(f) Determine and make any adjustments in the Performance Goals included in any Performance-Based Awards; and

(g) Adopt any sub-plans applicable to residents of any specified jurisdiction as it deems necessary or appropriate in order to comply with or take advantage of any tax or other laws applicable to the Company, any Affiliate or to Participants or to otherwise facilitate the administration of the Plan, which sub-plans may include additional restrictions or conditions applicable to Stock Rights or Shares issuable pursuant to a Stock Right; provided, however, that all such interpretations, rules, determinations, terms and conditions shall be made and prescribed in the context of potential tax consequences under Section 409A of the Code and preserving the tax status under Section 422 of the Code of those Options which are designated as ISOs. Subject to the foregoing, the interpretation and construction by the Administrator of any provisions of the Plan or of any Stock Right granted under it shall be final, unless otherwise determined by the Board of Directors, if the Administrator is the Committee. In addition, if the Administrator is the Committee, the Board of Directors may take any action under the Plan that would otherwise be the responsibility of the Committee.

To the extent permitted under applicable law, the Board of Directors or the Committee may allocate all or any portion of its responsibilities and powers to any one or more of its members and may delegate all or any portion of its responsibilities and powers to any other person selected by it. The Board of Directors or the Committee may revoke any such allocation or delegation at any time.
Notwithstanding the foregoing, only the Board of Directors or the Committee shall be authorized to grant a Stock Right to any director of the Company or to any “officer” of the Company as defined by Rule 16a-1 under the Exchange Act.

5. ELIGIBILITY FOR PARTICIPATION. The Administrator will, in its sole discretion, name the Participants in the Plan; provided, however, that each Participant must be an Employee, director or Consultant of the Company or of an Affiliate at the time a Stock Right is granted. Notwithstanding the foregoing, the Administrator may authorize the grant of a Stock Right to a person not then an Employee, director or Consultant of the Company or of an Affiliate; provided, however, that the actual grant of such Stock Right shall be conditioned upon such person becoming eligible to become a Participant at or prior to the time of the execution of the Agreement evidencing such Stock Right. ISOs may be granted only to Employees. Non-Qualified Options, Stock Grants and Stock- Based Awards may be granted to any Employee, director or Consultant of the Company or an Affiliate. The granting of any Stock Right to any individual shall neither entitle that individual to, nor disqualify that individual from, participation in any other grant of Stock Rights or any grant under any other benefit plan established by the Company or any Affiliate for Employees, directors or Consultants.

6. TERMS AND CONDITIONS OF OPTIONS. Each Option shall be set forth in an Option Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Administrator may provide that Options be granted subject to such terms and conditions, consistent with the terms and conditions specifically required under this Plan, as the Administrator may deem appropriate including, without limitation, subsequent approval by the shareholders of the Company of this Plan or any amendments thereto. The Option Agreements shall be subject to at least the following terms and conditions:

(a) Non-Q ualified Options: Each Option intended to be a Non-Qualified Option shall be subject to the terms and conditions which the Administrator determines to be appropriate and in the best interest of the Company, subject to the following minimum standards for any such Non-Qualified Option:

(i) Exercise Price: Each Option Agreement shall state the exercise price (per share) of the Shares covered by each Option, which exercise price shall be determined by the Administrator and shall be at least equal to the Fair Market Value per share of the Common Stock on the date of grant of the Option.

(ii) Number of Shares: Each Option Agreement shall state the number of Shares to which it pertains.

(iii) Vesting: Each Option Agreement shall state the date or dates on which it first is exercisable and the date after which it may no longer be exercised, and may provide that the Option rights accrue or become exercisable in installments over a period of months or years, or upon the occurrence of certain performance conditions or the attainment of stated goals or events.

(iv) Additional Conditions: Exercise of any Option may be conditioned upon the Participant's execution of a shareholders agreement in a form satisfactory to the Administrator providing for certain protections for the Company and its other shareholders, including requirements that:

A. The Participant's or the Participant's Survivors' right to sell or transfer the Shares may be restricted; and

B. The Participant or the Participant's Survivors may be required to execute letters of investment intent and must also acknowledge that the Shares will bear legends noting any applicable restrictions.

(v) Term of Option: Each Option shall terminate not more than ten years from the date of the grant or at such earlier time as the Option Agreement may provide.

(b) ISOs: Each Option intended to be an ISO shall be issued only to an Employee who is deemed to be a resident of the United States for tax purposes, and shall be subject to the following terms and conditions, with such additional restrictions or changes as the Administrator determines are appropriate but not in conflict with Section 422 of the Code and relevant regulations and rulings of the Internal Revenue Service:

(i) Minimum Standards: The ISO shall meet the minimum standards required of Non-Qualified Options, as described in Paragraph 6(a) above, except clause (i) and (v) thereunder.

(ii) Exercise Price: Immediately before the ISO is granted, if the Participant owns, directly or by reason of the applicable attribution rules in Section 424(d) of the Code:

A. 10% or less of the total combined voting power of all classes of stock of the Company or an Affiliate, the exercise price per share of the Shares covered by each ISO shall not be less than 100% of the Fair Market Value per share of the Common Stock on the date of grant of the Option; or

B. More than 10% of the total combined voting power of all classes of stock of the Company or an Affiliate, the exercise price per share of the Shares covered by each ISO shall not be less than 110% of the Fair Market Value per share of the Common Stock on the date of grant of the Option.

(iii) Term of Option: For Participants who own:

A. 10% or less of the total combined voting power of all classes of stock of the Company or an Affiliate, each ISO shall terminate not more than ten years from the date of the grant or at such earlier time as the Option Agreement may provide; or

B. More than 10% of the total combined voting power of all classes of stock of the Company or an Affiliate, each ISO shall terminate not more than five years from the date of the grant or at such earlier time as the Option Agreement may provide.

(iv) Limitation on Yearly Exercise: The Option Agreements shall restrict the amount of ISOs which may become exercisable in any calendar year (under this or any other ISO plan of the Company or an Affiliate) so that the aggregate Fair Market Value (determined on the date each ISO is granted) of the stock with respect to which ISOs are exercisable for the first time by the Participant in any calendar year does not exceed $100,000.

7. TERMS AND CONDITIONS OF STOCK GRANTS. Each Stock Grant to a Participant shall state the principal terms in an Agreement duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Agreement shall be in a form approved by the Administrator and shall contain terms and conditions which the Administrator determines to be appropriate and in the best interest of the Company, subject to the following minimum standards:

(a) Each Agreement shall state the purchase price per share, if any, of the Shares covered by each Stock Grant, which purchase price shall be determined by the Administrator but shall not be less than the minimum consideration required by the Delaware General Corporation Law, if any, on the date of the grant of the Stock Grant;

(b) Each Agreement shall state the number of Shares to which the Stock Grant pertains;

(c) Each Agreement shall include the terms of any right of the Company to restrict or reacquire the Shares subject to the Stock Grant, including the time period or attainment of Performance Goals or such other performance criteria upon which such rights shall accrue and the purchase price therefor, if any; and

(d) Dividends (other than stock dividends to be issued pursuant to Section 25 of the Plan) may accrue but shall not be paid prior to the time, and may be paid only to the extent that the restrictions or rights to reacquire the Shares subject to the Stock Grant lapse.

8. TERMS AND CONDITIONS OF OTHER STOCK-BASED AWARDS. The Administrator shall have the right to grant other Stock-Based Awards based upon the Common Stock having such terms and conditions as the Administrator may determine, including, without limitation, the grant of Shares based upon certain conditions, the grant of securities convertible into Shares and the grant of stock appreciation rights, phantom stock awards or stock units. The principal terms of each Stock-Based Award shall be set forth in an Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Agreement shall be in a form approved by the Administrator and shall contain terms and conditions which the Administrator determines to be appropriate and in the best interest of the Company. Each Agreement shall include the terms of any right of the Company including the right to terminate the Stock-Based Award without the issuance of Shares, the terms of any vesting conditions, Performance Goals or events upon which Shares shall be issued, provided that dividends (other than stock dividends to be issued pursuant to Section 25 of the Plan) or dividend equivalents may accrue but shall not be paid prior to and may be paid only to the extent that the Shares subject to the Stock-Based Award vest. Under no circumstances may the Agreement covering stock appreciation rights (a) have an exercise or base price (per share) that is less than the Fair Market Value per share of Common Stock on the date of grant or (b) expire more than ten years following the date of grant.

The Company intends that the Plan and any Stock-Based Awards granted hereunder be exempt from the application of Section 409A of the Code or meet the requirements of paragraphs (2), (3) and (4) of subsection (a) of Section 409A of the Code, to the extent applicable, and be operated in accordance with Section 409A so that any compensation deferred under any Stock-Based Award (and applicable investment earnings) shall not be included in income under Section 409A of the Code. Any ambiguities in the Plan shall be construed to effect the intent as described in this Paragraph 8.

9. PERFORMANCE-BASED AWARDS. The Committee shall determine whether, with respect to a performance period, the applicable Performance Goals have been met with respect to a given Participant and, if they have, to so certify and ascertain the amount of the applicable Performance-Based Award. No Performance-Based Awards will be issued for such performance period until such certification is made by the Committee. The number of Shares issued in respect of a Performance-Based Award determined by the Committee for a performance period shall be paid to the Participant at such time as determined by the Committee in its sole discretion after the end of such performance period, and any dividends (other than stock dividends to be issued pursuant to Section 25 of the Plan) or dividend equivalents that accrue shall only be paid in respect of the number of Shares earned in respect of such Performance-Based Award.

10. EXERCISE OF OPTIONS AND ISSUE OF SHARES. An Option (or any part or installment thereof) shall be exercised by giving written notice to the Company or its designee (in a form acceptable to the Administrator, which may include electronic notice), together with provision for payment of the aggregate exercise price in accordance with this Paragraph for the Shares as to which the Option is being exercised, and upon compliance with any other condition(s) set forth in the Option Agreement. Such notice shall be signed by the person exercising the Option (which signature may be provided electronically in a form acceptable to the Administrator), shall state the number of Shares with respect to which the Option is being exercised and shall contain any representation required by the Plan or the Option Agreement. Payment of the exercise price for the Shares as to which such Option is being exercised shall be made (a) in United States dollars in cash or by check; or (b) at the discretion of the Administrator, through delivery of shares of Common Stock held for at least six months (if required to avoid negative accounting treatment) having a Fair Market Value equal as of the date of the exercise to the aggregate cash exercise price for the number of Shares as to which the Option is being exercised; or (c) at the discretion of the Administrator, by having the Company retain from the Shares otherwise issuable upon exercise of the Option, a number of Shares having a Fair Market Value equal as of the date of exercise to the aggregate exercise price for the number of Shares as to which the Option is being exercised; or (d) at the discretion of the Administrator, in accordance with a cashless exercise program established with a securities brokerage firm, and approved by the Administrator; or (e) at the discretion of the Administrator, by any combination of (a), (b), (c) and (d) above or (f) at the discretion of the Administrator, by payment of such other lawful consideration as the Administrator may determine. Notwithstanding the foregoing, the Administrator shall accept only such payment on exercise of an ISO as is permitted by Section 422 of the Code.

The Company shall then reasonably promptly deliver the Shares as to which such Option was exercised to the Participant (or to the Participant's Survivors, as the case may be). In determining what constitutes "reasonably promptly," it is expressly understood that the issuance and delivery of the Shares may be delayed by the Company in order to comply with any law or regulation (including, without limitation, state securities or "blue sky" laws) which requires the Company to take any action with respect to the Shares prior to their issuance. The Shares shall, upon delivery, be fully paid, non-assessable Shares.

11. PAYMENT IN CONNECTION WITH THE ISSUANCE OF STOCK GRANTS AND STOCK-BASED AWARDS AND ISSUE OF SHARES. Any Stock Grant or Stock-Based Award requiring payment of a purchase price for the Shares as to which such Stock Grant or Stock-Based Award is being granted shall be made (a) in United States dollars in cash or by check; or (b) at the discretion of the Administrator, through delivery of shares of Common Stock held for at least six months (if required to avoid negative accounting treatment) and having a Fair Market Value equal as of the date of payment to the purchase price of the Stock Grant or Stock-Based Award; or (c) by delivery of a promissory note, if the Board of Directors has expressly authorized the loan of funds to the Participant for the purpose of enabling or assisting the Participant to effect such purchase; (d) at the discretion of the Administrator, by
any combination of (a) through (c) above; or (e) at the discretion of the Administrator, by payment of such other lawful consideration as the Administrator may determine.

The Company shall when required by the applicable Agreement, reasonably promptly deliver the Shares as to which such Stock Grant or Stock-Based Award was made to the Participant (or to the Participant's Survivors, as the case may be), subject to any escrow provision set forth in the applicable Agreement. In determining what constitutes "reasonably promptly," it is expressly understood that the issuance and delivery of the Shares may be delayed by the Company in order to comply with any law or regulation (including, without limitation, state securities or "blue sky" laws) which requires the Company to take any action with respect to the Shares prior to their issuance.

12. RIGHTS AS A SHAREHOLDER. No Participant to whom a Stock Right has been granted shall have rights as a shareholder with respect to any Shares covered by such Stock Right except after due exercise of an Option or issuance of Shares as set forth in any Agreement, tender of the aggregate exercise or purchase price, if any, for the Shares being purchased and registration of the Shares in the Company's share register in the name of the Participant.

13. ASSIGNABILITY AND TRANSFERABILITY OF STOCK RIGHTS. By its terms, a Stock Right granted to a Participant shall not be transferable by the Participant other than (i) by will or by the laws of descent and distribution, or (ii) as approved by the Administrator in its discretion and set forth in the applicable Agreement provided that no Stock Right may be transferred by a Participant for value. Notwithstanding the foregoing, an ISO transferred except in compliance with clause (i) above shall no longer qualify as an ISO. The designation of a beneficiary of a Stock Right by a Participant, with the prior approval of the Administrator and in such form as the Administrator shall prescribe, shall not be deemed a transfer prohibited by this Paragraph. Except as provided above during the Participant's lifetime a Stock Right shall only be exercisable by or issued to such Participant (or his or her legal representative) and shall not be assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to execution, attachment or similar process. Any attempted transfer, assignment, pledge, hypothecation or other disposition of any Stock Right or of any rights granted thereunder contrary to the provisions of this Plan, or the levy of any attachment or similar process upon a Stock Right, shall be null and void.

14. EFFECT ON OPTIONS OF TERMINATION OF SERVICE OTHER THAN FOR CAUSE OR DEATH OR DISABILITY. Except as otherwise provided in a Participant's Option Agreement, in the event of a termination of service (whether as an Employee, director or Consultant) with the Company or an Affiliate before the Participant has exercised an Option, the following rules apply:

(a) A Participant who ceases to be an Employee, director or Consultant of the Company or of an Affiliate (for any reason other than termination for Cause, Disability, or death for which events there are special rules in Paragraphs 15, 16, and 17, respectively), may exercise any Option granted to such Participant to the extent that the Option is exercisable on the date of such termination of service, but only within such term as the Administrator has designated in a Participant's Option Agreement.

(b) Except as provided in Subparagraph (c) below, or Paragraph 16 or 17, in no event may an Option intended to be an ISO, be exercised later than three months after the Participant's termination of employment.

(c) The provisions of this Paragraph, and not the provisions of Paragraph 16 or 17, shall apply to a Participant who subsequently becomes Disabled or dies after the termination of employment, director status or consultancy; provided, however, in the case of a Participant's Disability or death within three months after the termination of employment, director status or consultancy, the Participant or the Participant's Survivors may exercise the Option within one year after the date of the Participant's termination of service, but in no event after the date of expiration of the term of the Option.

(d) Notwithstanding anything herein to the contrary, if subsequent to a Participant's termination of employment, termination of director status or termination of consultancy, but prior to the exercise of an Option, the Administrator determines that, either prior or subsequent to the Participant's termination, the Participant engaged in conduct which would constitute Cause, then such Participant shall forthwith cease to have any right to exercise any Option.

(e) A Participant to whom an Option has been granted under the Plan who is absent from the Company or an Affiliate because of temporary disability (any disability other than a Disability as defined in Paragraph 1 hereof), or who is on leave of absence for any purpose, shall not, during the period of any such absence, be deemed, by virtue of such absence alone, to have terminated such Participant's employment, director status or consultancy with the Company or with an Affiliate, except as the Administrator may otherwise expressly provide; provided, however, that, for ISOs, any leave of absence granted by the Administrator of greater than three months, unless pursuant to a contract or statute that guarantees the right to reemployment, shall cause such ISO to become a Non- Qualified Option on the date that is six months following the commencement of such leave of absence.

(f) Except as required by law or as set forth in a Participant's Option Agreement, Options granted under the Plan shall not be affected by any change of a Participant's status within or among the Company and any Affiliates, so long as the Participant continues to be an Employee, director or Consultant of the Company or any Affiliate.

15. EFFECT ON OPTIONS OF TERMINATION OF SERVICE FOR CAUSE. Except as otherwise provided in a Participant's Option Agreement, the following rules apply if the Participant's service (whether as an Employee, director or Consultant) with the Company or an Affiliate is terminated for Cause prior to the time that all his or her outstanding Options have been exercised:

(a) All outstanding and unexercised Options as of the time the Participant is notified his or her service is terminated for Cause will immediately be forfeited.

(b) Cause is not limited to events which have occurred prior to a Participant's termination of service, nor is it necessary that the Administrator's finding of Cause occur prior to termination. If the Administrator determines, subsequent to a Participant's termination of service but prior to the exercise of an Option, that either prior or subsequent to the Participant's termination the Participant engaged in conduct which would constitute Cause, then the right to exercise any Option is forfeited.

16. EFFECT ON OPTIONS OF TERMINATION OF SERVICE FOR DISABILITY. Except as otherwise provided in a Participant's Option Agreement:

(a) A Participant who ceases to be an Employee, director or Consultant of the Company or of an Affiliate by reason of Disability may exercise any Option granted to such Participant to the extent that the Option has become exercisable but has not been exercised on the date of the Participant's termination of service due to Disability; and in the event rights to exercise the Option accrue periodically, to the extent of a pro rata portion through the date of the Participant's termination of service due to Disability of any additional vesting rights that would have accrued on the next vesting date had the Participant not become Disabled. The proration shall be based upon the number of days accrued in the current vesting period prior to the date of the Participant's termination of service due to Disability.

(b) A Disabled Participant may exercise the Option only within the period ending one year after the date of the Participant's termination of service due to Disability, notwithstanding that the Participant might have been able to exercise the Option as to some or all of the Shares on a later date if the Participant had not been terminated due to Disability and had continued to be an Employee, director or Consultant or, if earlier, within the originally prescribed term of the Option.

(c) The Administrator shall make the determination both of whether Disability has occurred and the date of its occurrence (unless a procedure for such determination is set forth in another agreement between the Company and such Participant, in which case such procedure shall be used for such determination). If requested, the Participant shall be examined by a physician selected or approved by the Administrator, the cost of which examination shall be paid for by the Company.

17. EFFECT ON OPTIONS OF DEATH WHILE AN EMPLOYEE, DIRECTOR OR CONSULTANT. Except as otherwise provided in a Participant's Option Agreement:

(a) In the event of the death of a Participant while the Participant is an Employee, director or Consultant of the Company or of an Affiliate, such Option may be exercised by the Participant's Survivors to the extent that the Option has become exercisable but has not been exercised on the date of death; and in the event rights to exercise the Option accrue periodically, to the extent of a pro rata portion through the date of death of any additional vesting rights that would have accrued on the next vesting date had the Participant not died. The proration shall be based upon the number of days accrued in the current vesting period prior to the Participant's date of death.

(b) If the Participant's Survivors wish to exercise the Option, they must take all necessary steps to exercise the Option within one year after the date of death of such Participant, notwithstanding that the decedent might have been able to exercise the Option as to some or all of the Shares on a later date if he or she had not died and had continued to be an Employee, director or Consultant or, if earlier, within the originally prescribed term of the Option.

18. EFFECT OF TERMINATION OF SERVICE ON UNACCEPTED STOCK GRANTS AND STOCK-BASED AWARDS. In the event of a termination of service (whether as an Employee, director or Consultant) with the Company or an Affiliate for any reason before the Participant has accepted a Stock Grant or a Stock-Based Award and paid the purchase price, if required, such grant shall terminate.

For purposes of this Paragraph 18 and Paragraph 19 below, a Participant to whom a Stock Grant or a Stock-Based Award has been issued under the Plan who is absent from work with the Company or with an Affiliate because of temporary disability (any disability other than a Disability as defined in Paragraph 1 hereof), or who is on leave of absence for any purpose, shall not, during the period of any such absence, be deemed, by virtue of such absence alone, to have terminated such Participant's employment, director status or consultancy with the Company or with an Affiliate, except as the Administrator may otherwise expressly provide.

In addition, for purposes of this Paragraph 18 and Paragraph 19 below, any change of employment or other service within or among the Company and any Affiliates shall not be treated as a termination of employment, director status or consultancy so long as the Participant continues to be an Employee, director or Consultant of the Company or any Affiliate.

19. EFFECT ON STOCK GRANTS AND STOCK-BASED AWARDS OF TERMINATION OF SERVICE OTHER THAN FOR CAUSE, DEATH OR DISABILITY. Except as otherwise provided in a Participant's Agreement, in the event of a termination of service for any reason (whether as an Employee, director or Consultant), other than termination for Cause, death or Disability for which there are special rules in Paragraphs 20, 21, and 22 below, before all forfeiture provisions or Company rights of repurchase shall have lapsed, then the Company shall have the right to cancel or repurchase that number of Shares subject to a Stock Grant or Stock-Based Award as to which the Company's forfeiture or repurchase rights have not lapsed.

20. EFFECT ON STOCK GRANTS AND STOCK-BASED AWARDS OF TERMINATION OF SERVICE FOR CAUSE . Except as otherwise provided in a Participant's Agreement, the following rules apply if the Participant's service (whether as an Employee, director or Consultant) with the Company or an Affiliate is terminated for Cause:

(a) All Shares subject to any Stock Grant or Stock-Based Award that remain subject to forfeiture provisions or as to which the Company shall have a repurchase right shall be immediately forfeited to the Company as of the time the Participant is notified his or her service is terminated for Cause.

(b) Cause is not limited to events which have occurred prior to a Participant's termination of service, nor is it necessary that the Administrator's finding of Cause occur prior to termination. If the Administrator determines, subsequent to a Participant's termination of service, that either prior or subsequent to the Participant's termination the Participant engaged in conduct which would constitute Cause, then all Shares subject to any Stock Grant or Stock-Based Award that remained subject to forfeiture provisions or as to which the Company had a repurchase right on the date of termination shall be immediately forfeited to the Company.

21. EFFECT ON STOCK GRANTS AND STOCK-BASED AWARDS OF TERMINATION OF SERVICE FOR DISABILITY. Except as otherwise provided in a Participant's Agreement, the following rules apply if a Participant ceases to be an Employee, director or Consultant of the Company or of an Affiliate by reason of Disability: to the extent the forfeiture provisions or the Company's rights of repurchase have not lapsed on the date of Disability, they shall be exercisable; provided, however, that in the event such forfeiture provisions or rights of repurchase lapse periodically, such provisions or rights shall lapse to the extent of a pro rata portion of the Shares subject to such Stock Grant or Stock-Based Award through the date of Disability as would have lapsed had the Participant not become Disabled. The proration shall be based upon the number of days accrued prior to the date of Disability.

The Administrator shall make the determination both as to whether Disability has occurred and the date of its occurrence (unless a procedure for such determination is set forth in another agreement between the Company and such Participant, in which case such procedure shall be used for such determination). If requested, the Participant shall be examined by a physician selected or approved by the Administrator, the cost of which examination shall be paid for by the Company.

22. EFFECT ON STOCK GRANTS AND STOCK-BASED AWARDS OF DEATH WHILE AN EMPLOYEE, DIRECTOR OR CONSULTANT. Except as otherwise provided in a Participant's Agreement, the following rules apply in the event of the death of a Participant while the Participant is an Employee, director or Consultant of the Company or of an Affiliate: to the extent the forfeiture provisions or the Company's rights of repurchase have not lapsed on the date of death, they shall be exercisable; provided, however, that in the event such forfeiture provisions or rights of repurchase lapse periodically, such provisions or rights shall lapse to the extent of a pro rata portion of the Shares subject to such Stock Grant or Stock-Based Award through the date of death as would have lapsed had the Participant not died. The proration shall be based upon the number of days accrued prior to the Participant's date of death.

23. PURCHASE FOR INVESTMENT. Unless the offering and sale of the Shares shall have been effectively registered under the Securities Act, the Company shall be under no obligation to issue Shares under the Plan unless and until the following conditions have been fulfilled:

(a) The person who receives a Stock Right shall warrant to the Company, prior to the receipt of Shares, that such person is acquiring such Shares for his or her own account, for investment, and not with a view to, or for sale in connection with, the distribution of any such Shares, in which event the person acquiring such Shares shall be bound by the provisions of the following legend (or a legend in substantially similar form) which shall be endorsed upon the certificate evidencing the Shares issued pursuant to such exercise or such grant of a Stock Right:

> "The shares represented by this certificate have been taken for investment and they may not be sold or otherwise transferred by any person, including a pledgee, unless (1) either (a) a Registration Statement with respect to such shares shall be effective under the Securities Act of 1933, as amended, or (b) the Company shall have received an opinion of counsel satisfactory to it that an exemption from registration under such Act is then available, and (2) there shall have been compliance with all applicable state securities laws."

(b) At the discretion of the Administrator, the Company shall have received an opinion of its counsel that the Shares may be issued in compliance with the Securities Act without registration thereunder.

24. DISSOLUTION OR LIQ UIDATION OF THE COMPANY. Upon the dissolution or liquidation of the Company, all Options granted under this Plan which as of such date shall not have been exercised and all Stock Grants and Stock-Based Awards which have not been accepted, to the extent required under the applicable Agreement, will terminate and become null and void; provided, however, that if the rights of a Participant or a Participant's Survivors have not otherwise terminated and expired, the Participant or the Participant's Survivors will have the right immediately prior to such dissolution or liquidation to exercise or accept any Stock Right to the extent that the Stock Right is exercisable or subject to acceptance as of the date immediately prior to such dissolution or liquidation. Upon the dissolution or liquidation of the Company, any outstanding Stock-Based Awards shall immediately terminate unless otherwise determined by the Administrator or specifically provided in the applicable Agreement.

25. ADJUSTMENTS. Upon the occurrence of any of the following events, a Participant's rights with respect to any Stock Right granted to such Participant hereunder shall be adjusted as hereinafter provided, unless otherwise specifically provided in a Participant's Agreement.

(a) Stock Dividends and Stock Splits. If (i) the shares of Common Stock shall be subdivided or combined into a greater or smaller number of shares or if the Company shall issue any shares of Common Stock as a stock dividend on its outstanding Common Stock, or (ii) additional shares or new or different shares or other securities of the Company or other non-cash assets are distributed with respect to such shares of Common Stock, each Stock Right and the number of shares of Common Stock deliverable thereunder shall be appropriately increased or decreased proportionately, and appropriate adjustments shall be made including, in the exercise, base or purchase price per share and in the Performance Goals applicable to outstanding Performance-Based Awards to reflect such events. The number of Shares subject to the limitations in Paragraph 3(a) and 4(c) shall also be proportionately adjusted upon the occurrence of such events.

(b) Corporate Transactions. If the Company is to be consolidated with or acquired by another entity in a Corporate Transaction, the Administrator or the board of directors of any entity assuming the obligations of the Company hereunder (the "Successor Board"), shall, as to outstanding Options, either: (i) make appropriate provision for the continuation of such Options by substituting on an equitable basis for the Shares then subject to such Options either the consideration payable with respect to the outstanding shares of Common Stock in connection with the Corporate Transaction or securities of any successor or acquiring entity; or
(ii) upon written notice to the Participants, provide that such Options must be exercised (either (A) to the extent then exercisable or (B) at the discretion of the Administrator, any such Options being made partially or fully exercisable for purposes of this Subparagraph), within a specified number of days of the date of such notice, at the end of which period such Options which have not been exercised shall terminate; or (iii) terminate such Options in exchange for payment of an amount equal to the consideration payable upon consummation of such Corporate Transaction to a holder of the number of shares of Common Stock into which such Option would have been exercisable (either (A) to the extent then exercisable or, (B) at the discretion of the Administrator, any such Options being made partially or fully exercisable for purposes of this Subparagraph) less the aggregate exercise price thereof. For purposes of determining the payments to be made pursuant to Subclause (iii) above, in the case of a Corporate Transaction the consideration for which, in whole or in part, is other than cash, the consideration other than cash shall be valued at the fair value thereof as determined in good faith by the Board of Directors.

With respect to outstanding Stock Grants or Stock-Based Awards, the Administrator or the Successor Board, shall make appropriate provision for the continuation of such Stock Grants or Stock-Based Awards on the same terms and conditions by substituting on an equitable basis for the Shares then subject to such Stock Grants or Stock-Based Awards either the consideration payable with respect to the outstanding Shares of Common Stock in connection with the Corporate Transaction or securities of any successor or acquiring entity. In lieu of the foregoing, in connection with any Corporate Transaction, the Administrator may provide that each outstanding Stock Grant or Stock-Based Award shall be terminated in exchange for payment of an amount equal to the consideration payable upon consummation of such Corporate Transaction to a holder of the number of shares of Common Stock comprising such Stock Grant or Stock-Based Award (to the extent such Stock Grant or Stock-Based Award is no longer subject to any forfeiture or repurchase rights then in effect or, at the discretion of the Administrator, all forfeiture and repurchase rights being waived).

In taking any of the actions permitted under this Paragraph 25(b), the Administrator shall not be obligated by the Plan to treat all Stock Rights, all Stock Rights held by a Participant, or all Stock Rights of the same type, identically.

A Stock Right may be subject to acceleration of vesting and exercisability upon or after a Change of Control as may be provided in the Agreement for such Stock Right, in any other written agreement between the Company or any Affiliate and the Participant, in any director compensation policy of the Company, or as otherwise determined by the Administrator.

(c) Recapitalization or Reorganization. In the event of a recapitalization or reorganization of the Company other than a Corporate Transaction pursuant to which securities of the Company or of another corporation are issued with respect to the outstanding shares of Common Stock, a Participant upon exercising an Option or accepting a Stock Grant after the recapitalization or reorganization shall be entitled to receive for the price paid upon such exercise or acceptance if any, the number of replacement securities which would have been received if such Option had been exercised or Stock Grant accepted prior to such recapitalization or reorganization.

(d) Adjustments to Stock-Based Awards. Upon the happening of any of the events described in Subparagraphs (a), (b) or (c) above, any outstanding Stock-Based Award shall be appropriately adjusted to reflect the events described in such Subparagraphs. The Administrator or the Successor Board shall determine the specific adjustments to be made under this Paragraph 25, including, but not limited to the effect of any, Corporate Transaction or Change of Control and, subject to Paragraph 4, its determination shall be conclusive.

(e) Modification of Options. Notwithstanding the foregoing, any adjustments made pursuant to Subparagraph (a), (b) or (c) above with respect to Options shall be made only after the Administrator determines whether such adjustments would (i) constitute a “modification” of any ISOs (as that term is defined in Section 424(h) of the Code) or (ii) cause any adverse tax consequences for the holders of Options, including, but not limited to, pursuant to Section 409A of the Code. If the Administrator determines that such adjustments made with respect to Options would constitute a modification or other adverse tax consequence, it may in its discretion refrain from making such adjustments, unless the holder of an Option specifically agrees in writing that such adjustment be made and such writing indicates that the holder has full knowledge of the consequences of such “modification” on his or her income tax treatment with respect to the Option. This paragraph shall not apply to the acceleration of the vesting of any ISO that would cause any portion of the ISO to violate the annual vesting limitation contained in Section 422(d) of the Code, as described in Paragraph 6(b)(iv).

26. ISSUANCES OF SECURITIES. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares subject to Stock Rights. Except as expressly provided herein, no adjustments shall be made for dividends paid in cash or in property (including without limitation, securities) of the Company prior to any issuance of Shares pursuant to a Stock Right.

27. FRACTIONAL SHARES. No fractional shares shall be issued under the Plan and the person exercising a Stock Right shall receive from the Company cash in lieu of such fractional shares equal to the Fair Market Value thereof.

28. WITHHOLDING. In the event that any federal, state, or local income taxes, employment taxes, Federal Insurance Contributions Act withholdings or other amounts are required by applicable law or governmental regulation to be withheld from the Participant's salary, wages or other remuneration in connection with the issuance of a Stock Right or Shares under the Plan or for any other reason required by law, the Company may withhold from the Participant's compensation, if any, or may require that the Participant advance in cash to the Company, or to any Affiliate of the Company which employs or employed the Participant, the statutory minimum amount of such withholdings unless a different withholding arrangement, including the use of shares of the Company's Common Stock or a promissory note, is authorized by the Administrator (and permitted by law). For purposes hereof, the fair market value of the shares withheld for purposes of payroll withholding shall be determined in the manner set forth under the definition of Fair Market Value provided in Paragraph 1 above, as of the most recent practicable date. If the Fair Market Value of the shares withheld is less than the amount of payroll withholdings required, the Participant may be required to advance the difference in cash to the Company or the Affiliate employer.

29. NOTICE TO COMPANY OF DISQ UALIFYING DISPOSITION . Each Employee who receives an ISO must agree to notify the Company in writing immediately after the Employee makes a Disqualifying Disposition of any Shares acquired pursuant to the exercise of an ISO. A Disqualifying Disposition is defined in Section 424(c) of the Code and includes any disposition (including any sale or gift) of such Shares before the later of (a) two years after the date the Employee was granted the ISO, or (b) one year after the date the Employee acquired Shares by exercising the ISO, except as otherwise provided in Section 424(c) of the Code. If the Employee has died before such Shares are sold, these holding period requirements do not apply and no Disqualifying Disposition can occur thereafter.

30. TERMINATION OF THE PLAN. The Plan will terminate on December 20, 2030, the date which is ten years from the earlier of the date of its adoption by the Board of Directors and the date of its approval by the shareholders of the Company. The Plan may be terminated at an earlier date by vote of the shareholders or the Board of Directors of the Company; provided, however, that any such earlier termination shall not affect any Agreements executed prior to the effective date of such termination. Termination of the Plan shall not affect any Stock Rights theretofore granted.

31. AMENDMENT OF THE PLAN AND AGREEMENTS . The Plan may be amended by the shareholders of the Company. The Plan may also be amended by the Administrator; provided that any amendment approved by the Administrator which the Administrator determines is of a scope that requires shareholder approval shall be subject to obtaining such shareholder approval including, without limitation, to the extent necessary to qualify any or all outstanding Stock Rights granted under the Plan or Stock Rights to be granted under the Plan for favorable federal income tax treatment as may be afforded ISOs under Section 422 of the Code and to the extent necessary to qualify the Shares issuable under the Plan for listing on any national securities exchange or quotation in any national automated quotation system of securities dealers. Any modification or amendment of the Plan shall not, without the consent of a Participant, adversely affect his or her rights under a Stock Right previously granted to such Participant, unless such amendment is required by applicable law or necessary to preserve the economic value of such Stock Right. With the consent of the Participant affected, the Administrator may amend outstanding Agreements in a manner which may be adverse to the Participant but which is not inconsistent with the Plan. In the discretion of the Administrator, outstanding Agreements may be amended by the Administrator in a manner which is not adverse to the Participant. Nothing in this Paragraph 31 shall limit the Administrator's authority to take any action permitted pursuant to Paragraph 25.

32. EMPLOYMENT OR OTHER RELATIONSHIP. Nothing in this Plan or any Agreement shall be deemed to prevent the Company or an Affiliate from terminating the employment, consultancy or director status of a Participant, nor to prevent a Participant from terminating his or her own employment, consultancy or director status or to give any Participant a right to be retained in employment or other service by the Company or any Affiliate for any period of time.

33. SECTION 409A. If a Participant is a “specified employee” as defined in Section 409A of the Code (and as applied according to procedures of the Company and its Affiliates) as of his separation from service, to the extent any payment under this Plan or pursuant to the grant of a Stock-Based Award constitutes deferred compensation (after taking into account any applicable exemptions from Section 409A of the Code), and to the extent required by Section 409A of the Code, no payments due under this Plan or pursuant to a Stock-Based Award may be made until the earlier of: (i) the first day of the seventh month following the Participant’s separation from service, or (ii) the Participant’s date of death; provided, however, that any payments delayed during this six-month period shall be paid in the aggregate in a lump sum, without interest, on the first day of the seventh month following the Participant’s separation from service.

The Administrator shall administer the Plan with a view toward ensuring that Stock Rights under the Plan that are subject to Section 409A of the Code comply with the requirements thereof and that Options under the Plan be exempt from the requirements of Section 409A of the Code, but neither the Administrator nor any member of the Board of Directors, nor the Company nor any of its Affiliates, nor any other person acting hereunder on behalf of the Company, the Administrator or the Board of Directors shall be liable to a Participant or any Survivor by reason of the acceleration of any income, or the imposition of any additional tax or penalty, with respect to a Stock Right, whether by reason of a failure to satisfy the requirements of Section 409A of the Code or otherwise.

34. INDEMNITY. Neither the Board of Directors nor the Administrator, nor any members of either, nor any employees of the Company or any parent, subsidiary, or other Affiliate, shall be liable for any act, omission, interpretation, construction or determination made in good faith in connection with their responsibilities with respect to this Plan, and the Company hereby agrees to indemnify the members of the Board or Directors, the members of the Committee, and the employees of the Company and its parent or subsidiaries in respect of any claim, loss, damage, or expense (including reasonable counsel fees) arising from any such act, omission, interpretation, construction or determination to the full extent permitted by law.

35. CLAWBACK. Notwithstanding anything to the contrary contained in this Plan, the Company may recover from a Participant any compensation received from any Stock Right (whether or not settled) or cause a Participant to forfeit any Stock Right (whether or not vested) in the event that the Company’s Clawback Policy as then in effect is triggered.

36. GOVERNING LAW. This Plan shall be construed and enforced in accordance with the law of the State of Delaware.

Exhibit 10.6

Option No.__

SPRUCE POWER HOLDING CORP.

Stock Option Grant Notice

Stock Option Grant under the Company's 2020 Equity Incentive Plan

1. Name and Address of Participant: _____
2. Grant Date: _____
3. Type of Grant: _____
4. Maximum Number of Shares for which this Option is exercisable: _____
5. Exercise (purchase) price per share: _____
6. Option Expiration Date: _____
7. Vesting Start Date: _____
8. Vesting Schedule: This Option shall become exercisable (and the Shares issued upon exercise shall be vested) as follows provided the Participant is an Employee, director or Consultant of the Company or of an Affiliate on the applicable vesting date:

[Insert Vesting Schedule]

The foregoing rights are cumulative and are subject to the other terms and conditions of this Stock Option Grant Notice and the Plan.

The Company and the Participant acknowledge receipt of this Stock Option Grant Notice and agree to the terms of the Stock Option Agreement attached hereto and incorporated by reference herein, the Company's 2020 Equity Incentive Plan and the terms of this Option Grant as set forth above.

Spruce Power Holding Corp.

By: ____

Name:

Title:

____

Participant

Spruce Power Holding Corp.

STOCK OPTION AGREEMENT - INCORPORATED TERMS AND CONDITIONS

AGREEMENT (this "Agreement") made as of the date of grant set forth in the Stock Option Grant Notice by and between Spruce Power Holding Corp. (the "Company"), a Delaware company, and the individual whose name appears on the Stock Option Grant Notice (the "Participant").

WHEREAS, the Company desires to grant to the Participant an Option to purchase shares of its common stock, $0.0001 par value per share (the "Shares"), under and for the purposes set forth in the Company's 2020 Equity Incentive Plan (the "Plan");

WHEREAS, the Company and the Participant understand and agree that any terms used and not defined herein have the same meanings as in the Plan; and

WHEREAS, the Company and the Participant each intend that the Option granted herein shall be of the type set forth in the Stock Option Grant Notice.

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth and for other good and valuable consideration, the parties hereto agree as follows:

1. GRANT OF OPTION. The Company hereby grants to the Participant the right and option to purchase all or any part of an aggregate of the number of Shares set forth in the Stock Option Grant Notice, on the terms and conditions and subject to all the limitations set forth herein, under United States securities and tax laws, and in the Plan, which is incorporated herein by reference. The Participant acknowledges receipt of a copy of the Plan.

2. EXERCISE PRICE. The exercise price of the Shares covered by the Option shall be the amount per Share set forth in the Stock Option Grant Notice, subject to adjustment, as provided in the Plan, in the event of a stock split, reverse stock split or other events affecting the holders of Shares after the date hereof (the "Exercise Price"). Payment shall be made in accordance with Paragraph 11 of the Plan.

3. EXERCISABILITY OF OPTION. Subject to the terms and conditions set forth in this Agreement and the Plan, the Option granted hereby shall become vested and exercisable as set forth in the Stock Option Grant Notice and is subject to the other terms and conditions of this Agreement and the Plan.

4. TERM OF OPTION. This Option shall terminate on the Option Expiration Date as specified in the Stock Option Grant Notice and, if this Option is designated in the Stock Option Grant Notice as an ISO and the Participant owns as of the date hereof more than 10% of the total combined voting power of all classes of capital stock of the Company or an Affiliate, such date may not be more than five years from the date of this Agreement, but shall be subject to earlier termination as provided herein or in the Plan.

If the Participant ceases to be an Employee, director or Consultant of the Company or of an Affiliate for any reason other than the death or Disability of the Participant, or termination of the Participant for Cause (the "Termination Date"), the Option to the extent then vested and exercisable pursuant to Section 3 hereof as of the Termination Date, and not previously terminated in accordance with this Agreement, may be exercised within **three** months after the Termination Date, or on or prior to the Option Expiration Date as specified in the Stock Option Grant Notice, whichever is earlier, but may not be exercised thereafter except as set forth below. In such event, the unvested portion of the Option shall not be exercisable and shall expire and be cancelled on the Termination Date.

If this Option is designated in the Stock Option Grant Notice as an ISO and the Participant ceases to be an Employee of the Company or of an Affiliate but continues after termination of employment to provide service to the Company or an Affiliate as a director or Consultant, this Option shall continue to vest in accordance with Section 3 above as if this Option had not terminated until the Participant is no longer providing services to the Company. In such case, this Option shall automatically convert and be deemed a Non-Qualified Option as of the date that is three months from termination of the Participant's employment and this Option shall continue on the same terms and conditions set forth herein until such Participant is no longer providing service to the Company or an Affiliate.

Notwithstanding the foregoing, in the event of the Participant's Disability or death within three months after the Termination Date, the Participant or the Participant's Survivors may exercise the Option within one year after the Termination Date, but in no event after the Option Expiration Date as specified in the Stock Option Grant Notice.

In the event the Participant's service is terminated by the Company or an Affiliate for Cause, the Participant's right to exercise any unexercised portion of this Option even if vested shall cease immediately as of the time the Participant is notified his or her service is terminated for Cause, and this Option shall thereupon terminate. Notwithstanding anything herein to the contrary, if subsequent to the Participant's termination, but prior to the exercise of the Option, the Administrator determines that, either prior or subsequent to the Participant's termination, the Participant engaged in conduct which would constitute Cause, then the Participant shall immediately cease to have any right to exercise the Option and this Option shall thereupon terminate.

In the event of the Disability of the Participant, as determined in accordance with the Plan, the Option shall be exercisable within one year after the Participant's termination of service due to Disability or, if earlier, on or prior to the Option Expiration Date as specified in the Stock Option Grant Notice. In such event, the Option shall be exercisable:

(a) to the extent that the Option has become exercisable but has not been exercised as of the date of the Participant's termination of service due to Disability; and

(b) in the event rights to exercise the Option accrue periodically, to the extent of a pro rata portion through the date of the Participant's termination of service due to Disability of any additional vesting rights that would have accrued on the next vesting date had the Participant not become Disabled. The proration shall be based upon the number of days accrued in the current vesting period prior to the date of the Participant's termination of service due to Disability.

In the event of the death of the Participant while an Employee, director or Consultant of the Company or of an Affiliate, the Option shall be exercisable by the Participant's Survivors within one year after the date of death of the Participant or, if earlier, on or prior to the Option Expiration Date as specified in the Stock Option Grant Notice. In such event, the Option shall be exercisable:

(x) to the extent that the Option has become exercisable but has not been exercised as of the date of death; and

(y) in the event rights to exercise the Option accrue periodically, to the extent of a pro rata portion through the date of death of any additional vesting rights that would have accrued on the next vesting date had the Participant not died. The proration shall be based upon the number of days accrued in the current vesting period prior to the Participant's date of death.

5. METHOD OF EXERCISING OPTION. Subject to the terms and conditions of this Agreement, the Option may be exercised by written notice to the Company or its designee, in substantially the form of Exhibit A attached hereto (or in such other form acceptable to the Company, which may include electronic notice). Such notice shall state the number of Shares with respect to which the Option is being exercised and shall be signed by the person exercising the Option (which signature may be provided electronically in a form acceptable to the Company). Payment of the Exercise Price for such Shares shall be made in accordance with Paragraph 11 of the Plan. The Company shall deliver such Shares as soon as practicable after the notice shall be received, provided, however, that the Company may delay issuance of such Shares until completion of any action or obtaining of any consent, which the Company deems necessary under any applicable law (including, without limitation, state securities or "blue sky" laws). The Shares as to which the Option shall have been so exercised shall be registered in the Company's share register in the name of the person so exercising the Option (or, if the Option shall be exercised by the Participant and if the Participant shall so request in the notice exercising the Option, shall be registered in the Company's share register in the name of the Participant and another person jointly, with right of survivorship) and shall be delivered as provided above to or upon the written order of the person exercising the Option. In the event the Option shall be exercised, pursuant to Section 4 hereof, by any person other than the Participant, such notice shall be accompanied by appropriate proof of the right of such person to exercise the Option. All Shares that shall be purchased upon the exercise of the Option as provided herein shall be fully paid and nonassessable.

6. PARTIAL EXERCISE. Exercise of this Option to the extent above stated may be made in part at any time and from time to time within the above limits, except that no fractional share shall be issued pursuant to this Option.

7. NON-ASSIGNABILITY. The Option shall not be transferable by the Participant otherwise than by will or by the laws of descent and distribution. If this Option is a Non-Qualified Option then it may also be transferred pursuant to a qualified domestic relations order as defined by the Code or Title I of the Employee Retirement Income Security Act or the rules thereunder and the Participant, with the approval of the Administrator, may transfer the Option for no consideration to or for the benefit of the Participant's Immediate Family (including, without limitation, to a trust for the benefit of the Participant's Immediate Family or to a partnership or limited liability company for one or more members of the Participant's Immediate Family), subject to such limits as the Administrator may establish, and the transferee shall remain subject to all the terms and conditions applicable to the Option prior to such transfer and each such transferee shall so acknowledge in writing as a condition precedent to the effectiveness of such transfer. The term "Immediate Family" shall mean the Participant's spouse, former spouse, parents, children, stepchildren, adoptive relationships, sisters, brothers, nieces, nephews and grandchildren (and, for this purpose, shall also include the Participant). Except as provided above in this paragraph, the Option shall be exercisable, during the Participant's lifetime, only by the Participant (or, in the event of legal incapacity or incompetency, by the Participant's guardian or representative) and shall not be assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to execution, attachment or similar process. Any attempted transfer, assignment, pledge, hypothecation or other disposition of the Option or of any rights granted hereunder contrary to the provisions of this Section 7, or the levy of any attachment or similar process upon the Option shall be null and void.

8. NO RIGHTS AS STOCKHOLDER UNTIL EXERCISE. The Participant shall have no rights as a stockholder with respect to Shares subject to this Agreement until registration of the Shares in the Company's share register in the name of the Participant. Except as is expressly provided in the Plan with respect to certain changes in the capitalization of the Company, no adjustment shall be made for dividends or similar rights for which the record date is prior to the date of such registration.

9. ADJUSTMENTS. The Plan contains provisions covering the treatment of Options in a number of contingencies such as stock splits and mergers. Provisions in the Plan for adjustment with respect to stock subject to Options and the related provisions with respect to successors to the business of the Company are hereby made applicable hereunder and are incorporated herein by reference**.**

10. TAXES. The Participant acknowledges and agrees that (i) any income or other taxes due from the Participant with respect to this Option or the Shares issuable pursuant to this Option shall be the Participant's responsibility; (ii) the Participant was free to use professional advisors of his or her choice in connection with this Agreement, has received advice from his or her professional advisors in connection with this Agreement, understands its meaning and import, and is entering into this Agreement freely and without coercion or duress; (iii) the Participant has not received and is not relying upon any advice, representations or assurances made by or on behalf of the Company or any Affiliate or any employee of or counsel to the Company or any Affiliate regarding any tax or other effects or implications of the Option, the Shares or other matters contemplated by this Agreement; and
(iv) neither the Administrator, the Company, its Affiliates, nor any of its officers or directors, shall be held liable for any applicable costs, taxes, or penalties associated with the Option if, in fact, the Internal Revenue Service were to determine that the Option constitutes deferred compensation under Section 409A of the Code.

If this Option is designated in the Stock Option Grant Notice as a Non-Qualified Option or if the Option is an ISO and is converted into a Non-Qualified Option and such Non-Qualified Option is exercised, the Participant agrees that the Company may withhold from the Participant's remuneration, if any, the minimum statutory amount of federal, state and local withholding taxes attributable to such amount that is considered compensation includable in such person's gross income. At the Company's discretion, the amount required to be withheld may be withheld in cash from such remuneration, or in kind from the Shares otherwise deliverable to the Participant on exercise of the Option. The Participant further agrees that, if the Company does not withhold an amount from the Participant's remuneration sufficient to satisfy the Company's income tax withholding obligation, the Participant will reimburse the Company on demand, in cash, for the amount under-withheld.

11. PURCHASE FOR INVESTMENT. Unless the offering and sale of the Shares to be issued upon the particular exercise of the Option shall have been effectively registered under the Securities Act, the Company shall be under no obligation to issue the Shares covered by such exercise unless the Company has determined that such exercise and issuance would be exempt from the registration requirements of the Securities Act and until the following conditions have been fulfilled:

(a) The person(s) who exercise the Option shall warrant to the Company, at the time of such exercise, that such person(s) are acquiring such Shares for their own respective accounts, for investment, and not with a view to, or for sale in connection with, the distribution of any such Shares, in which event the person(s) acquiring such Shares shall be bound by the provisions of the following legend which shall be endorsed upon any certificate(s) evidencing the Shares issued pursuant to such exercise:

"The shares represented by this certificate have been taken for investment and they may not be sold or otherwise transferred by any person, including a pledgee, unless (1) either (a) a Registration Statement with respect to such shares shall be effective under the Securities Act of 1933, as amended, or (b) the Company shall have received an opinion of counsel satisfactory to it that an exemption from registration under such Act is then available, and (2) there shall have been compliance with all applicable state securities laws;" and

(b) If the Company so requires, the Company shall have received an opinion of its counsel that the Shares may be issued upon such particular exercise in compliance with the Securities Act without registration thereunder. Without limiting the generality of the foregoing, the Company may delay issuance of the Shares until completion of any action or obtaining of any consent, which the Company deems necessary under any applicable law (including without limitation state securities or "blue sky" laws).

12. RESTRICTIONS ON TRANSFER OF SHARES.

(a) The Participant agrees that in the event the Company proposes to offer for sale to the public any of its equity securities and such Participant is requested by the Company and any underwriter engaged by the Company in connection with such offering to sign an agreement restricting the sale or other transfer of Shares, then it will promptly sign such agreement and will not transfer, whether in privately negotiated transactions or to the public in open market transactions or otherwise, any Shares or other securities of the Company held by him or her during such period as is determined by the Company and the underwriters, not to exceed 180 days following the closing of the offering, plus such additional period of time as may be required to comply with FINRA rules or similar rules thereto promulgated by another regulatory authority (such period, the "Lock-Up Period"). Such agreement shall be in writing and in form and substance reasonably satisfactory to the Company and such underwriter and pursuant to customary and prevailing terms and conditions. Notwithstanding whether the Participant has signed such an agreement, the Company may impose stop- transfer instructions with respect to the Shares or other securities of the Company subject to the foregoing restrictions until the end of the Lock-Up Period.

(b) The Participant acknowledges and agrees that neither the Company, its stockholders nor its directors and officers, has any duty or obligation to disclose to the Participant any material information regarding the business of the Company or affecting the value of the Shares before, at the time of, or following a termination of the service of the Participant by the Company, including, without limitation, any information concerning plans for the Company to make a public offering of its securities or to be acquired by or merged with or into another firm or entity.

13. NO OBLIGATION TO MAINTAIN RELATIONSHIP. The Participant acknowledges that: (i) the Company is not by the Plan or this Option obligated to continue the Participant as an employee, director or Consultant of the Company or an Affiliate; (ii) the Plan is discretionary in nature and may be suspended or terminated by the Company at any time; (iii) the grant of the Option is a one-time benefit which does not create any contractual or other right to receive future grants of options, or benefits in lieu of options; (iv) all determinations with respect to any such future grants, including, but not limited to, the times when options shall be granted, the number of shares subject to each option, the option price, and the time or times when each option shall be exercisable, will be at the sole discretion of the Company; (v) the Participant's participation in the Plan is voluntary; (vi) the value of the Option is an extraordinary item of compensation which is outside the scope of the Participant's employment or consulting contract, if any; and (vii) the Option is not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments.

14. IF OPTION IS INTENDED TO BE AN ISO. If this Option is designated in the Stock Option Grant Notice as an ISO so that the Participant (or the Participant's Survivors) may qualify for the favorable tax treatment provided to holders of Options that meet the standards of Section 422 of the Code then any provision of this Agreement or the Plan which conflicts with the Code so that this Option would not be deemed an ISO is null and void and any ambiguities shall be resolved so that the Option qualifies as an ISO. The Participant should consult with the Participant's own tax advisors regarding the tax effects of the Option and the requirements necessary to obtain favorable tax treatment under Section 422 of the Code, including, but not limited to, holding period requirements.

Notwithstanding the foregoing, to the extent that the Option is designated in the Stock Option Grant Notice as an ISO and is not deemed to be an ISO pursuant to Section 422(d) of the Code because the aggregate Fair Market Value (determined as of the Date of Option Grant) of any of the Shares with respect to which this ISO is granted becomes exercisable for the first time during any calendar year in excess of $100,000, the portion of the Option representing such excess value shall be treated as a Non-Qualified Option and the Participant shall be deemed to have taxable income measured by the difference between the then Fair Market Value of the Shares received upon exercise and the price paid for such Shares pursuant to this Agreement.

Neither the Company nor any Affiliate shall have any liability to the Participant, or any other party, if the Option (or any part thereof) that is intended to be an ISO is not an ISO or for any action taken by the Administrator, including without limitation the conversion of an ISO to a Non-Qualified Option.

15. NOTICE TO COMPANY OF DISQ UALIFYING DISPOSITION OF AN ISO. If this Option is designated in the Stock Option Grant Notice as an ISO then the Participant agrees to notify the Company in writing immediately after the Participant makes a Disqualifying Disposition of any of the Shares acquired pursuant to the exercise of the ISO. A Disqualifying Disposition is defined in Section 424(c) of the Code and includes any disposition (including any sale) of such Shares before the later of (a) two years after the date the Participant was granted the ISO or (b) one year after the date the Participant acquired Shares by exercising the ISO, except as otherwise provided in Section 424(c) of the Code. If the Participant has died before the Shares are sold, these holding period requirements do not apply and no Disqualifying Disposition can occur thereafter.

16. NOTICES. Any notices required or permitted by the terms of this Agreement or the Plan shall be given by recognized courier service, facsimile, registered or certified mail, return receipt requested, addressed as follows:

If to the Company:

Spruce Power Holding Corp. 145 Newton Street
Boston, Massachusetts 02135 Attention:

If to the Participant at the address set forth on the Stock Option Grant Notice

or to such other address or addresses of which notice in the same manner has previously been given. Any such notice shall be deemed to have been given upon the earlier of receipt, one business day following delivery to a recognized courier service or three business days following mailing by registered or certified mail.

17. GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to the conflict of law principles thereof. For the purpose of litigating any dispute that arises under this Agreement, the parties hereby consent to exclusive jurisdiction in State of Massachusetts and agree that such litigation shall be conducted in the state courts of Suffolk County, Massachusetts or the federal courts of the United States for the District of Massachusetts.

18. BENEFIT OF AGREEMENT. Subject to the provisions of the Plan and the other provisions hereof, this Agreement shall be for the benefit of and shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

19. ENTIRE AGREEMENT. This Agreement, together with the Plan, embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof (with the exception of acceleration of vesting provisions contained in any other agreement with the Company). No statement, representation, warranty, covenant or agreement not expressly set forth in this Agreement shall affect or be used to interpret, change or restrict, the express terms and provisions of this Agreement. Notwithstanding the foregoing in all events, this Agreement shall be subject to and governed by the Plan.

20. MODIFICATIONS AND AMENDMENTS. The terms and provisions of this Agreement may be modified or amended as provided in the Plan.

21. WAIVERS AND CONSENTS. Except as provided in the Plan, the terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

22. DATA PRIVACY. By entering into this Agreement, the Participant: (i) authorizes the Company and each Affiliate, and any agent of the Company or any Affiliate administering the Plan or providing Plan recordkeeping services, to disclose to the Company or any of its Affiliates such information and data as the Company or any such Affiliate shall request in order to facilitate the grant of options and the administration of the Plan;
(ii) to the extent permitted by applicable law waives any data privacy rights he or she may have with respect to such information, and (iii) authorizes the Company and each Affiliate to store and transmit such information in electronic form for the purposes set forth in this Agreement.

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NOTICE OF EXERCISE OF STOCK OPTION

[Form for Shares registered in the United States]

To: Spruce Power Holding Corp.

IMPORTANT NOTICE: This form of Notice of Exercise may only be used at such time as the Company has filed a Registration Statement with the Securities and Exchange Commission under which the issuance of the Shares for which this exercise is being made is registered and such Registration Statement remains effective.

Ladies and Gentlemen:

I hereby exercise my Stock Option to purchase__shares (the "Shares") of the common stock, $0.0001 par value, of Spruce Power Holding Corp. (the "Company"), at the exercise price of $__per share, pursuant to and subject to the terms of that Stock Option Grant Notice dated __, 202_.

I understand the nature of the investment I am making and the financial risks thereof. I am aware that it is my responsibility to have consulted with competent tax and legal advisors about the relevant national, state and local income tax and securities laws affecting the exercise of the Option and the purchase and subsequent sale of the Shares.

I am paying the option exercise price for the Shares as follows:

_____

Please issue the Shares (check one):

☐ to me; or

☐ to me and __, as joint tenants with right of survivorship, at the following address:

_____

_____

_____

My mailing address for stockholder communications, if different from the address listed above, is:

_____

_____

_____

Very truly yours,

_____

Participant (signature)

_____

Print Name

_____

Date

Exhibit A-2

Exhibit 10.7

Restricted Stock Unit No. _____

SPRUCE POWER HOLDING CORP.

Restricted Stock Unit Award Grant Notice Restricted Stock Unit Award Grant under the Company's 2020 Equity Incentive Plan

1. Name and Address of Participant: _____

_____

_____

2. Date of Grant of Restricted Stock Unit Award: _____
3. Maximum Number of Shares underlying Restricted Stock Unit Award:
4. Vesting of Award: This Restricted Stock Unit Award shall vest as follows provided the Participant is an Employee, director or Consultant of the Company or of an Affiliate on the applicable vesting:

Number of Restricted Stock Units Vesting Date

The Company and the Participant acknowledge receipt of this Restricted Stock Unit Award Grant Notice and agree to the terms of the Restricted Stock Unit Agreement attached hereto and incorporated by reference herein, the Company's 2020 Equity Incentive Plan and the terms of this Restricted Stock Unit Award as set forth above.

Spruce Power Holding Corp.

By: _____

Name:_____

Title: _____

_____

Participant

SPRUCE POWER HOLDING CORP.

RESTRICTED STOCK UNIT AGREEMENT –

INCORPORATED TERMS AND CONDITIONS

AGREEMENT (this "Agreement") made as of the date of grant set forth in the Restricted Stock Unit Award Grant Notice between Spruce Power Holding Corp. (the "Company"), a Delaware corporation, and the individual whose name appears on the Restricted Stock Unit Award Grant Notice (the "Participant").

WHEREAS, the Company has adopted the 2020 Equity Incentive Plan (the "Plan"), to promote the interests of the Company by providing an incentive for Employees, directors and Consultants of the Company and its Affiliates;

WHEREAS, pursuant to the provisions of the Plan, the Company desires to grant to the Participant restricted stock units ("RSUs") related to the Company's common stock, $0.0001 par value per share ("Common Stock"), in accordance with the provisions of the Plan, all on the terms and conditions hereinafter set forth; and

WHEREAS, the Company and the Participant understand and agree that any terms used and not defined herein have the meanings ascribed to such terms in the Plan.

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. Grant of Award. The Company hereby grants to the Participant an award for the number of RSUs set forth in the Restricted Stock Unit Award Grant Notice (the "Award"). Each RSU represents a contingent entitlement of the Participant to receive one share of Common Stock, on the terms and conditions and subject to all the limitations set forth herein and in the Plan, which is incorporated herein by reference. The Participant acknowledges receipt of a copy of the Plan.

2. Vesting of Award.

(a) Subject to the terms and conditions set forth in this Agreement and the Plan, the Award granted hereby shall vest as set forth in the Restricted Stock Unit Award Grant Notice and is subject to the other terms and conditions of this Agreement and the Plan. On each vesting date set forth in the Restricted Stock Unit Award Grant Notice, the Participant shall be entitled to receive such number of shares of Common Stock equivalent to the number of RSUs as set forth in the Restricted Stock Unit Award Grant Notice provided that the Participant is providing service to the Company or an Affiliate on such vesting date. Such shares of Common Stock shall thereafter be delivered by the Company to the Participant within [five] days of the applicable vesting date and in accordance with this Agreement and the Plan.

(b) Except as otherwise set forth in this Agreement, if the Participant ceases to be providing services for any reason by the Company or by an Affiliate (the "Termination") prior to a vesting date set forth in the Restricted Stock Unit Award Grant Notice, then as of the date on which the Participant's employment or service terminates, all unvested RSUs shall immediately be forfeited to the Company and this Agreement shall terminate and be of no further force or effect.

3. Prohibitions on Transfer and Sale. This Award (including any additional RSUs received by the Participant as a result of stock dividends, stock splits or any other similar transaction affecting the Company's securities without receipt of consideration) shall not be transferable by the Participant otherwise than (i) by will or by the laws of descent and distribution, or (ii) pursuant to a qualified domestic relations order as defined by the Internal Revenue Code or Title I of the Employee Retirement Income Security Act or the rules thereunder. Except as provided in the previous sentence, the shares of Common Stock to be issued pursuant to this Agreement shall be issued, during the Participant's lifetime, only to the Participant (or, in the event of legal incapacity or incompetence, to the Participant's guardian or representative). This Award shall not be assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to execution, attachment or similar process. Any attempted transfer, assignment, pledge, hypothecation or other disposition of this Award or of any rights granted hereunder contrary to the provisions of this Section 3, or the levy of any attachment or similar process upon this Award shall be null and void.

4. Adjustments. The Plan contains provisions covering the treatment of RSUs and shares of Common Stock in a number of contingencies such as stock splits. Provisions in the Plan for adjustment with respect to this Award and the related provisions with respect to successors to the business of the Company are hereby made applicable hereunder and are incorporated herein by reference.

5. Securities Law Compliance. The Participant specifically acknowledges and agrees that any sales of shares of Common Stock shall be made in accordance with the requirements of the Securities Act of 1933, as amended. The Company currently has an effective registration statement on file with the Securities and Exchange Commission with respect to the Common Stock to be granted hereunder. The Company intends to maintain this registration statement but has no obligation to do so. If the registration statement ceases to be effective for any reason, Participant will not be able to transfer or sell any of the shares of Common Stock issued to the Participant pursuant to this Agreement unless exemptions from registration or filings under applicable securities laws are available. Furthermore, despite registration, applicable securities laws may restrict the ability of the Participant to sell his or her Common Stock, including due to the Participant's affiliation with the Company. The Company shall not be obligated to either issue the Common Stock or permit the resale of any shares of Common Stock if such issuance or resale would violate any applicable securities law, rule or regulation.

6. Rights as a Stockholder. The Participant shall have no right as a stockholder, including voting and dividend rights, with respect to the RSUs subject to this Agreement.

7. Incorporation of the Plan. The Participant specifically understands and agrees that the RSUs and the shares of Common Stock to be issued under the Plan will be issued to the Participant pursuant to the Plan, a copy of which Plan the Participant acknowledges he or she has read and understands and by which Plan he or she agrees to be bound. The provisions of the Plan are incorporated herein by reference.

8. Tax Liability of the Participant and Payment of Taxes. The Participant acknowledges and agrees that any income or other taxes due from the Participant with respect to this Award or the shares of Common Stock to be issued pursuant to this Agreement or otherwise sold shall be the Participant's responsibility. Without limiting the foregoing, the Participant agrees that if under applicable law the Participant will owe taxes at each vesting date on the portion of the Award then vested the Company shall be entitled to immediate payment from the Participant of the amount of any tax or other amounts required to be withheld by the Company by applicable law or regulation. Any taxes or other amounts due shall be paid, at the option of the Administrator as follows:

(a) through reducing the number of shares of Common Stock entitled to be issued to the Participant on the applicable vesting date in an amount equal to the statutory minimum of the Participant's total tax and other withholding obligations due and payable by the Company. Fractional shares will not be retained to satisfy any portion of the Company's withholding obligation. Accordingly, the Participant agrees that in the event that the amount of withholding required would result in a fraction of a share being owed, that amount will be satisfied by withholding the fractional amount from the Participant's paycheck;

(b) requiring the Participant to deposit with the Company an amount of cash equal to the amount determined by the Company to be required to be withheld with respect to the statutory minimum amount of the Participant's total tax and other withholding obligations due and payable by the Company or otherwise withholding from the Participant's paycheck an amount equal to such amounts due and payable by the Company; or

(c) if the Company believes that the sale of shares can be made in compliance with applicable securities laws, authorizing, at a time when the Participant is not in possession of material nonpublic information, the sale by the Participant on the applicable vesting date of such number of shares of Common Stock as the Company instructs a registered broker to sell to satisfy the Company's withholding obligation, after deduction of the broker's commission, and the broker shall be required to remit to the Company the cash necessary in order for the Company to satisfy its withholding obligation. To the extent the proceeds of such sale exceed the Company's withholding obligation the Company agrees to pay such excess cash to the Participant as soon as practicable. In addition, if such sale is not sufficient to pay the Company's withholding obligation the Participant agrees to pay to the Company as soon as practicable, including through additional payroll withholding, the amount of any withholding obligation that is not satisfied by the sale of shares of Common Stock. The Participant agrees to hold the Company and the broker harmless from all costs, damages or expenses relating to any such sale. The Participant acknowledges that the Company and the broker are under no obligation to arrange for such sale at any particular price. In connection with such sale of shares of Common Stock, the Participant shall execute any such documents requested by the broker in order to effectuate the sale of shares of Common Stock and payment of the withholding obligation to the Company. The Participant acknowledges that this paragraph is intended to comply with Section 10b5-1(c)(1(i)(B) under the Exchange Act.

[It is the Company's intention that the Participant's tax obligations under this Section 8 shall be satisfied through the procedure of Subsection (c) above, unless the Company provides notice of an alternate procedure under this Section, in its discretion. The Company shall not deliver any shares of Common Stock to the Participant until it is satisfied that all required withholdings have been made.] The Company shall not deliver any shares of Common Stock to the Participant until it is satisfied that all required withholdings have been made.

9. Participant Acknowledgements and Authorizations. The

Participant acknowledges the following:

(a) The Company is not by the Plan or this Award obligated to continue the Participant as an employee, director or consultant of the Company or an Affiliate.

(b) The Plan is discretionary in nature and may be suspended or terminated by the Company at any time.

(c) The grant of this Award is considered a one-time benefit and does not create a contractual or other right to receive any other award under the Plan, benefits in lieu of awards or any other benefits in the future.

(d) The Plan is a voluntary program of the Company and future awards, if any, will be at the sole discretion of the Company, including, but not limited to, the timing of any grant, the amount of any award, vesting provisions and the purchase price, if any.

(e) The value of this Award is an extraordinary item of compensation outside of the scope of the Participant's employment or consulting contract, if any. As such the Award is not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments. The future value of the shares of Common Stock is unknown and cannot be predicted with certainty.

(f) The Participant (i) authorizes the Company and each Affiliate and any agent of the Company or any Affiliate administering the Plan or providing Plan recordkeeping services, to disclose to the Company or any of its Affiliates such information and data as the Company or any such Affiliate shall request in order to facilitate the grant of the Award and the administration of the Plan; and (ii) authorizes the Company and each Affiliate to store and transmit such information in electronic form for the purposes set forth in this Agreement.

10. Notices. Any notices required or permitted by the terms of this Agreement or the Plan shall be given by recognized courier service, facsimile, registered or certified mail, return receipt requested, addressed as follows:

If to the Company:

Spruce Power Holding Corp. 145 Newton
Street
Boston, Massachusetts 02135
Attn: __

If to the Participant at the address set forth on the Restricted Stock Unit Award Grant Notice or to such other address or addresses of which notice in the same manner has previously been given. Any such notice shall be deemed to have been given on the earliest of receipt, one business day following delivery by the sender to a recognized courier service, or three business days following mailing by registered or certified mail.

11. Assignment and Successors.

(a) This Agreement is personal to the Participant and without the prior written consent of the Company shall not be assignable by the Participant otherwise than by will or the laws of descent and distribution. This Agreement shall inure to the benefit of and be enforceable by the Participant's legal representatives.

(b) This Agreement shall inure to the benefit of and be binding upon the Company and its successors and assigns.

12. Governing Law. This Agreement shall be construed and enforced in accordance with the laws of the State of Delaware, without giving effect to the conflict of law principles thereof. For the purpose of litigating any dispute that arises under this Agreement, whether at law or in equity, the parties hereby consent to exclusive jurisdiction in the State of Massachusetts and agree that such litigation shall be conducted in the state courts of the State of Massachusetts or the federal courts of the United States for the District of Massachusetts.

13. Severability. If any provision of this Agreement is held to be invalid or unenforceable by a court of competent jurisdiction, then such provision or provisions shall be modified to the extent necessary to make such provision valid and enforceable, and to the extent that this is impossible, then such provision shall be deemed to be excised from this Agreement, and the validity, legality and enforceability of the rest of this Agreement shall not be affected thereby.

14. Entire Agreement. This Agreement, together with the Plan, constitutes the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement not expressly set forth in this Agreement shall affect or be used to interpret, change or restrict the express terms and provisions of this Agreement provided, however, in any event, this Agreement shall be subject to and governed by the Plan.

15. Modifications and Amendments; Waivers and Consents. The terms and provisions of this Agreement may be modified or amended as provided in the Plan. Except as provided in the Plan, the terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

16. Section 409A. The Award of RSUs evidenced by this Agreement is intended to be exempt from the nonqualified deferred compensation rules of Section 409A of the Code as a "short term deferral" (as that term is used in the final regulations and other guidance issued under Section 409A of the Code, including Treasury Regulation Section 1.409A-1(b)(4)(i)), and shall be construed accordingly.

17. Data Privacy. By entering into this Agreement, the Participant: (i) authorizes the Company and each Affiliate, and any agent of the Company or any Affiliate administering the Plan or providing Plan recordkeeping services, to disclose to the Company or any of its Affiliates such information and data as the Company or any such Affiliate shall request in order to facilitate the grant of options and the administration of the Plan; (ii) to the extent permitted by applicable law waives any data privacy rights he or she may have with respect to such information, and (iii) authorizes the Company and each Affiliate to store and transmit such information in electronic form for the purposes set forth in this Agreement.

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Exhibit 21

Subsidiaries of Registrant

Name	Percentage Ownership	State of Organization
Spruce Holding Company 1 LLC	100%	Delaware
Spruce Holding Company 2 LLC	100%	Delaware
Spruce Holding Company 3 LLC	100%	Delaware
Spruce Manager, LLC	100%	Delaware
Spruce Home 2, LLC	100%	Delaware
Spruce Asset Management, LLC	100%	Delaware
Spruce Capital & Trading, LLC	100%	Delaware
Spruce Sequoia, LLC	100%	Delaware
Spruce Servicing, LLC	100%	Delaware
Spruce Maple, LLC	100%	Delaware
Spruce IP Properties, LLC	100%	Delaware
Spruce Power Pledgor, LLC	100%	Delaware
Catania Solar, LLC	100%	Delaware
Spruce Market, LLC	100%	Delaware
Solar Service Experts, LLC (dba Spruce Power)	100%	Delaware
Spruce Lending, Inc.	100%	Delaware
Spruce Storage, LLC	100%	Delaware
Spruce Power Holdings, LLC	100%	Delaware
Spruce Fleet, LLC	100%	Delaware
Spruce ABS, LLC	100%	Delaware
KWS Solar Term Parent 1, LLC	100%	Delaware
KWS Solar Term Parent 2, LLC	100%	Delaware
KWS Solar Term Parent 3, LLC	100%	Delaware
KWS Solar Term Borrower 1, LLC	100%	Delaware
KWS Solar Term Borrower 2, LLC	100%	Delaware
KWS Solar Term Borrower 3, LLC	100%	Delaware
Spruce Power 1, LLC	100%	Delaware
Spruce NYGB Pledgor, LLC	100%	Delaware
Spruce NYGB Borrower, LLC	100%	Delaware
Sungevity Greenwich Lessor, LLC	100%	Delaware
Kilowatt OBS Owner 1, LLC	100%	Delaware
Spruce PV - OBS Systems, LLC	100%	Delaware
Volta Manager Holding II, LLC	100%	Delaware
Ampere Solar Manager IV, LLC	100%	Delaware
Spruce MH Owner 2 NYGB, LLC	100%	Delaware
Ampere Solar Owner 1, LLC	100%	Delaware
ORE F4 HoldCo, LLC	100%	Delaware
ORE F4 ProjectCo, LLC	100%	Delaware
ORE F5A Holdco, LLC	100%	Delaware
ORE F5A ProjectCo, LLC	100%	Delaware
ORE F6 HoldCo, LLC	100%	Delaware
ORE F6 ProjectCo, LLC	100%	Delaware
SunServe Residential Solar I, LLC	100%	Delaware
Volta Solar Manager II, LLC	100%	Delaware
Volta Solar Owner II, LLC	100%	Delaware
Ampere Solar Owner IV, LLC	100%	Delaware

Spruce Manager Holding 2 NYGB, LLC	100%	Delaware
Spruce Power 2, LLC	100%	Delaware
Spruce Power 3 HoldCo, LLC	100%	Delaware
Spruce Power 3, LLC	100%	Delaware
Spruce Power 4 HoldCo, LLC	100%	Delaware
Spruce Power 4, LLC	100%	Delaware
SS Holdings 2017, LLC	100%	Delaware
SunStreet Energy Master Tenant Holdings, LLC ("SEMTH" or "FinCo")	100%	Delaware
Sunstreet Energy Tenant, LLC ("SET" or "Tenant")	100%	Delaware
SET Borrower 2022, LLC ("Borrower")	100%	Delaware

Exhibit 23.1

Independent Registered Public Accounting Firm's Consent

We consent to the incorporation by reference in Registration Statement No. 333-252089 on Form S-3 and Registration Statement No. 333-261393 on Form S-8 of our report dated March 30, 2023, with respect to our audit of the consolidated financial statements of Spruce Power Holding Corporation as of December 31, 2022 and for the year then ended, which report is included in this Annual Report on Form 10-K of Spruce Power Holding Corporation for the year ended December 31, 2023.

Our report on the consolidated financial statements is before the effects of the adjustments to retrospectively apply the reverse stock split described in Note 2 which was audited by other auditors.

/s/ Marcum LLP

Marcum LLP
Melville, NY
April 8, 2024

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-252089 on Form S-3 and Registration Statement No. 333-261393 on Form S-8 of our report dated April 8, 2024 relating to the financial statements of Spruce Power Holding Corporation appearing in this Annual Report on Form 10-K for the year ended December 31, 2023.

/s/ Deloitte & Touche LLP

Houston, Texas
April 8, 2024

Exhibit 31.1

CERTIFICATION PURSUANT TO
SECURITIES EXCHANGE ACT RULES 13a-14(a) and 15d-14(a) AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Christian Fong, certify that:

1. I have reviewed this Form 10-Q of Spruce Power Holding Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13-a-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 my supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to me 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 my 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: April 8, 2024

By: */s/ Christian Fong*

Christian Fong

Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
SECURITIES EXCHANGE ACT RULES 13a-14(a) and 15d-14(a) AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Sarah Weber Wells, certify that:

1. I have reviewed this Form 10-Q of Spruce Power Holding Corporation.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13-a-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 my supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to me 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 my 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: April 8, 2024

By: */s/ Sarah Weber Wells*

Sarah Weber Wells

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

Exhibit 32.1

CERTIFICATION PURSUANT TO SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Spruce Power Holding Corporation (the "Corporation") on Form 10-Q for the fiscal quarter ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Christian Fong, as Chief Executive Officer of the Corporation, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Date: April 8, 2024

By: */s/ Christian Fong*

Christian Fong
Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request. This certification shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of Section 18 of the Exchange Act. Such certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

Exhibit 32.2

CERTIFICATION PURSUANT TO SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Spruce Power Holding Corporation (the "Corporation") on Form 10-Q for the fiscal quarter ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Sarah Weber Wells, as Chief Financial Officer of the Corporation, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Corporation.

Date: April 8, 2024

By: */s/ Sarah Weber Wells*

Sarah Weber Wells,
Chief Financial Officer
(Principal Financial Officer and
Principal Accounting Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request. This certification shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of Section 18 of the Exchange Act. Such certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

Exhibit 97

SPRUCE POWER HOLDING CORPORATION

CLAWBACK POLICY

(adopted as of December 1, 2023)

INTRODUCTION

The Board of Directors (the "Board") of Spruce Power Holding Corporation (the "Company") believes that it is in the best interests of the Company and its stockholders to create and maintain a culture that emphasizes integrity and accountability and that reinforces the Company's pay-for-performance compensation philosophy. The Board has therefore adopted this policy (this "Policy") which provides for the recoupment of certain executive compensation in the event of an accounting restatement resulting from material noncompliance with financial reporting requirements under securities laws. This Policy is designed to comply with Section 10D of the Securities Exchange Act of 1934 and any applicable rules or standards adopted by the Securities and Exchange Commission (the "SEC") or any national securities exchange on which the Company's securities are listed (collectively, the "Applicable Rules").

ADMINISTRATION

This Policy shall be administered by the Board or, if so designated by the Board, the Compensation Committee, in which case references herein to the Board shall be deemed references to the Compensation Committee. Any determinations made by the Board shall be final and binding on all affected individuals.

COVERED EXECUTIVES

This Policy applies to the Company's current and former executive officers, as determined by the Board in accordance with the Applicable Rules (the "Covered Executives"). This Policy applies to any Covered Executive who receives Incentive Compensation after such Covered Executive began service as an executive officer and who served as an executive officer at any time during the performance period for the Incentive Compensation.

RECOUPMENT; ACCOUNTING RESTATEMENT

In the event the Company is required to prepare an accounting restatement of its financial statements due to the Company's material noncompliance with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period, the Board will require reimbursement or forfeiture of any excess Incentive Compensation received by any Covered Executive during the three completed fiscal years immediately preceding the date on which the Company is required to prepare an accounting restatement. Such recoupment shall be made reasonably promptly after the Company is required to prepare such an accounting restatement.

For these purposes, the date the Company is required to prepare an accounting restatement will be the earlier of:

- the date the Company's board of directors, a committee of the board of directors, or the officer or officers of the Company authorized to take such action if board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare an accounting restatement; or

- the date a court, regulator, or other legally authorized body directs the Company to prepare an accounting restatement.

INCENTIVE COMPENSATION

For purposes of this Policy, Incentive Compensation means any compensation that is granted, earned or vested based wholly or in part on the attainment of a Financial Reporting Measure, and may include the following:

- Annual bonuses and other short- and long-term cash incentives.
- Stock options.
- Stock appreciation rights.
- Restricted stock.
- Restricted stock units.
- Performance shares.
- Performance units.

Financial Reporting Measures are measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures. A financial reporting measure need not be presented within the financial statements or included in a filing with the SEC. Examples of Financial Reporting Measures include:

- Company stock price.
- Total stockholder return.
- Revenues.
- Net income.
- Earnings before interest, taxes, depreciation, and amortization (EBITDA).
- Funds from operations.
- Liquidity measures such as working capital or operating cash flow.
- Return measures such as return on invested capital or return on assets.
- Earnings measures such as earnings per share.

EXCESS INCENTIVE COMPENSATION: AMOUNT SUBJECT TO RECOVERY

The amount to be recovered will be the excess of the Incentive Compensation paid to the Covered Executive based on the erroneous data over the Incentive Compensation that would have been paid to the Covered Executive had it been based on the restated results, computed without regard to any taxes paid, as determined by the Board.

If the Board cannot determine the amount of excess Incentive Compensation received by the Covered Executive directly from the information in the accounting restatement, then it will make its determination based on a reasonable estimate of the effect of the accounting restatement.

The Company will maintain documentation of the determination of the amount to be recovered.

METHOD OF RECOUPMENT

The Board will determine, in its sole discretion, the method for recouping Incentive Compensation hereunder which may include, without limitation:

- requiring reimbursement of cash Incentive Compensation previously paid;
- seeking recovery of any gain realized on the vesting, exercise, settlement, sale, transfer, or other disposition of any equity-based awards;
- offsetting the recouped amount from any compensation otherwise owed by the Company to the Covered Executive;
- cancelling outstanding vested or unvested equity awards; and/or
- taking any other remedial and recovery action permitted by law, as determined by the Board.

NO INDEMNIFICATION

The Company shall not indemnify any Covered Executives against the loss of any incorrectly awarded Incentive Compensation.

INTERPRETATION

The Board is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate, or advisable for the administration of this Policy. It is intended that this Policy be interpreted in a manner that is consistent with the requirements of the Applicable Rules.

EFFECTIVE DATE

This Policy shall be effective as of October 2, 2023 (the “Effective Date”) and shall apply to Incentive Compensation that is approved, awarded or granted to Covered Executives on or after that date.

AMENDMENT; TERMINATION

The Board may amend this Policy from time to time in its discretion and shall amend this Policy as it deems necessary to reflect any changes in the Applicable Rules. The Board may terminate this Policy at any time.

OTHER RECOUPMENT RIGHTS

The Board intends that this Policy will be applied to the fullest extent of the law. The Board may require that any employment agreement, equity award agreement, or similar agreement entered into on or after the Effective Date shall, as a condition to the grant of any benefit thereunder, require a Covered Executive to agree to abide by the terms of this Policy. Any right of recoupment under this Policy is in addition to, and not in lieu of, any other remedies or rights of recoupment that may be available to the Company pursuant to the terms of any similar policy in any employment agreement, equity award agreement, or similar agreement and any other legal remedies available to the Company.

IMPRACTICABILITY

The Board shall recover any excess Incentive Compensation in accordance with this Policy unless such recovery would be impracticable, as determined by the Board in accordance with the Applicable Rules.

SUCCESSORS

This Policy shall be binding and enforceable against all Covered Executives and their beneficiaries, heirs, executors, administrators or other legal representatives.