

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2024

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to**

Commission File Number: 001-39845

SES AI Corporation

(Exact name of registrant as specified in its Charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

35 Cabot Road Woburn, MA
(Address of principal executive offices)

88-0641865
(I.R.S. Employer
Identification No.)

01801
(Zip Code)

Registrant's telephone number, including area code: (339) 298-8750

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

<u>Title of Each Class</u>	<u>Trading Symbol(s)</u>	<u>Name of Exchange on which registered</u>
Class A common stock, par value \$0.0001 per share	SES	The New York Stock Exchange
Warrants to purchase one share of Class A common stock, each at an exercise price of \$11.50	SES WS	The 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 ☐ No ☒

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

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

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

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

The aggregate market value of the voting and non-voting stock held by non-affiliates of the registrant as of June 28, 2024, the last business day of the registrant's most recently completed second fiscal quarter, was approximately \$392.0 million, calculated by using the closing price of the registrant's Class A common stock on such date on the New York Stock Exchange of \$1.25.

As of February 25, 2025, there were 320,778,608 shares of the registrant's Class A common stock and 43,881,251 shares of the registrant's Class B common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant intends to file a proxy statement pursuant to Regulation 14A within 120 days of the end of the fiscal year ended December 31, 2024. Portions of such proxy statement are incorporated by reference into Part III of this Annual Report on Form 10-K.

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EXPLANATORY NOTE

Unless otherwise stated or unless the context otherwise requires, the terms “we,” “us,” “our,” “SES,” and the “Company” refer to SES AI Corporation, a Delaware corporation (f/k/a Ivanhoe Capital Acquisition Corp., a Cayman Islands exempted company (“Ivanhoe”)) and its consolidated subsidiaries, after giving effect to the Business Combination (as defined below).

We were originally formed as a Cayman Islands exempted company in July of 2020 for the purpose of effecting a merger, share exchange, asset acquisition, stock purchase, reorganization, recapitalization or other similar business combination with one or more businesses. On January 11, 2021, we consummated our initial public offering (the “IPO”), following which our securities began trading on the New York Stock Exchange (the “NYSE”).

On February 3, 2022 (the “Closing Date”), Ivanhoe consummated its previously announced business combination (the “Business Combination”) with SES Holdings Pte. Ltd., a Singapore private company limited by shares (“Old SES”), pursuant to the terms of that certain Business Combination Agreement (as amended, the “Business Combination Agreement”) by and among Ivanhoe, Old SES, and Wormhole Amalgamation Sub Pte. Ltd., a Singapore private company limited by shares, and a direct, wholly-owned subsidiary of Ivanhoe (“Amalgamation Sub”).

Pursuant to the terms of the Business Combination Agreement and in connection with the closing of the Business Combination (the “Closing”), (i) Ivanhoe migrated out of the Cayman Islands and domesticated as a Delaware corporation (the “Domestication”) by way of continuation and deregistration under Part XII of the Cayman Islands Companies Act and domestication under Section 388 of the Delaware General Corporation Law (“DGCL”), (ii) Ivanhoe changed its name to “SES AI Corporation” (“SES,” or the “Company”), and (iii) Amalgamation Sub merged with and into Old SES, with Old SES as the surviving company (the “Amalgamation”) (the time that the Amalgamation became effective is referred to as the “Effective Time”). As a result of the Amalgamation, Old SES became our wholly-owned subsidiary.

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS AND RISK FACTORS SUMMARY

This Annual Report on Form 10-K (this Annual Report”) contains statements that the Company believes are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, without limitation, statements relating to expectations for future financial performance, business strategies or expectations for our business. These statements are based on the beliefs and assumptions of the management of the Company. Although the Company believes that its plans, intentions and expectations reflected in or suggested by these forward-looking statements are reasonable, it cannot provide assurance that it will achieve or realize these plans, intentions or expectations. These statements constitute projections, forecasts and forward-looking statements, and are not guarantees of performance. Such statements can be identified by the fact that they do not relate strictly to historical or current facts. When used in this Annual Report, words such as “anticipate,” “believe,” “can,” “continue,” “could,” “estimate,” “expect,” “forecast,” “intend,” “may,” “might,” “plan,” “possible,” “potential,” “predict,” “project,” “seek,” “should,” “strive,” “target,” “will,” “would” and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking.

You should not place undue reliance on these forward-looking statements. Should one or more of a number of known and unknown risks and uncertainties materialize, or should any of our assumptions prove incorrect, the Company’s actual results or performance may be materially different from those expressed or implied by these forward-looking statements. Some factors that could cause actual results to differ include, but are not limited to the risks below, which also serves as a summary of the principal risks of an investment in our securities:

- We face significant challenges in developing a Lithium-Metal (“Li-Metal”) battery that can be commercialized for use in electric vehicles (“EVs”) and other applications, and the pace of development is often unpredictable and subject to delays.
- We expect to continue to incur losses for the foreseeable future. While we expect to become profitable eventually, our projects are based on internal assumptions that may prove incorrect, and we may never achieve or maintain profitability.
- We will need substantial additional capital in the future to fund our business and may be unable to meet our future capital requirements, impairing our financial position and results of operations.
- Our Li-Metal technology is untested in actual EVs and may ultimately prove unworkable.
- The market for UAM, and for use of Li-Metal technology in UAM applications, is still emerging and may not achieve the growth potential we expect.

- If our batteries fail to perform as expected our ability to develop, market and sell our batteries could be harmed.
- We are unable to predict user behavior when driving EVs with Li-Metal technology.
- Delays in the pre-manufacturing development of our battery cells could adversely affect our business and prospects.
- We may not be able to engage target original equipment manufacturers (“OEMs”) customers successfully and to convert such contacts into meaningful orders in the future.
- If we are unable to integrate our products into EVs manufactured by OEM customers, our results of operations could be impaired.
- We may not be able to establish new, or maintain existing, supply relationships for necessary raw materials, components or equipment or may be required to pay costs for raw materials, components or equipment that are more expensive than anticipated, which could delay the introduction of our product and negatively impact our business.
- Our ability to manufacture our Li-Metal batteries at scale depends on our ability to build, operate and staff our facilities successfully, as well as to obtain sufficient contract manufacturing specificity.
- We have pursued and may continue to pursue joint development agreements (“JDAs”), service contracts and other strategic alliances, which could have an adverse impact on our business if they are unsuccessful or if we are unable to enter into new strategic alliances.
- The EV battery market continues to evolve and is highly competitive, and certain other battery manufacturers have significantly greater resources than we do.
- We may not be able to estimate accurately the future supply and demand for our batteries, which could result in a variety of inefficiencies in our business and hinder our ability to generate revenue. If we fail to predict accurately our manufacturing requirements, we could incur additional costs or experience delays.
- Certain components of our batteries pose safety risks that may cause accidents. We may be subject to financial and reputational risks due to product recalls and product liability claims, and we could face substantial liabilities that exceed our resources.
- Our use of artificial intelligence and machine learning may result in legal and regulatory risks.
- The market for our AI-based services is still emerging and our AI programs may not achieve the growth potential we expect.
- Our patent applications may not result in issued patents or our patent rights may be challenged, invalidated or limited in scope, any of which could have a material adverse effect on our ability to prevent others from competing or interfering with the commercialization of our products.
- We rely heavily on our intellectual property portfolio, including unpatented proprietary technology. If we are unable to protect our intellectual property rights from unauthorized use, our business and competitive position would be harmed.
- The international nature of our business exposes us to business, regulatory, political, operational, financial and economic risks associated with doing business outside of the United States.
- The price of our Class A common stock has been and may continue to be volatile.
- Our public warrants may never be in the money, and they may expire worthless.
- We are controlled or substantially influenced by Dr. Qichao Hu and certain entities affiliated with Dr. Hu, whose interests may conflict with other stockholders. The concentrated ownership of our dual class common stock could prevent stockholders from influencing significant decisions.
- Our failure to satisfy certain New York Stock Exchange (“NYSE”) listing requirements may result in our Class A common stock being delisted from the NYSE, which could eliminate or adversely affect the trading market for our Class A common stock.
- We have a history of material weaknesses in our internal control over financial reporting, and a failure to remediate any such weakness and/or our identification of new ones could have an adverse impact on the value of our Class A common stock.
- The other factors described in “Part I, Item 1A” in this Annual Report.

PART I

Item 1. Business

Overview

We are a leading developer and manufacturer of high-performance, AI-enhanced Lithium-Metal (“Li-Metal”) and Lithium-ion (“Li-ion”) rechargeable battery technologies for electric vehicles (“EVs”), Urban Air Mobility (“UAM”), drones, robotics, Battery Energy Storage Systems (“BESS”) and other applications. Our differentiated battery technology has been designed to combine the high energy density of Li-Metal and Li-ion with the large-scale manufacturability of conventional Li-ion batteries in order to help promote the transition from the global dependence on fossil fuel-based vehicles to clean and efficient EVs, with the goal of enabling a new era of electric transportation on land and in the air. We are seeking to accelerate our pace of innovation by currently utilizing artificial intelligence (“AI”) across the spectrum of our business, from engineering and manufacturing to battery health and safety monitoring and AI-accelerated battery materials discovery.

SES’s mission is to accelerate the world’s energy transition through material discovery and battery management. Our team has dedicated the past decade to developing a comprehensive and proprietary Li-Metal and Li-ion battery technology platform, including high concentration solvent-in-salt electrolyte, ultra-thin wide format lithium anode, protective anode coating, and novel cell engineering processes that are based on scalable Li-ion manufacturing but address unique lithium metal plating challenges. As we build more AI-enhanced Li-Metal and Li-ion cells and generate more data, AI has become an increasingly integral part of our business in material development, battery health monitoring and incident prediction, with our AI initiatives consisting of AI for Science, AI for Manufacturing and AI for Safety. We believe that our AI for Science has the potential to accelerate our pipeline material discovery by mapping the vast universe of small molecules, with the goal to improve battery performance and safety. Our AI for Manufacturing uses machine learning to help define and fine-tune quality specifications based on manufacturing process data. Our AI for Safety is designed to monitor battery state-of-health and predict incidents more accurately than conventional battery management system.

Four Pillars of our Business

There are four pillars to our mission.

1. Electric Vehicles (EV)

In 2012, we transitioned away from solid state Li-Metal so our Li-Metal batteries could operate at room temperature and be manufactured at large scale. In 2024, we began producing large 50 Amp-hour (“Ah”) and 100Ah B-sample Li-Metal battery cells for EVs. We made significant progress in automotive Li-Metal cell manufacturing by addressing key manufacturing challenges in ultra-thin wide format lithium anode, issues related to powder and metal bur in lithium anode punching, high concentration electrolyte scale-up, and other issues related to quality and safety in automotive large Li-Metal cell manufacturing. We have performed in-house testing on these 50Ah and 100Ah Li-Metal B-sample cells and shared testing data with our OEM partners, as well as shipped these B-sample cells to other third parties and OEMs for their further performance and safety testing.

We believe that our AI-enhanced Li-Metal battery technology demonstrates industry-leading energy density and performance and have the ability to:

- deliver a lightweight and compact battery, and substantially reduce range anxiety of EV consumers;
- provide fast-charge capability to charge the battery to 80% in less than 15 minutes, significantly reducing charging times;
- incorporate AI software and battery management systems (“BMS”), which will accurately monitor the state of health of the battery and apply appropriate self-healing protocols;
- achieve rapid market adoption due to our strategic partnerships, including with leading global OEMs, such as Hyundai Motor Company (“Hyundai”) and Honda Motor Company, Ltd. (“Honda”); and
- capitalize on the innovation occurring in Li-ion, including improvements in energy density, manufacturing efficiency and cost reduction, as our manufacturing processes are very similar to Li-ion.

In 2024, we transitioned from developing and producing A-Sample batteries to B-Samples to meet carmakers' requirements for their electric vehicles. A-Sample batteries are functional prototypes developed for OEMs based on their technical specifications. These are in contrast with B-Sample batteries, which are A-sample batteries manufactured under much higher throughput and tested in actual vehicles.

We expect to develop and produce C-Samples batteries beginning in 2026, which would be fully functional, mature samples for mass production and tested for full drivability in actual EVs. As we remain focused on B-Sample battery development, we do not yet have any arrangements with OEMs to manufacture consumer-ready batteries for their EVs. We expect this progress will pave the way for commercial production of our technology in 2027. For more information on collaborations with these OEMs, see “Our Partnerships” below.

2. Urban Air Mobility (UAM)

We believe that UAM is a perfect fit for Li-Metal. In our view, B-sample battery cell technology requires less additional development to reach commercial production for use in UAM than in EVs, and that our B-sample technology for EVs can be adapted for UAMs. UAM frequently operates on a fleet business model where the key business metrics are cost per passenger per mile, with weight being a paramount factor to costs. We believe that the step-change gravimetric energy density that Li-Metal can potentially offer means that an aircraft has the potential to carry twice the number of passengers, or twice the payload for cargo applications, or fly twice the distance, which has the potential to significantly improve the profitability of UAM operators. We have converted two of our EV A-sample lines to be dedicated to UAM cell production.

We also believe that our high-energy density and high-power density cells, such as the AI-enhanced 2170 cylindrical cell that we unveiled in January 2025, are well designed for use in humanoid robots, drones and other applications.

3. Artificial Intelligence (AI)

We started our AI programs to address the need to provide a high level of safety in, and to further accelerate our future roadmap for, material Li-Metal battery development. Our AI programs fall under three major categories:

AI for Science - We are developing new AI models designed to screen a vast universe of small molecules for potential electrolyte solvent candidates. We have also built an electrolyte foundry designed to provide high throughput synthesis and testing of these materials.

AI for Manufacturing – The traditional approach to optimizing cell design and process and improving manufacturing quality is through human experience, where the human engineers define and optimize quality specifications, which typically is a very lengthy process. We believe our AI for Manufacturing can accelerate this timeline. AI for Manufacturing uses machine learning to help define and fine-tune quality specifications based on manufacturing process data.

AI for Safety - We seek to provide a high level of safety in the field, and we are leveraging our automotive 50Ah and 100Ah cell production volume and quality data to train our AI for Safety. Our AI for Safety prediction accuracy increased to 95% in 2024, meeting the target we set at the start of the year. Our ultimate goal is to be able to reach near 100% safety in the field, which we believe will be paramount to both EV and UAM OEMs.

We are currently using and intend to continue using and developing AI for our own product innovations. Additionally, in the future we plan to work toward generating additional service revenue from the use of our AI programs by third parties. For more information, see “Our AI-Related Initiatives.”

4. Battery Energy Storage System (BESS)

We believe the intersection of digital infrastructure and the need for power is one of the most critical themes of our time. As AI continues to evolve, the demand for power will grow significantly. BESS is an essential enabler of renewable energy generation, helping alternative sources of power make a steady contribution to the world’s energy needs despite the inherently intermittent character of the renewable energy sources. The flexibility BESS provides will make it integral to applications such as peak shaving, self-consumption, and back power in the event of outages. All of this has created a significant opportunity for us. We have been actively exploring this area as a natural fit to exploit our unique capabilities in materials discovery and superintelligent battery management through AI. We believe that our AI-enhanced batteries can extend the life of BESS, and our AI for Safety can improve BESS battery health and safety. We have only begun to tap into this market and look forward to growing our presence in energy storage.

Our Li-Metal Battery Technology

Limitations of Current Battery Technology

Conventional Li-ion technology is currently being used in most commercially available EVs. Li-ion typically uses a metal oxide-based or phosphate-based cathode and graphite or graphite/silicon-based anodes. The anode and cathode are separated by a polymer-based separator. Finally, the whole cell is filled with a liquid electrolyte that conducts lithium ions from the anode to the cathode as the vehicle is being driven (or battery is being discharged), and from the cathode to the anode as the vehicle (or the battery) is being charged. Conventional Li-ion cells have been instrumental in kick-starting the current EV market and are being manufactured at scale at capacities of hundreds of GWh today. However, the automotive industry desires a battery with higher energy density to improve the electric driving range (the distance that a vehicle can be driven on a single charge) while reducing battery cost to enable mass-adoption.

Li-Metal Batteries

Li-Metal is widely considered and accepted as the EV battery technology capable of achieving the highest energy density. In fact, switching the current Li-ion graphite/silicon anode with Li-Metal will currently result in the highest possible energy density for any given cathode in lithium chemistry. Li-Metal is the lightest un-engineered pure metal on earth and since the lithium ions do not have to diffuse in and out of the anode host material (like in the case of graphite or silicon in conventional Li-ion), the battery cells made with Li-Metal anode can be very compact and light. This combination of a lightweight and compact anode results in the highest possible gravimetric (Watt-hour (“Wh”)/kg) and volumetric (Wh/liter) energy density, respectively, for any given cathode in lithium chemistry.

SES’s Approach to Li-Metal Cell

SES’s approach to Li-Metal cell utilizes the high energy density benefits of lithium metal anode while utilizing a cell design that primarily uses a liquid electrolyte in the cathode and separator to transport the lithium ions. There is also a protective anode coating between the anode and the separator. This approach results not only in improved energy density due to using a lithium metal anode, but also superior performance at room and lower than room temperatures and enables manufacturing at scale just like Li-ion, which is manufactured at scale today. In fact, we have been successfully making multi-Amp-hour, multi-layer cells using our Li-Metal approach for many years.

The key breakthrough in SES’s Li-Metal cells is its proprietary and patented liquid electrolyte. This electrolyte was developed internally at SES with many years of scientific research and development. We use a high-concentration, solvent-in-salt electrolyte. While liquid electrolytes used in conventional Li-ion cells are volatile and flammable, SES’s liquid electrolyte has low volatility and is self-extinguishing. Conventional liquid electrolytes are primarily made up of organic solvents with low concentrations of salt to aid lithium-ion conduction. SES’s liquid electrolyte primarily consists of salt with a low concentration of proprietary solvent molecules. This new type of high-concentration solvent-in-salt liquid electrolyte is fundamentally different from conventional liquid electrolyte. It maintains the manufacturability advantage of liquid electrolytes in conventional Li-ion manufacturing but can enable Li-Metal due to its stability on lithium metal.

SES’s Li-Metal technology also helps resolve an issue that has plagued Li-Metal adoption and progress for decades. With repeated charge and discharge cycles, lithium metal anodes are known to develop needle-like mossy structures known as dendrites, which can penetrate the separator and short-circuit the battery cell. The use of our liquid electrolyte changes the morphology of dendrite formation in our Li-Metal battery cells from needle-like mossy structures to a smooth lithium metal surface or dense deposition. Our proprietary anode coating provides an added layer of protection against separator penetration by making lithium plating denser during charging. Additionally, our AI-powered safety software and BMS monitors the state-of-health of the battery cells and can accurately detect any safety issues much earlier. The combination of these elements significantly increases cell cycle life and safety.

The rest of the cell is assembled using our proprietary ultra-thin wide-width Li-Metal anode, a conventional separator and a cathode. With the exception of the Li-Metal anode, all materials and components utilized in our battery cells are either already being manufactured at scale or have the capability to be easily manufactured at scale without the need for intensive research and development, or development of new equipment.

To our knowledge, SES Li-Metal battery cells are the only Li-Metal cells demonstrated to meet or exceed the preliminary OEM target requirements for energy density, low temperature discharge, room temperature fast charge and discharge, cycle life and safety.

Our unique high-energy density Li-Metal battery is expected to be:

- light and compact, with high energy density of at least 400 Wh/kg and 1,000 Wh/liter in our large 100 AH cells, compared to approximately 265 Wh/kg / 535 Wh/L in Li-ion battery cells using a high nickel content cathode, and with one version of our 100 Ah

multi-layer battery cells demonstrating energy density of 380 Wh/kg / 850 Wh/L in third-party testing. This higher energy density is expected to translate into significantly more range, which we believe will help to enable the expansion of an electrified world;

- durable and safe, with the ability to meet stringent cycle life, overall lifetime and safety targets for EVs and UAM aircrafts;
- capable of fast charge, charging up to 80% in less than 15 minutes;
- capable of high power discharge, at room and low temperatures;
- low-cost, taking advantage of existing Li-ion manufacturing scale and best-practices to enable cost-reduction;
- capitalizing on the innovation occurring in Li-ion, in terms of incremental improvement in energy density, supply chain development, cost reduction and manufacturing efficiency, since the cathode and cell manufacturing process are the same as in Li-ion; and
- smarter, with AI-powered safety software and BMS that can predict safety incidents in real time and make appropriate diagnostic recommendations

Our AI-Based Initiatives

Through our AI-based initiatives discussed above targeted at material discovery, we believe that we can rapidly introduce enhancements to Li-Metal and Li-ion batteries for use in a multitude of applications, including EVs, UAM, storage, drones and robotics, among others. We believe that our AI-discovered electrolyte materials provide a pathway to generate service revenue earlier than previously anticipated through targeting the large addressable market in each of the aforementioned applications. Since AI-enhanced electrolytes can simply be dropped into existing Li-ion manufacturing infrastructure, they also require significantly less capital expenditure than traditional battery manufacturing.

Our Partnerships

We have entered into strategic alliances and may in the future enter into additional strategic alliances. For example, we previously had a JDA with General Motors (“GM”), have entered into JDAs with Hyundai Motor Company (“Hyundai”) and another OEM partner, and have a service contract with Honda Motor Company, Ltd. (“Honda”), which expire at different points in time. For more information, see Note 4 to our consolidated financial statements. We expect to continue to strengthen these partnerships in the use of our battery technology. Also, we intend to work closely with other OEMs and other strategic partners to develop and produce our Li-Metal battery cells, as well as support our supply chain and the build out of manufacturing facilities, with the aim of making our Li-Metal battery cells widely available in EVs, UAM aircrafts and other applications over time

Our Research and Development

We conduct research and development at our facilities in Woburn, Massachusetts in the United States, Shanghai, China, and Chungju, South Korea. Research and development activities concentrate on making further improvements to our battery technology, including improvements to battery performance, quality and cost.

Major development efforts include, but are not limited to, programs in the following areas.

- **Scale-up:** Our design is further being customized with and validated by several OEMs. Based on our collaborations with OEMs, we believe that a roughly 100 Ah cell-size manufactured at GWh scale (five to seven cells-per-minute) is needed to achieve commercialization in EVs and UAMs at a large, global scale. We are developing processes and upgrading equipment to scale up the manufacturing of our current cell design from three to nine Ah capacity to 50 Ah and 100 Ah capacity.
- **Module and Pack Design:** Li-Metal cells must be integrated into modules and packs as part of their integration into vehicles. Our active development efforts are focused on the integration of our Li-Metal cells into modules to enable our Li-Metal cells to perform as intended once they are integrated into vehicles.
- **AI Software and BMS:** Software is critical to the ongoing monitoring of battery health and safety. We continue to develop AI algorithms to diagnose battery cell-related health issues, develop advanced control algorithms and charging methods to enhance cycle life and safety, and port such software on to a BMS that can be integrated into a battery pack.
- **Advanced Materials and Coatings:** We continue to research and develop advanced electrolyte and anodes to further improve cycle life and safety. In addition, we continue to develop novel methods of laminating or depositing lithium metal onto current collector that can be deployed at commercial GWh scale.

- ***Cathode Materials and Design:*** We develop our Li-Metal cells for a variety of different cathode materials, cathode design and cathode processing methods that can provide ultra-high energy density and/or significant cost-reduction.
- ***Li-Metal Recycling:*** Along with other battery components that are already being recycled today, Li-Metal foil will also need to be recycled in the future. We continue to explore methods of recycling that are productive and cost-effective.

Our Intellectual Property

To maintain a competitive advantage, we believe we must develop and preserve the proprietary aspect of our technologies. We rely on a combination of copyright, patent, trademark, trade secret, license and other intellectual property laws in the United States and other jurisdictions, as well as license agreements and other contractual protections, including non-disclosure agreements and other measures to establish, maintain, enforce and protect our proprietary rights. Our policy is to require our employees, consultants, and advisers to execute non-disclosure agreements in connection with their employment, consulting, or advisory relationships with us, where appropriate. We also have a policy that requires employees, consultants, and advisers who work on our products to agree to disclose and assign to us all inventions conceived during their work with us that are developed using our property or relate to our business. In addition, we seek to protect our proprietary and intellectual property position by, in addition to filing patent applications in various jurisdictions related to our proprietary technology, relying on trade secrets, know-how and continuing technological innovation. Despite measures taken to protect our intellectual property, unauthorized parties may attempt to copy aspects of our proprietary technology or obtain and use information that we regard as proprietary, which could harm our business and competitive position. For a more comprehensive discussion of the risks related to our intellectual property, please see “Part I, Item 1A. Risk Factors—Risks Relating to Our Business and Technology” and “Risk Factors—Risks Relating to Our Intellectual Property.”

Patents

As of December 31, 2024, we have been granted 87 patents, with expiration dates ranging from 2032 through 2043, and have over 154 patent applications pending in the United States and in other jurisdictions. We also rely substantially on unpatented proprietary technology, including know-how and 30 trade secrets as of December 31, 2024. The issued and pending patents, licenses, know-how and trade secrets cover the following:

- ***Cell design,*** including physical format, component layout, application tuning, cell formation and support structures.
- ***Materials,*** including salt preparation and purification, design of synthetic solvents, state-of-the art electrolyte formulations, lithium foil production, separator composition and anodes.
- ***Battery management,*** including charge/discharge profiles, rapid charging, safety systems and algorithms, telemetry harvesting and big data analysis.
- ***Environmental,*** including low-impact production of cell materials and recyclability of spent materials.

Trademarks

We have registered various trademarks associated with our business with the United States Patent and Trademark Office on the Principal Register and in other appropriate jurisdictions. As of December 31, 2024, we have 93 registered or allowed trademarks, with 14 trademark applications pending. Depending upon the jurisdiction, trademarks are valid if they are in use and/or their registrations are properly maintained.

Our Suppliers

Currently, we are in product development and our product design has yet to be finalized, so our volume demand is limited, and we do not have long-term supply arrangements. As volume demand grows, we expect to negotiate long-term supply contracts. For our current product development needs, we source from third-party suppliers for raw materials, components and equipment necessary to develop and manufacture our Li-Metal battery cells.

Our Employees

As of December 31, 2024, we had approximately 250 full-time employees. Approximately 37% of our employees, including all of our executive management team, are located in the United States, with the remaining located in China, South Korea and Singapore. The workforce in our China and South Korea locations primarily consists of operators for our manufacturing lines. Currently, approximately

83% of our employees worldwide are engaged in research and development and related functions, with expertise in all aspects of the development process, including materials science, chemistry, engineering, machine-learning, and software. Many of these employees have extensive experience from large Li-ion companies and hold advanced engineering and scientific degrees, including many from the world's top universities.

Our Facilities

We have leased facilities located in Woburn, Massachusetts in the United States, Shanghai, China, and Chungju and Seoul, South Korea. Our primary Woburn facility, which also serves as the Company's headquarters, focuses on chemistry, material and algorithm research and development, as well as engaging with our OEM and strategic partners. We also have another facility near our Woburn facility, which focuses on novel electrolyte molecule discovery and synthetic pathway development. Our Shanghai facility focuses on supply chain development, manufacturing process development, battery cell development and production. Our Chungju facility focuses on manufacturing process development. We have also set up an office in Seoul focused on supply chain, customer relations and our collaboration with partners in the region.

Competition

The battery market, like the EV market it services, is fast-growing, extremely competitive and driven by the innovation of both large incumbents and emerging entrants like SES. With the introduction of new technologies and the potential entry of new competitors into the market, we expect competition to increase in the future, which could harm our business, results of operations, or financial condition.

Our prospective competitors include major manufacturers supplying the industry, automotive OEMs and potential new entrants to the industry. Existing suppliers of batteries to the EV industry include Contemporary Amperex Technology Co. Limited, SK Innovation, LG Energy Solutions, Panasonic Corporation and Samsung SDI. Additionally, many automotive OEMs, including Tesla, Nio, Rivian and Toyota, are researching and investing in efforts to develop their own EV battery production capabilities.

Newer entrants, including Sila Nanotechnologies, Solid Power, Enovix, QuantumScape, and Amprius, are also seeking to improve conventional lithium-ion batteries or to develop new technologies, including lithium-metal and solid-state batteries, or to develop new technologies for cathodes, anodes, electrolytes and additives. Some of these companies have established relationships with automotive OEMs and are in varying stages of development.

We acknowledge that incumbents and emerging entrants may have greater resources to invest in advancing their technologies, access to more potential customers, or strategic relationships with OEMs (or other third parties) that may give them a competitive edge. We further acknowledge that these disparities, where they exist, have the potential to harm our business, results of operations or financial condition.

Government Regulation and Compliance

There are government regulations pertaining to battery safety, transportation of batteries, use of batteries in vehicles, factory safety and disposal of hazardous materials. We will ultimately have to comply with these regulations to sell our batteries into the market. For more information, see "Part I, Item 1A. Risk Factors—Risks Relating to Regulations and Our Compliance With Such Regulations" discussing regulations and regulatory risks related to export controls (including our export controls compliance program), environmental, health and safety, anti-corruption, anti-bribery, data collection, trade and tax law compliance.

Company Information

Information that we furnish to or file with the SEC, including the Company's annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to, or exhibits included in, these reports are made available for download, free of charge, through the Company's website at www.ses.ai as soon as reasonably practicable. The Company's SEC filings, including exhibits filed therewith, are also available directly on the SEC's website at www.sec.gov.

The Company may use its website as a distribution channel of material company information. Financial and other important information regarding the Company is routinely posted on and accessible through the Company's website. Accordingly, investors should monitor this channel, in addition to following the Company's press releases, SEC filings and public conference calls and webcasts. Information contained on the Company's website is not part of this report.

Item 1A. Risk Factors

We have identified the following risks and uncertainties that may have a material adverse effect on our business, financial condition, results of operations or reputation. The risks described below are not the only risks we face. Additional risks not presently known to us or that we currently believe are not material may also significantly affect our business, financial condition, results of operations or reputation. Our business could be harmed by any of these risks. The risk factors described below should be read together with the other information set forth in this Annual Report, including our consolidated financial statements and the related notes, as well as in other documents that we file with the SEC.

Risks Relating to Our Business and Technology

We face significant challenges in developing a Li-Metal battery that can be commercialized for use in EVs and other applications, and the pace of development is often unpredictable and subject to delays.

To our knowledge, Li-Metal batteries have never been successfully used in automobiles. Li-Metal batteries have been successfully used for other applications, but their use in other vehicles, including UAM, has been limited thus far. We are still in the development stages for our Li-Metal batteries and face significant scientific challenges that will need to be solved prior to commercializing our Li-Metal batteries for use in EVs and other applications such as UAM. If we are not able to overcome these challenges, our Li-Metal batteries may not be able to be commercialized and our business may fail.

In particular, we need to build Li-Metal battery cells which meet OEM requirements for use in EVs and UAM. While we have been making progress toward these requirements, significant engineering and mechanical barriers remain which must be solved before our Li-Metal batteries will meet OEM requirements. It is difficult to predict with certainty the pace of scientific development which will allow us to solve these challenges, and delays in meeting these challenges, or the introduction of new, unforeseen challenges, could impact the timing of the commercialization of our Li-Metal batteries, or our ability to reach commercialization at all.

We expect to continue to incur losses for the foreseeable future. While we expect to become profitable eventually, our projections are based on internal assumptions that may prove incorrect, and we may never achieve or maintain profitability.

We incurred net losses of \$100.2 million and \$53.4 million for the years ended December 31, 2024 and 2023, respectively, and had an accumulated deficit of \$298.9 million and \$198.7 million from our inception through December 31, 2024 and 2023, respectively. As discussed in “Business - Our Technology,” to date, we have only validated the capabilities of our Li-Metal battery cell technology and have not produced Li-Metal batteries for sale. As a result, since inception, we have not achieved profitable operations or positive cash flows from our operations.

We believe that we will continue to incur operating and net losses as we continue to incur significant expenses in connection with our research and development efforts. As discussed in other risk factors in this section, factors that could impact the timing and levels of our profitability include, but are not limited to: our ability to solve the scientific engineering and mechanical challenges to commercialize our products; the level of demand for our products; the performance of our products; the projected supply materials for our products; the cost of our investment in artificial intelligence and machine learning infrastructure; a reduction in the cost of Li-ion; average selling prices of EVs and our products; the safety of UAM use; projected production capacities of our facilities; our collaboration with OEMs; the projected gross margin achievable upon sale of our products; and the extent to which growth of EV and UAM markets and continued shift in consumer preference will conform with projections.

We will need substantial additional capital in the future to fund our business and may be unable to meet our future capital requirements, impairing our financial position and results of operations.

The development, design, manufacture and sale of batteries is a capital-intensive business. We expect to sustain substantial operating expenses, without generating sufficient revenues to cover expenditures, for a number of years. To date, we have funded our operations through a combination of proceeds from the Business Combination and subsequent equity private placement in 2022 and funding received through the sales of our redeemable convertible preferred stock. These funds are expected to finance our principal sources of liquidity and ongoing costs, such as research and development relating to our Li-Metal batteries and the construction of additional manufacturing facilities. In the future, if we are not able to fund our operations from cash flows generated from anticipated product sales, we expect that we will need to raise additional funds through a variety of possible methods, including, but not limited to, entry into joint ventures or other strategic arrangements, issuance of equity (including through at-the-market sales), equity-related or debt securities or through obtaining credit from financial institutions, as well as anticipated future revenue from product sales.

We believe that our cash on hand and marketable securities will be sufficient to meet our working capital and capital expenditure requirements for a period of at least 12 months from the date of this Annual Report on Form 10-K, and also sufficient to fund us to commercialization. However, additional funding may be required for a variety of reasons, including opportunities to build an integrated supply chain in the United States and delays in expected development of our Li-Metal battery cells. Our ability to successfully develop our products, commence commercial operations and expand our business will depend on many factors, including our working capital needs, the availability of equity and/or debt financing and, over time, our ability to generate positive cash flows from operations.

We cannot be certain that additional capital will be available on attractive terms, if at all, when needed, which could be dilutive to stockholders. We may be forced to decrease our level of investment in product development or scale back our operations, which could have an adverse impact on our business and financial prospects. Furthermore, the cost of debt could be higher than anticipated, which could negatively affect our earnings.

Our Li-Metal technology is untested in actual EVs and may ultimately prove unworkable.

The results of third-party tests show that our multi-layer cells meet or exceed the preliminary OEM target requirements for energy density, low temperature discharge, room temperature fast charge and discharge, cycle life and safety. Additionally, Li-Metal is widely considered and accepted as the EV battery technology capable of achieving the highest energy density. However, we have not produced Li-Metal batteries for use by an actual EV, and no one has successfully demonstrated use of high energy density Li-Metal batteries in EVs. Our Li-Metal battery cell technology may prove unworkable when used in actual EVs, which would substantially undercut our business, operating results, financial condition and prospects, and could effectively eliminate the value of your investment.

The market for UAM, and for use of Li-Metal technology in UAM applications, is still emerging, and may not achieve the growth potential we expect.

The UAM market is still emerging, and it is uncertain to what extent market acceptance of UAM will grow, if at all. The market is new and rapidly evolving, characterized by rapidly changing technologies and evolving government regulation and industry standards. To our knowledge, there is no market standard battery technology for use in UAM applications. There can be no assurance that, even if the UAM market grows significantly, Li-Metal will emerge as a preferred battery technology for use in UAM applications. The success of our ability to sell Li-Metal batteries for use in UAM applications will depend on the growth and acceptance of UAM generally and the results of testing and certifications for use of our batteries in UAM applications. If the UAM market does not develop as we expect, or if our Li-Metal batteries do not perform as expected during testing for use in UAM applications, it could materially adversely affect our business, operating results, financial condition and prospects.

If our batteries fail to perform as expected, our ability to develop, market and sell our batteries could be harmed.

If and/or when commercial production of our Li-Metal battery technology commences, our batteries may contain defects in design and manufacture that may cause them to not perform as expected or that may require repairs, recalls, and design changes. Our battery cells are inherently complex and incorporate technology and components that have not been used for other applications and that may contain defects and errors, particularly when first introduced. For more information, see “Part I, Item 1. Business—Our Technology.” Due to our limited operating history, we have a restricted frame of reference from which to evaluate the long-term performance of our Li-Metal batteries. There can be no assurance that we will be able to detect and fix any defects in our batteries prior to the sale to potential consumers. If our batteries fail to perform as expected, customers may delay deliveries, terminate further orders or initiate product recalls, each of which could adversely affect our sales and brand and could adversely affect our business, financial condition, operating results and prospects.

We are unable to predict user behavior when driving EVs with Li-Metal technology.

While conventional Li-ion battery technology has been tested in many applications for several decades, Li-Metal batteries have yet to be commercialized for use in EVs. Even if we work with OEMs to thoroughly test Li-Metal cells using pre-determined conditions, there is no guarantee that users in the field will not drive outside of recommended driving conditions and unintentionally abuse the batteries. In such events, performance and safety may be compromised, thus having a materially negative impact on our business, financial condition, operating results and prospects.

Delays in the pre-manufacturing development of our battery cells could adversely affect our business and prospects.

We have previously entered into and currently maintain JDAs and/or service contracts with major OEMs to develop (jointly in the case of JDAs or independently in the case of service contracts) Li-Metal batteries, with the expectation that such development will culminate in the widespread use of our technology in future EVs with these major OEMs and eventually with other large OEMs. For more information, see

Note 4 to our consolidated financial statements. We have previously substituted, and may determine to substitute, our JDAs with other types of strategic alliances, such as service contracts. However, as we are still in the developmental stages with each of these OEMs, we do not currently have existing arrangements to produce our Li-Metal cells for use in OEM vehicles, and production-ready models of our batteries will not be available until sufficiently tested and approved for inclusion in future OEMs' EVs. Each time we produce a battery with a higher output, the product must undergo extensive pre-manufacturing development and testing. Anything that delays the consistent development and testing of pre-manufacturing battery cells samples at increasingly higher outputs, such as technology or engineering issues, could alter our prospects and adversely affect our business.

We may not be able to engage target OEM customers successfully and to convert such contacts into meaningful orders in the future.

Our success, and our ability to increase revenue and operate profitably, depends in part on our ability to identify OEM target customers and convert such contacts into meaningful orders or expand on current customer relationships. In some cases, our battery cells may be delivered to certain customers on a sampling basis, where they have the ability to evaluate whether our products meet their performance requirements before committing to joint development and meaningful orders. While our business does not substantially depend on any one customer, our ongoing success depends on whether our target customers are willing to begin and continue using our battery technology, as well as whether their product lines continue to incorporate our products. Thus, our efforts to expand our manufacturing and sales to OEMs may not be successful and may never result in products that achieve market acceptance, create additional revenue or become profitable, thus harming our financial results and prospects.

Our research and development efforts strive to create products that are on the cutting edge of technology and are meeting the evolving requirements of our customers, but competition in our industry is high. To secure acceptance of our products, we must also constantly develop and introduce cost-effective, increasingly more scalable Li-Metal batteries with enhanced functionality and performance to meet evolving industry standards. If we are unable to retain target customers, or convert early trial deployments into meaningful orders, our business, financial condition, operating results and prospects could be materially adversely affected. In addition, we may not receive adequate assistance from OEMs to commercialize our products successfully, which could impair our results of operations.

If we are unable to integrate our products into EVs manufactured by OEM customers, our results of operations could be impaired.

Our batteries are composed of modules assembled from battery cells, which we produce and intend to manufacture at scale. OEMs often require unique configurations or custom designs for batteries for their EVs. Once we enter into contracts with OEMs to produce batteries for their EVs, we expect to tailor the design of our batteries specifically to the EVs that these OEM customers manufacture. This development process requires not only substantial lead time between the commencement of design efforts for customized batteries and the commencement of volume shipments of the battery cells to the customer, but also the cooperation and assistance of the OEMs in order to determine the requirements for each specific application. Technical problems may arise that affect the acceptance of our product by the OEMs. If we are unable to design and develop products that meet the OEMs' requirements, we may lose opportunities to obtain purchase orders, and our reputation and prospects may be damaged.

We may not be able to establish new, or maintain existing, supply relationships for necessary raw materials, components or equipment or may be required to pay costs for raw materials, components or equipment that are more expensive than anticipated, which could delay the introduction of our product and negatively impact our business.

Currently, we are in product development and our product design has yet to be finalized, so our volume demand is limited, and we do not have long-term supply arrangements. As volume demand grows, we expect to negotiate long-term supply contracts. For our current product development needs, we source from third-party suppliers for raw materials, components and equipment necessary to develop and manufacture our Li-Metal battery cells. For more information, see "Part I, Item 1. Business—Our Suppliers."

To the extent that, when our volume demand so requires, if we are unable to enter into long-term agreements with our current or future suppliers on beneficial terms, or such suppliers experience difficulties ramping up their supply to meet our long-term requirements at reasonable cost, we may need to seek alternative sources for necessary raw materials, components or equipment necessary to develop and manufacture our Li-Metal battery cells, produce the raw materials or additional components in-house, or redesign our proposed products to accommodate available substitutes. To the extent that our suppliers experience any delays in providing or developing their products, we could also experience delays in delivering on our timelines.

Moreover, the price of raw materials, components and equipment could fluctuate significantly due to circumstances beyond our control. Substantial increases in prices would increase our operating costs and negatively impact our prospects. Any disruption in supply could also

temporarily disrupt future research and development activities or production of our batteries until an alternative supplier is able to meet our requirements.

Changes in business conditions, unforeseen circumstances and governmental changes, as well as other factors beyond our control or which we do not presently anticipate, could affect our suppliers' ability to deliver raw materials, components or equipment to us on a timely basis. For instance, we may be impacted by currency fluctuations, trade barriers, tariffs or shortages and other general economic or political conditions (such as the ongoing military conflict between Russia and Ukraine, the Middle East, and wider regional conflict), which may limit our ability to obtain key raw materials or components for our Li-Metal batteries or significantly increase freight charges and other costs and expenses associated with our business. For more information, including the impact of current tariffs on us, see “—Risks Relating to our International Operations—The international nature of our business exposes us to business, regulatory, political, operational, financial and economic risks associated with doing business outside of the United States.” Any of the foregoing could materially and adversely affect our business, financial condition, operating results and prospects.

Our ability to manufacture our Li-Metal batteries at scale depends on our ability to build, operate and staff our facilities successfully, as well as to obtain sufficient contract manufacturing capacity.

Because we expect to rely heavily on complex machinery, well-trained personnel and a well-managed supply chain for our operations, our internal and outsourced production will involve a significant degree of uncertainty and risk in terms of operational capacity performance and costs.

Our manufacturing facilities consist of large-scale machinery combining many components. Such machinery will require us to make intensive capital expenditures prior to our ability to earn any product revenue. The manufacturing facility machinery may suffer unexpected malfunctions from time to time and will depend on repairs and spare parts to resume operations, which may not be available when needed. Additionally, unexpected malfunctions of the manufacturing facility machinery may significantly affect the intended operational efficiency, thus materially and adversely affecting our business, financial condition and operating results.

The production of our facilities also requires us to hire and train highly skilled personnel to operate such facilities, including engineers, workers, and indirect laborers. Recruiting and training such skilled staff takes significant cost and time, and an inability to do so timely or at all inhibits the successful operation of these facilities, thus negatively affecting our business. In addition, the manufacturing of our Li-Metal batteries at facilities requires us to obtain various production licenses and permits, receive the necessary internal approvals from our customers regarding specifications and enter into agreements for the supply of raw materials, components and manufacturing tools and supplies. If we do not complete such steps in a timely manner, our manufacturing timeline or output could be significantly delayed or inhibited.

We also plan to rely in the future on contract manufacturers to complete production of certain of our products in a timely manner that meets our quality, quantity and cost requirements. Contract manufacturers may encounter problems during manufacturing for a variety of reasons, any of which could delay or impede their ability to meet demand for our products.

Finally, the production of our Li-Metal batteries at scale and competitive cost, compared to conventional Li-ion cells, will require us to achieve rates of throughput, use of electricity and consumables, yield, and rate of automation demonstrated for mature batteries and battery material. As we have not produced Li-Metal batteries at scale, our ability to achieve such rates is untested and subject to significant constraints and uncertainties. Operational performance and costs can be difficult to predict and are often influenced by factors outside of our control, such as, but not limited to, environmental hazards and remediation, costs associated with commissioning of machines, damages or defects in electronic systems, industrial accidents, fire and seismic activity and natural disasters, and problems with equipment vendors. Should operational risks materialize, they may result in lower yield, which would negatively affect our revenue growth and profitability as projected. Additionally, they could cause personal injury to or death of workers, the loss of manufacturing equipment, damage to manufacturing facilities, monetary losses, delays and unanticipated fluctuations in production, environmental damage, administrative fines, increased insurance costs and potential legal liabilities, all of which could have a material adverse effect on our business, financial condition, operating results and prospects.

We have pursued and may continue to pursue JDAs, service contracts and other strategic alliances, which could have an adverse impact on our business if they are unsuccessful or if we are unable to enter into new strategic alliances.

We have entered into strategic alliances and may in the future enter into additional strategic alliances. For example, we previously had a JDA with GM, have entered into JDAs with Hyundai and another OEM partner, and have a service contract with Honda, which expire at

different points in time. For more information, including the expiration dates of these agreements, see Note 4 to our consolidated financial statements. We expect to form other strategic joint ventures in the future to support our supply chain as well as the build out of manufacturing facilities aimed at the commercialization of our batteries, whether with these existing OEMs or new OEMs, which could take various forms, such as service contracts in substitution of JDAs.

While offering potential benefits, these current and future strategic alliances with battery manufacturers, OEMs and others could subject us to a number of risks, including risks associated with sharing proprietary information, non-performance by our partners and costs of establishing and maintaining new strategic alliances, any of which may materially and adversely affect our business. We may have limited ability to monitor or control the actions of our partners and, to the extent any of them suffers negative publicity or harm to their reputation from events relating to their business, we may also suffer negative publicity or harm to our reputation by virtue of our association with them. For example, if we rely on our partners' manufacturing facilities, those operations would be outside of our control. We could experience delays if our partners do not meet agreed-upon timelines or experience capacity constraints, and in turn, we could lose customers and face reputational harm.

Further, there is risk of potential disputes with any partners with whom we collaborate, and we could be affected by adverse publicity related to our partners, whether or not such publicity is related to their collaboration with us. Our ability to build a premium brand successfully could also be adversely affected by perceptions about the quality of our partners' products. In addition, because we rely on our partners and third parties to meet our quality standards, there can be no assurance that we will successfully maintain quality standards. Finally, we may not be successful in signing into new JDAs, service contracts or other strategic alliances in the future, whether with new OEM partners or with existing OEM partners with whom we want to continue our relationships. Any of the foregoing could adversely affect our business, financial condition, operating results and prospects.

The EV battery market continues to evolve and is highly competitive, and certain other battery manufacturers have significantly greater resources than we do.

The EV battery market, like the EV market it services, is fast-growing, extremely competitive and driven by the innovation of both large incumbents and emerging entrants like SES. For more information, see "Part I, Item 1. Business—Competition." Li-ion battery technology has been widely adopted and our current competitors have, and future competitors may have, greater resources than we do and may also be able to devote greater resources to the development of their current and future technologies. These competitors also may have greater access to customers and may be able to establish cooperative or strategic relationships amongst themselves or with third parties that may further enhance their resources and competitive positioning. In addition, Li-ion battery manufacturers may continue to reduce cost and expand supply of conventional batteries and therefore reduce the prospects for our business or negatively impact our ability to sell our products at a market-competitive price and yet with sufficient margins.

A number of development-stage companies are also seeking to develop new technologies for Li-Metal batteries. Potential new entrants are seeking to develop new technologies for cathodes, anodes, electrolytes and additives. Some of these companies have established relationships with OEMs and are in varying stages of development. Additionally, many OEMs are researching and investing in conventional Li-ion batteries and/or Li-Metal battery efforts and, in some cases, in battery development and production. Furthermore, other companies are developing alternative technologies such as advanced diesel, ethanol, fuel cells or compressed natural gas, as well as potential improvements in the fuel economy of the internal combustion engine. We expect competition in battery technology and EVs to intensify due to increased demand for these vehicles and a regulatory push for EVs, continuing globalization, and consolidation in the worldwide automotive industry. Developments in alternative technologies or improvements in battery technology made by competitors may materially adversely affect the sales, pricing and gross margins of our batteries. If a competing technology is developed that has superior operational or price performance, our business will be harmed. Similarly, if we fail to accurately predict and ensure that our battery technology can address customers' changing needs or emerging technological trends, or if our customers fail to achieve the benefits expected from our Li-Metal batteries, our business will be harmed.

We may not be able to estimate accurately the future supply and demand for our batteries, which could result in a variety of inefficiencies in our business and hinder our ability to generate revenue. If we fail to predict accurately our manufacturing requirements, we could incur additional costs or experience delays.

It is difficult to predict our future revenues and appropriately budget for our expenses, and we may have limited insight into trends that may emerge and affect our business. We anticipate being required to provide forecasts of our demand to our current and future suppliers prior to the scheduled delivery of products to potential customers. Currently, there is no historical basis for making judgments on the demand for our batteries or our ability to develop, manufacture, and deliver batteries, or our profitability in the future. If we overestimate our

requirements, our suppliers may have excess inventory, which may increase our costs. If we underestimate our requirements, our suppliers may have inadequate inventory, which could interrupt manufacturing of our products and result in delays in shipments and product revenue or potential liability for late delivery. In addition, lead times for raw materials, components and manufacturing equipment may vary significantly and depend on factors such as the specific supplier, contract terms and demand for each raw material, component or manufacturing equipment at a given time. Any of the foregoing could result in delays in the delivery of batteries to our potential customers, which would harm our business, financial condition, operating results and prospects.

Certain components of our batteries pose safety risks that may cause accidents. We may be subject to financial and reputational risks due to product recalls and product liability claims, and we could face substantial liabilities that exceed our resources.

Due to the high energy density inherent in lithium-based batteries, our batteries can pose certain safety risks, including the risk of fire. Our state-of-the-art software is designed to accurately monitor and predict most safety incidents. Nevertheless, accidents causing death or personal injury, or property damage can occur, and no high energy density battery will ever be 100% safe. For example, with repeated charge and discharge cycles, Li-Metal anodes are known to develop needle-like mossy structures known as dendrites, which can penetrate the separator and short-circuit the battery cell. Although we incorporate safety procedures in the research, development, manufacture and transportation of batteries that are designed to minimize safety risks - for example, our Li-Metal battery technology is designed to change the morphology of dendrite formation - the manufacture or use of our products may still cause accidents. Any accident, whether occurring at the manufacturing facilities or from the use of our products, may result in significant production interruption, delays or claims for substantial damages caused by personal injuries or property damage.

Product liability claims, even those without merit or those that do not involve our products, could harm our business, financial condition, operating results and prospects. The automobile industry in particular experiences significant product liability claims, and we face inherent risk of exposure to claims in the event that our battery products do not perform or are claimed not to have performed as expected. As is true for other commercial vehicle suppliers, we expect in the future that our battery products will be installed on vehicles that will be involved in crashes resulting in death or personal injury. Additionally, product liability claims that affect our competitors may cause indirect adverse publicity for us and our products.

A successful product liability claim against us could require us to pay a substantial monetary award. We may not be able to cover any substantial monetary judgment against us. Moreover, a product liability claim against us or our competitors could generate substantial negative publicity about our products and business and could have a material adverse effect on our brand, business, prospects, financial condition and operating results.

We may incur significant costs based on the warranties we may supply in our products and services.

Battery manufacturers are expected to give warranties that are reflective of the warranties given by manufacturers to users of the end product (e.g., from an OEM to a buyer of a vehicle). With respect to our battery products, we expect to offer warranties against any defects due to product malfunction or workmanship. We expect to provide a reserve for these potential warranty expenses, which is based on an analysis of historical warranty issues. There will be no assurance that future warranty claims will be consistent with past history, and in the event we experience a significant increase in warranty claims, there is no assurance that our reserves will be sufficient. This could have a material adverse effect on our business, financial condition and operating results.

Our business depends substantially on the continuing efforts of our senior executives and other key personnel as well as the ability to attract, train and retain highly skilled employees and key personnel.

Our success depends on our ability to attract and retain our executive officers, key employees and other qualified personnel, and our operations may be severely disrupted if we lost their services. As we build our brand and become better known, there is increased risk that competitors or other companies will seek to hire our personnel. All of our executives and engineering staff are subject to non-competition agreements, but we may face challenges in enforcing these non-competition agreements, and such agreements may become illegal if the Federal Trade Commission's Non-Compete Clause Rule is found enforceable following the conclusion of pending litigation. The failure to attract, integrate, train, motivate and retain these personnel could seriously harm our business and prospects.

To execute our business plan, we must attract and retain highly qualified personnel in research and development, artificial intelligence and machine learning, sales and marketing, production and other leadership roles. Competition for these employees is intense, and we may not be successful in attracting and retaining qualified personnel. We have from time to time in the past experienced, and we expect to continue to experience, difficulty in hiring and retaining highly skilled employees with appropriate qualifications in relevant industries. Many of the

companies with which we compete for experienced personnel have greater resources than we have. In addition, in making employment decisions, particularly in high-technology industries, job candidates often consider the value of the equity they are to receive in connection with their employment. Employees may be more likely to leave us if the shares they own or the shares underlying their equity incentive awards have significantly appreciated or significantly reduced in value. A significant talent pool consists of nationals from countries that may require a license from the United States Bureau of Industry and Security to work with our technology, which raises the cost of hiring due to the uncertainty that a license may not be granted and the candidate would be unemployable in the role envisioned. If we fail to attract new personnel, or fail to retain and motivate our current personnel, our business and growth prospects could be harmed.

In addition, we are highly dependent on the services of Dr. Qichao Hu, our Founder and Chief Executive Officer, and other senior technical and management personnel, including our executive officers, who may take significant amounts of time to replace. If Dr. Hu or other key personnel were to depart, we may not be able to successfully attract and retain senior leadership necessary to grow our business.

If we do not maintain and continue to develop our corporate culture as we grow and evolve, it could also harm our ability to foster the innovation, creativity and teamwork we believe that we need to support our growth. Additions of executive-level management, significant numbers of new employees, our workforce reduction and higher employee turnover could significantly and adversely impact our culture.

Our insurance coverage may not be adequate to protect us from all business risks.

We may be subject, in the ordinary course of business, to losses resulting from product liability, cyber-attacks, accidents, acts of God, and other claims against us, for which we may have no insurance coverage. As a general matter, the policies that we do have may include significant deductibles or self-insured retentions, and we cannot be certain that our insurance coverage will be sufficient to cover all future losses or claims against us. A loss that is uninsured or which exceeds policy limits may require us to pay substantial amounts, which could adversely affect our financial condition and operating results.

Risks Relating to the EV Industry

Our future growth and success depend on the willingness of vehicle operators and consumers to adopt EVs.

Our growth is highly dependent upon the adoption of EVs by commercial vehicle and specialty vehicle operators and consumers. If the markets for EVs do not develop as we expect or develop more slowly than we expect, our business, prospects, financial condition and operating results will be harmed, because demand for our products and services will not increase as expected or may even be reduced. The market for alternative fuel vehicles is relatively new, rapidly evolving, characterized by rapidly changing technologies, price competition, numerous competitors, evolving government regulation and industry standards, frequent new vehicle announcements and changing consumer demands and behaviors.

Other factors may influence the adoption of EVs, including, but not limited to:

- perceptions about EV quality, design and performance, especially if adverse events or accidents occur that are linked to the quality or safety of EVs;
- volatility in sales of EVs;
- the costs of purchasing and maintaining EVs;
- perceptions about vehicle safety in general, namely, safety issues that may be attributed to the use of advanced technology, including vehicle electronics;
- negative perceptions of EVs, such as that they are more expensive than nonelectric vehicles and are only affordable with government subsidies or that they have failed to meet customer expectations;
- the limited range over which EVs may be driven on a single battery charge and the effects of weather on this range;
- the decline of an EV's range resulting from deterioration over time in the battery's ability to hold a charge;
- concerns about electric charging infrastructure availability and reliability, which could derail past and present efforts to promote EVs as a practical solution to vehicles which require gasoline;
- concerns about charging station standardizations, convenience and cost influencing consumers' perceptions regarding the convenience of EV charging stations;
- concerns of potential customers about the susceptibility of battery packs to damage from improper charging, as well as the lifespan of battery packs and the cost of their replacement;
- concerns regarding comprehensive vehicular insurance coverage related to EVs;

- developments in alternative technologies, such as advanced diesel, ethanol, fuel cells or compressed natural gas, or improvements in the fuel economy of the internal combustion engine, which could adversely affect sales of EVs;
- the environmental consciousness of consumers;
- the availability and volatility in the cost of natural gas, diesel, coal, oil, gasoline and other fuels relative to electricity;
- the availability of tax and other governmental incentives to purchase and operate EVs or future regulation requiring increased use of nonpolluting vehicles (for more information, see “—The unavailability, reduction or elimination of, or uncertainty regarding, government and economic incentives or subsidies available to us, end-users or OEMs could have a material adverse effect on our business, financial condition, operating results and prospects”);
- concerns regarding the value and costs for upkeep of EVs in the used car market;
- the availability of enough skilled labor in after-sale maintenance and repair services of EVs; and
- macroeconomic factors.

Any of these factors could impair the development of the EV market, lowering demand. In anticipation of an expected increase in the demand for EVs in the next few years, we plan to develop, test, manufacture and commercialize our Li-Metal battery technology. However, the markets we expect to target, primarily those in North America, Europe and Asia, may not achieve the level of growth we expect. If any market fails to achieve our expected level of growth, we may have excess manufacturing capacity and may not be able to generate enough revenue to achieve or sustain our profitability.

The unavailability, reduction or elimination of, or uncertainty regarding, government and economic incentives or subsidies available to us, end-users or OEMs could have a material adverse effect on our business, financial condition, operating results and prospects.

In 2019, in connection with our establishment of our Shanghai facility, the first two years of rent on the facility totaling approximately RMB7.1 million was borne by the Jiading district local government which also took on certain renovations to the facility at the cost of approximately RMB 4.3 million such that it is suitable for our use. In 2020, we received an incentive award of RMB10,000 under the Jiading Industrial Zone Development Potential Award from the Jiading district local government. In 2022, we also received an incentive award from certain South Korean government agencies. We intend to apply for further grants in the future in the jurisdictions in which we operate. Government incentives and subsidies are granted in connection with government’s efforts to promote the development of the local economy and other policies. Some local government incentives and subsidies may be challenged by higher-level government authorities. Therefore, government incentives and subsidies may be modified, terminated or subject to clawback at the sole discretion of the relevant governmental authorities. Additionally, because laws, regulations and policies with respect to incentives and subsidies may change, we cannot be sure that government incentives and subsidies will continue to be available. In the event that we cease to receive any government incentives or subsidies, any current or future incentive or subsidy is reduced, or any of our current or future incentives or subsidies are challenged, our business, financial condition and operating results may be adversely affected. See Note 10 “Government Grant” of the Notes to the Financial Statements for discussion of our accounting for government incentives.

Additionally, we believe that, currently, the availability of government incentives and subsidies available to end-users and OEMs is an important factor considered by customers when purchasing EVs, and that growth in the battery market will depend in part on the availability and amounts of these subsidies and incentives for EVs. Currently, government programs, including in China and Europe, favor the purchase of EVs, including through disincentives that discourage the use of gasoline-powered vehicles. In the United States, the Inflation Reduction Act of 2022 (the “IRA”) provides tax credits for the purchase of electric vehicles, and the states of California, Connecticut, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island and Washington have recently banned the sale of new gas-powered vehicles by 2035, and other states may follow. Given the current political climate in the United States, the future of these incentives and subsidies for end-users and OEMs remains uncertain, including with respect to federal programs. Since taking office, President Trump has taken actions to revoke the prior presidential administration’s non-binding target that 50% of new vehicles sold in the U.S. be battery powered by 2030 and to halt the disbursement of certain federal funds to the states for the building of EV charging infrastructure. The president and certain Republican members of Congress have also criticized the IRA and clean energy initiatives, and the president has stated that he supports revising current federal agency rules that incentivize the EV market and ending state emissions waivers that limit gas-powered vehicle sales. Currently, the IRA and its tax credits remain in place and would require an act of Congress to be repealed, and any changes to federal agency rules would require administrative action. In addition, the enforceability of the federal government’s halt on the disbursement of funds to the states or any future actions to end or discourage state incentives or subsidies is extremely unclear. However, if such government laws or programs incentivizing the growth of the EV market are reduced or eliminated, or the available benefits thereunder are exhausted earlier than anticipated, demand for EVs may decrease and our anticipated sales of EV battery products could be adversely affected. In addition, OEM customers may delay taking delivery of our battery products if they believe that certain EV incentives will be available at a later date, which may adversely affect our business, financial condition, operating results and prospects. Any further

reduction or elimination of government and economic incentives or subsidies may result in the diminished competitiveness of the alternative fuel vehicle industry generally or EVs that use our batteries in particular.

Developments in alternative technology or other fossil fuel alternatives may adversely affect the demand for our battery products.

Significant developments in alternative technologies, such as fuel cell technology, advanced diesel, ethanol or natural gas, or breathing batteries, may materially and adversely affect our business, financial condition, operating results and prospects in ways that we may not currently anticipate. Existing and other battery technologies, fuels or sources of energy may emerge as customers' preferred alternatives to our battery products. Any failure by us to develop new or enhanced technologies or processes, or to react to changes in existing technologies, could materially delay our development and introduction of new and enhanced alternative products, which could result in decreased revenue and a loss of market share to our competitors.

Our research and development efforts may not be sufficient to adapt to changes in alternative fuel and EV technology. As technologies evolve, we plan to upgrade or adapt our energy solutions with the latest technology, in particular lighter weight modules and packs, advanced cooling methods, more sophisticated safety management software, more efficient manufacturing process, and advanced battery chemistry, which may also negatively impact the adoption of our other products. However, we may not compete effectively with alternative systems if we are not able to develop, source and integrate the latest technology into our battery products.

If the EVs in which our batteries are installed do not meet certain motor vehicle standards, our business, operating results and prospects could be adversely affected.

Our products are expected to be used as components in EVs. All vehicles sold must comply with applicable international, federal, and state motor vehicle safety standards, which vary by national and other jurisdictions. In the United States, vehicles that meet or exceed all federally mandated safety standards are certified under the federal regulations. Rigorous testing and the use of approved materials and equipment are among the requirements for achieving federal certification. Failure by our eventual EV manufacturing customers to satisfy motor vehicle standards could have a material adverse effect on our business and operating results.

Moreover, we may incur our own significant costs in complying with these regulations. Laws and regulations related to the EV industry and alternative energy are currently evolving and we face risks associated with changes to these laws and regulations. For more information, see “—The unavailability, reduction or elimination of, or uncertainty regarding, government and economic incentives or subsidies available to us, end-users or OEMs could have a material adverse effect on our business, financial condition, operating results and prospects.”

To the extent laws and regulations become more stringent or otherwise change, our products or the vehicles into which they are incorporated may not comply with applicable international, federal, state or local laws, which would have an adverse effect on our business. Compliance with changing laws and regulations could be burdensome, time consuming and expensive. To the extent compliance with new laws and regulations is cost prohibitive, our business, financial condition, operating results and prospects would be adversely affected.

Internationally, there may be laws and regulations in jurisdictions we have not yet entered or laws of which we are unaware in jurisdictions we have entered that may restrict our sales or other business practices. Even for those jurisdictions we have analyzed, the laws and regulations in this area can be complex, difficult to interpret and may change over time. Continued regulatory limitations and other obstacles interfering with our or our eventual customers' ability to sell products could have a negative and material impact on our business, financial condition, operating results and prospects.

Our ability to successfully market our products will depend on the establishment of charging station networks meeting the needs of EVs using our products. If any of the charging station networks are not compatible with such products and technologies, our sales could be adversely affected.

We design, develop, and manufacture electric power batteries for EVs. However, we do not manufacture chargers or charging poles that are necessary for using our products. In addition, we will rely on third parties, such as city governments, utility providers and private investors, to build charging stations for EVs using our products. If no charging station networks are built in markets in which OEMs using our products target their EVs, there would be little demand for electric battery products in those areas.

Further, existing charging station networks have not been established under a uniform standard and it could diminish our sales if any of the networks are not compatible with EVs using our products and technologies. In order for our fast-charging batteries to become widely adopted in electric passenger cars, a critical mass of compatible fast-charging stations must be installed and in operation in any given urban

area where our OEM customers plan to enter. Establishing a network of fast-charging stations requires significant capital investment and government approvals. It also requires government regulators to believe that the merits of fast-charging stations support the costs of such construction. For more information regarding this government regulation, see “—The unavailability, reduction or elimination of, or uncertainty regarding, government and economic incentives or subsidies available to us, end-users or OEMs could have a material adverse effect on our business, financial condition, operating results and prospects.” If a sufficient number of charging stations that accommodate EVs using our products and technologies cannot be built up and be functional in a timely manner, it will be difficult for us to retain our existing customers and to attract new customers. As a result, our business, financial condition, operating results and prospects may be materially and adversely affected.

If emerging standards in charging station networks are not compatible with our current products or in development products and technologies, we may miss market opportunities and our financial performance will suffer. If other EV battery companies’ products and services, including industry-standard technologies or other new standards, emerge or become dominant in any of these areas, or differing standards emerge in global markets, demand for our technology and products could diminish. As standards emerge, such as those in China including specifications for hardware, connecting equipment and service networks, and standards for communication and inspection, compatibility of prior fast-charging stations could be made obsolete.

Risks Relating to Artificial Intelligence

The use of AI in our products and services may result in reputational harm and competitive harm.

We use artificial intelligence and machine learning in our business, including using artificial intelligence in our battery management systems to monitor the state of health of the battery and using machine learning to assist in developing new molecules and synthesis techniques to improve battery performance. As with many technological innovations, there are significant risks and challenges involved in maintaining and deploying these technologies. Artificial intelligence algorithms or training methodologies may be flawed. Datasets may be overbroad or insufficient and information generated by artificial intelligence may be illegal or harmful. There may also be insufficient back-testing. The rapid evolution and increased adoption of AI technologies may intensify our cybersecurity risks. For more information, see “Risks Relating to Privacy and Security—If we experience a significant cybersecurity breach or disruption in our information systems or any of our partners’ information systems, our business could be adversely affected.” Overall, there can be no assurance that the usage of such technologies will enhance our products or services or be beneficial to our business, including our efficiency or profitability.

Our use of artificial intelligence and machine learning may result in legal and regulatory risks.

Artificial intelligence entails significant legal risks. The IP ownership and license rights of new technologies such as artificial intelligence and machine learning have not been fully addressed by U.S. courts, and there is uncertainty and ongoing litigation in different jurisdictions as to the degree and extent of protection warranted for artificial intelligence technologies and relevant system input and outputs. If we fail to obtain protection for the intellectual property rights concerning technologies developed using artificial intelligence or machine learning, or later have our intellectual property rights invalidated or otherwise diminished, our competitors may be able to take advantage of our research and development efforts to develop competing products, which could adversely affect our business, reputation, financial condition, or results of operations. Moreover, the use or adoption of artificial intelligence and machine learning in our technology may expose us to breach of a data or software license, website terms of service claims, claimed violations of privacy rights or other tort claims.

The regulatory landscape surrounding artificial intelligence is also evolving, and the use of machine learning technologies may become subject to regulation under new laws or new applications of existing laws. In the U.S., there is increasing uncertainty as to the federal government’s future approach to AI regulation, including as to the continued applicability of the 2023 executive order of the prior U.S. presidential administration to, among other things, establish extensive new standards for AI safety and security. In January 2025, President Trump signed an executive order revoking this 2023 executive order and directing the heads of various federal governmental bodies to review actions taken under that executive order and develop a new action plan with respect to AI-related matters. Additionally, other jurisdictions may decide to adopt similar or more restrictive legislation that may render the use of such technologies challenging. For example, the EU AI Act (which could become applicable to us depending on the global expansion of our business) came into force on August 1, 2024, and will generally become fully applicable after a two-year transitional period. The EU AI Act introduces various requirements for AI systems and models placed on the market or put into service in the EU, including specific transparency and other requirements for general purpose AI systems and the models on which those systems are based. Several U.S. states are considering enacting or have already enacted regulations concerning the use of AI technologies, including those focused on consumer protection, and depending on the scope of AI regulation at the federal level, some states may move to regulate AI model development and deployment. Further, at both the U.S. federal and state level, there have been various proposals (and in some cases laws enacted) addressing “deepfakes” and other AI-generated synthetic media. These current or future restrictions may make it harder for us to conduct our business using artificial

intelligence, and violations of these laws and regulations could result in fines and penalties, criminal sanctions against us, our officers or our employees, prohibitions on the conduct of our business, and damage to our reputation. Governmental regulation and laws related to AI may also increase the burden and cost of research and development or require increased transparency that makes it more difficult to protect our IP.

The market for our AI-based services is still emerging, and our AI programs may not achieve the growth potential we expect.

We are seeking to accelerate our pace of innovation by utilizing AI across the spectrum of our business, from engineering and manufacturing; to battery health and safety monitoring. Our AI programs fall under three major categories, namely, AI for Safety, AI for Manufacturing and AI for Science. AI and the application of AI to battery development is a new and emerging field, characterized by rapidly changing technology and evolving government regulations and industry standards and presents additional risks, costs, and challenges, including those discussed in these risk factors. Our ability to derive revenue from providing AI-based services will depend on the growth and acceptance of these AI-based programs generally, and our ability to successfully develop and train AI models for use in these programs. In addition, developing AI-based models requires significant computing power, which can require significant capital expenditures and may be difficult to procure. The implementation of AI can be costly and there is no guarantee that our use of AI will enhance our technologies, benefit our business operations, or produce products and services that are preferred by our customers

Risks Relating to Our Intellectual Property

Our patent applications may not result in issued patents or our patent rights may be challenged, invalidated or limited in scope, any of which could have a material adverse effect on our ability to prevent others from competing or interfering with the commercialization of our products.

Our key technological innovations, including innovations that are currently commercialized in our products and innovations that we plan to deploy in the future, are described in our issued patents and pending patent applications, as well as patent applications that we plan to file in the future. For more information, see “Part I, Item 1. Business—Intellectual Property.” The process of applying for and obtaining a patent is expensive, time consuming and does not always result in patent claims as expected or needed. We may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost, in a timely manner, or in all jurisdictions where protection may be commercially advantageous, or we financially may not be able to protect our proprietary rights at all. There is also no assurance that the pending applications will result in issued patents.

In addition, the issuance of a patent does not give us the right to practice the patented invention. Third parties may have blocking patents that could prevent us from marketing our products and practicing our technology. Alternatively, third parties may seek to market their products similar to or otherwise competitive with our products. In these circumstances, we may need to defend and/or assert our patents, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or agency with jurisdiction may find our patents invalid and/or unenforceable. Even if we have valid and enforceable patents, these patents still may not provide protection against competing products or processes sufficient to achieve our business objectives. Under the terms of our JDAs, and as part of our sponsored research projects with universities, we may file patent applications with third parties and end up co-owning certain of our patents. Co-ownership of a patent may require us to enter into license agreements with third parties, which are less favorable than if we were the sole owner of the patent. Furthermore, if the other owners are unwilling to join us in an enforcement action, we may be unable to enforce our jointly owned patent rights against infringers. Such co-owners may be able to license their rights to other third parties, including our competitors, and our competitors could market competing products and technology. If one or more of our patents are held to be invalid or unenforceable, or if claims of those patents are interpreted narrowly, or if patents fail to issue from our pending applications, our competitiveness and value may also be undermined. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

We rely heavily on our intellectual property portfolio, including unpatented proprietary technology. If we are unable to protect our intellectual property rights from unauthorized use, our business and competitive position would be harmed.

We may not be able to prevent unauthorized use of our intellectual property, which could harm our business and competitive position. We rely upon a combination of the intellectual property protections afforded by patent, trademark and trade secret laws in the United States and other jurisdictions, as well as license agreements and other contractual protections, to establish, maintain and enforce rights in our proprietary technologies.

We also rely substantially on unpatented proprietary technology, including know-how or trade secrets. We seek to protect our intellectual property rights in various ways, including through nondisclosure and invention assignment agreements with our employees and consultants

and through non-disclosure agreements with business partners and other third parties. We cannot ensure that these agreements will provide meaningful protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use, misappropriation, or disclosure of such trade secrets, know-how or other proprietary information. There can be no assurance that employees, consultants, vendors and customers have executed such agreements or have not breached or will not breach their agreements with us, that we will have adequate remedies for any breach, or that our trade secrets will not otherwise become known or independently developed by competitors. The theft or unauthorized use or publication of our trade secrets and other confidential business information could reduce the differentiation of our products and harm our business, the value of our investment in development or business acquisitions could be reduced and third parties might make claims against us related to losses of their confidential or proprietary information. Any of the foregoing could materially and adversely affect our business.

Additionally, despite our efforts to protect our proprietary rights, third parties may attempt to copy or otherwise obtain and use our intellectual property. Monitoring unauthorized use of our intellectual property is difficult and costly, and the steps we have taken or will take to prevent misappropriation may not be sufficient. Any enforcement efforts we undertake, including litigation, could be time-consuming and expensive and could divert management's attention, which could harm our business, results of operations and financial condition. In addition, existing intellectual property laws and contractual remedies may afford less protection than needed to safeguard our intellectual property portfolio.

We may need to defend ourselves against intellectual property infringement claims, which may be time-consuming and could cause us to incur substantial costs.

Companies, organizations or individuals, including our current and future competitors, may hold or obtain patents, trademarks or other proprietary rights that would prevent, limit or interfere with our ability to make, use, develop or sell our products, which could make it more difficult for us to operate our business. From time to time, we have received, and we may in the future receive, claims or inquiries from holders of patents or trademarks claiming that and/or inquiring whether we are infringing their proprietary rights and/or seeking court declarations that they do not infringe upon our intellectual property rights. Companies holding patents or other intellectual property rights relating to batteries, electric motors or electronic power management systems may bring suits alleging infringement of such rights or otherwise asserting their rights and seeking licenses. In addition, if we are determined to have infringed upon a third party's intellectual property rights, we may be required to do one or more of the following:

- cease selling, incorporating or using products that incorporate the challenged intellectual property;
- pay damages;
- obtain a license from the holder of the infringed intellectual property right, which license may not be available on reasonable terms or at all; or
- redesign our batteries.

In the event of a successful claim of infringement against us and our failure or inability to obtain a license to the infringed technology, our business, prospects, operating results and financial condition could be materially adversely affected. In addition, any litigation or claims, whether or not valid, could result in substantial costs and diversion of resources and management's attention.

We may face risks relating to protecting our intellectual property in various countries.

Patent, trademark and trade secret laws vary significantly throughout the world. Filing, prosecuting, and defending patents in all countries throughout the world would be prohibitively expensive, and the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection or licenses, but enforcement is not as strong as that in the United States.

A number of foreign countries do not protect intellectual property rights to the same extent as do the laws of the United States. Therefore, our intellectual property rights may not be as strong or as easily enforced outside of the United States, and efforts to protect against the unauthorized use of our intellectual property rights, technology, and other proprietary rights may be more expensive and difficult outside of the United States. Some courts inside and outside the United States may be less willing or unwilling to protect trade secrets and agreement terms that address non-competition are difficult to enforce in many jurisdictions and might not be enforceable in certain cases. Failure to adequately protect our intellectual property rights could result in our competitors using our intellectual property to offer products, potentially resulting in the loss of some of our competitive advantage and a decrease in our revenue, which would adversely affect our business, financial condition, operating results and prospects.

Risks Relating to our International Operations

The international nature of our business exposes us to business, regulatory, political, operational, financial and economic risks associated with doing business outside of the United States.

While we are incorporated as a Delaware corporation, we have significant operations outside the United States. Battery manufacturing is capital intensive, and to reduce dilution and financial burden, SES has been applying for appropriate government financial support. We currently have an operating facility in Shanghai, China, focused on supply chain development, manufacturing process development, battery cell development and production, AI software, BMS and module development, and an operating facility in Chungju, South Korea, focused on manufacturing process development and battery cell product development. We have received financial support from the Government of South Korea to partially offset the expense of facility construction and plan to seek additional government financial support to the extent possible. Also, due to geopolitical considerations, we may be required to introduce certain commercial inefficiencies into our operations.

We are subject to, and could become further subject to, various legal, political, regulatory and social requirements and economic conditions both inside and outside the United States. Expansion into new markets requires significant resources and management's attention, as well as significant expenditures, including for the establishment of local operating entities, hiring of local employees and establishment of facilities in advance of generating any revenue. Some of the risks associated with international operations in China, South Korea and/or other countries, such as in the development, manufacturing, marketing or sale of our products, include, but are not limited to:

- the United States recently imposed tariffs of 10% on Chinese imports, which will increase costs of our product offerings across all lines of our business;
- ongoing trade tensions between the United States and China have been escalating, and new legislation or regulations in either jurisdiction could impose additional restrictions and costs on our ability to operate in one or both jurisdictions, or even foreclose operations entirely;
- general political tension between South Korea and North Korea, including the ongoing risk of armed conflict between the two countries, which could disrupt our manufacturing operations in South Korea or foreclose our operations entirely;
- non-U.S. countries have enacted and could enact legislation or impose regulations or other restrictions, including unfavorable labor regulations or tax policies (such as Chinese regulations prohibiting our operating company from paying dividends out of accumulated distributable profits unless 10% of such profits (up to half of the company's registered capital) are set aside annually, under Article 166 of China's Company Law), which could have an adverse effect on our ability to conduct business in or expatriate profits from those countries;
- tax rates in certain non-U.S. countries may exceed those in the United States and non-U.S. earnings may be subject to withholding requirements or the imposition of tariffs, exchange controls, or other restrictions, including restrictions on repatriation;
- the regulatory or judicial authorities of non-U.S. countries may not enforce legal rights and recognize business procedures in a manner to which we are accustomed or would reasonably expect;
- we may have difficulty complying with a variety of laws and regulations in non-U.S. countries, some of which may conflict with laws in the United States;
- changes in political and economic conditions may lead to changes in the business environment in which we operate, as well as changes in currency exchange rates;
- in the case of China, the degree of significant government control over China's economic growth through restrictions and limitations on foreign investment in certain industries, control over the allocation of resources, control over payment of foreign currency-denominated obligations, implementation of monetary policy, data localization and privacy requirements, technology transfer requirements, national security laws, influence over the courts and preferential treatment of particular industries or companies, could materially affect our liquidity, access to capital, intellectual property and ability to operate our business in China. If we are unable to operate our business in China, it would require us to redirect research and development efforts to facilities in other jurisdictions, which could result in additional expenditures which would negatively impact our business and results of operations;
- in the case of China, data localization requirements and restrictions on the use of foreign technology applications have already been enacted by the Chinese government, and restrictions on the use of Chinese technology and applications that have been or may be adopted in the future by the United States, may make it difficult to efficiently coordinate complex manufacturing supply chains in a global setting;
- in the case of China, new laws and regulations may require us to obtain additional permits or licenses, or complete or update registrations with regulatory authorities, and we may be unable to conduct our operations in China if we are unable to obtain required permits, licenses or registrations in a timely manner;
- restrictions or denials on visas for our personnel, may limit our ability to train and pass along proprietary information efficiently;

- differences in software usage and export controls, may make it difficult to share certain engineering documents and resources between global subsidiaries;
- changes to export controls and/or failure to obtain export licenses in the United States, China or other countries in which we do business could adversely affect our access to raw materials, ability to manufacture and ship our products or increase our costs to conduct research and development; and
- natural disasters or international conflict, including terrorist acts, could interrupt our research and development, manufacturing or commercialization or endanger our personnel.

Our ability to deal with these issues could be affected by existing or new U.S. laws and the need to protect our intellectual property and assets. The materialization of any such risks could have an adverse impact on our business, financial condition, operating results and prospects.

We could experience losses associated with our intellectual property in relation to our operations in China.

We rely upon the fair interpretation and enforcement of patent, copyright, trademark and trade secret laws in the U.S., similar laws in other countries, and agreements with employees, customers, suppliers, licensors and other parties. Such reliance serves to establish and maintain the intellectual property rights associated with the technology that we develop and ultimately sell. However, the laws and courts of certain countries at times do not protect intellectual property rights or respect contractual agreements to the same extent as the laws of the U.S. Therefore, in certain jurisdictions we may not be able to protect our intellectual property rights against counterfeiting or enforce our contractual agreements with other parties. Specifically, as discussed above, the Company conducts research and development operations in China. Article VII of the National Intelligence Law of China requires every commercial entity in China, by simple order of the Chinese government, to act as an agent of the government by committing espionage, technology theft, or whatever else the government deems to be in the national interest of China. If the Chinese government were to require the appropriation of certain of our intellectual property in the national interest, this could lead to material adverse effects on our operations and competitive positions.

Implementation of labor laws and regulations in China may adversely affect our business and results of operations.

Pursuant to the labor contract law of China that took effect in January 2008, its implementation rules that took effect in September 2008 and its amendment that took effect in July 2013, employers are subject to stricter requirements in terms of signing labor contracts, minimum wages, paying remuneration, determining the term of employees' probation and unilaterally terminating labor contracts. Due to lack of detailed interpretative rules and uniform implementation practices and broad discretion of the local competent authorities, it is uncertain as to how the labor contract law and its implementation rules will affect our current employment policies and practices. Our employment policies and practices may violate the labor contract law or its implementation rules, and we may thus be subject to related penalties, fines or legal fees. Compliance with the labor contract law and its implementation rules may increase our operating expenses, in particular our personnel expenses. In the event that we decide to terminate some of our employees or otherwise change our employment or labor practices, the labor contract law and its implementation rules may also limit our ability to effect those changes in a desirable or cost-effective manner, which could adversely affect our business and results of operations.

As the interpretation and implementation of these laws and regulations are still evolving, we cannot assure you that our employment practice will at all times be deemed in full compliance with labor-related laws and regulations in China, which may subject us to labor disputes or government investigations. If we are deemed to have violated relevant labor laws and regulations, we could be required to provide additional compensation to our employees and our business, financial condition and results of operations could be adversely affected.

Further, labor disputes, work stoppages or slowdowns at our operations facilities or any of our third-party service providers could significantly disrupt daily operation or our battery development plans and have materially adverse effects on our business.

Our incentives from various governments are conditional upon achieving or maintaining certain performance obligations and are subject to reduction, termination, or clawback.

We have received, and may in the future continue to receive, benefits and incentives from national, state, and local governments in various regions of the world designed to encourage us to establish, maintain, or increase investment, workforce, or production in those regions. These incentives may take various forms, including grants, loan subsidies, and tax arrangements, and typically require us to achieve or maintain certain levels of investment, capital spending, employment, technology deployment, or research and development activities to qualify for such incentives or could restrict us from undertaking certain activities. We may be unable to obtain significant future incentives to continue to fund a portion of our capital expenditures and operating costs, without which our cost structure would be adversely impacted. We also cannot guarantee that we will successfully achieve performance obligations required to qualify for these incentives or that the granting agencies will provide such funding. These incentive arrangements typically provide the granting agencies with rights to audit our compliance with their terms and obligations. Such audits could result in modifications to, or termination of, the applicable incentive program. The incentives we receive could be subject to reduction, termination, or clawback, and any decrease or clawback of government incentives could have a material adverse effect on our business, results of operations, or financial condition.

Risks Relating to Regulations and Our Compliance With Such Regulations

Our operations expose us to litigation, environmental and other legal compliance risks. Compliance with laws and regulations can be expensive, and our failure to comply with these laws and regulations may result in monetary damages and fines, adverse publicity and a material adverse effect on our business.

We are subject to a variety of litigation, environmental, health and safety and other legal compliance risks. These risks include, among other things, possible liability relating to product liability matters, personal injuries, intellectual property rights, contract-related claims, health and safety liabilities, environmental matters and compliance with U.S. and foreign laws, competition laws and laws governing improper business practices.

Our operations in the United States, China, and South Korea may be subject environmental laws and regulations, including laws and regulations relating to water, discharges, emissions, chemicals, hazardous materials, natural resources, remediation and contamination. Compliance with these laws can be difficult and costly. For example, battery life cycle management regulations and regulations governing the transport of batteries may impose substantial requirements on our operations in the United States. Our operations may be required to obtain and comply with environmental permits, many of which may be difficult and expensive to obtain and must be renewed on a periodic basis. A failure to comply with these laws, regulations or permits could result in substantial liabilities, including fines, penalties, the suspension or loss of permits, and possibly orders to cease the non-compliant operations.

As a business with international reach, we are subject to complex laws and regulations in jurisdictions in which we operate. Those laws and regulations may be interpreted in different ways. They may also change from time to time, as may related interpretations and other guidance. Changes in laws or regulations could result in higher expenses and payments, and uncertainty relating to laws or regulations may also affect how we conduct our operations and structure our investments and could limit our ability to enforce our rights.

Changes in environmental and climate laws or regulations, including laws relating to greenhouse gas emissions, could lead to new or additional investment in manufacturing designs, subject us to additional costs and restrictions, including increased energy and raw materials costs, and could increase environmental compliance expenditures. We are subject to various environmental laws and regulations on air emission, waste water discharge, solid waste, noise and the disposal of hazardous materials. Cobalt and lithium are toxic materials that are important raw materials in our batteries. We also use, generate and discharge other toxic, volatile and hazardous chemicals and wastes in our research, development and manufacturing activities. Under Chinese, South Korean, and U.S. environmental regulations, we are required to maintain the pollutant emission levels at the facility within the levels prescribed by the relevant governmental authorities and obtain a pollution discharge permit for water and air emissions. In addition, certain laws and regulations require enterprises like us that generate hazardous wastes to engage companies which are licensed and qualified to process the hazardous wastes, and to collect, store, dispose of and transfer the hazardous waste.

If we fail to comply with national and local environmental protection laws and regulations, the relevant governmental authorities may impose fines or deadlines to cure instances of non-compliance and may even order us to cease operations if we fail to comply with their requirements. In particular, any breach by us in connection with requirements relating to the handling of hazardous wastes may subject us to monetary damages and fines. In addition, if any third party suffers any loss as a result of our pollutant emission practices, our improper handling of hazardous wastes or our noncompliance with environmental regulations, such third parties may seek damages from us.

There can be no assurance that we will be able to comply with all environmental laws and regulations at all times as the environmental legal regime is evolving and becoming more stringent, especially in China, South Korea, and the United States. Therefore, if these or other governments where we do business impose more stringent regulations in the future, we will have to incur additional substantial costs and expenses in order to comply with new regulations, which may negatively affect our results of operations. If we fail to comply with any of the present or future environmental regulations in any material aspect or cause any loss to any third parties due to our pollutant emission practices, improper handling of hazardous wastes or other environmental noncompliance, we may suffer from negative publicity and may be required to pay substantial fines, pay damages to such third parties, or suspend or even cease operations. Failure to comply with environmental laws and regulations may materially and adversely affect our business, financial condition, operating results and prospects.

Failure to comply with certain health and production safety laws and regulations governing hazardous materials could materially adversely affect our business and results of operations.

In the sourcing of our products throughout the world, we process, store, dispose of and otherwise use large amounts of hazardous materials. As a result, we are subject to extensive and evolving health and production safety laws and regulations governing, among other things: the health of our employees and safety production requirements regarding the generation, handling, storage, use and transportation of hazardous materials. Compliance with these laws and regulations results in ongoing costs. Failure to comply with these laws or regulations, or to obtain or comply with the relevant permits, could result in fines, criminal charges or other sanctions by regulators. Furthermore, we may be ordered to rectify a non-compliance within a stipulated deadline; and if we fail to do so, we may be ordered to cease operations. Our ongoing compliance with health and safety laws, regulations and permits could require us to incur significant expenses, limit our ability to modify or expand our facilities or continue manufacturing and make other capital improvements. In addition, private parties, including current or former employees, could bring personal injury or other claims against us due to the presence of, or exposure to, hazardous substances used, stored or disposed of by us or contained in our products.

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

We are subject to anti-corruption, anti-bribery, anti-money laundering, financial and economic sanctions and similar laws and regulations in various jurisdictions in which we conduct or in the future may conduct activities, including the U.S. Foreign Corrupt Practices Act (“FCPA”), the U.K. Bribery Act 2010, and other anti-corruption laws and regulations in countries in which we conduct activities. Anti-corruption laws prohibit us and our officers, directors, employees, contractors and business partners acting on our behalf, including agents, from corruptly offering, promising, authorizing or providing, directly or indirectly, anything of value to a “foreign official” for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. These laws also require companies to make and keep books, records and accounts that accurately reflect transactions and dispositions of assets and to maintain a system of adequate internal accounting controls. These laws also prohibit non-governmental “commercial” bribery and soliciting or accepting bribes. A violation of any of these laws or regulations could 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 and adversely affect our business, financial condition, operating results and reputation. Our policies and procedures designed to ensure compliance with these laws and regulations may not be sufficient and our directors, officers, employees, representatives, consultants, agents, and business partners could engage in improper conduct for which we may be held responsible.

As we increase our international cross-border business and expand our operations abroad, we may continue to engage with business partners, suppliers and third-party intermediaries to market our services and to obtain necessary permits, licenses and other regulatory approvals. In addition, we or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners and agents, even if we do not explicitly authorize such activities. There can be no assurance that our employees and agents will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible. As we increase our international business, our risks under these laws may increase.

Detecting, investigating and resolving actual or alleged violations of anti-corruption, anti-bribery, anti-money laundering or financial and economic sanctions laws can require a significant diversion of time, resources and attention from management. Non-compliance with these laws could subject us to whistleblower complaints, adverse media coverage, investigations, subpoenas received, enforcement actions, prosecution and severe fines, damages and administrative, civil and criminal sanctions, collateral consequences, remedial measures and legal expenses, all of which could materially and adversely affect our business, financial condition, operating results and reputation. In addition, changes in these laws in the future could adversely impact our business and investments in our securities.

Governmental trade controls, including export and import controls, sanctions, customs requirements and related regimes, could subject us to liability or loss of contracting privileges, limit our ability to transfer technology or compete in certain markets and affect our ability to hire qualified personnel.

Our technology and products, including components of our products, are subject to export control and import laws and regulations, including those by the U.S. Export Administration Regulations, U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control, and similar regulations by the South Korean government. These jurisdictions' export control laws and regulations and economic sanctions prohibit the shipment of certain products, technologies and services to embargoed or sanctioned countries, governments and persons, as well as to various countries and persons due to national security and foreign policy concerns. In particular, U.S. and South Korean export control laws apply to cells with an energy density greater than 350 Wh/kg and require a license for the export of technology and cells exceeding that threshold to many locations outside of each respective jurisdiction, including China and Singapore. Some of our technology and products are thus presently subject to these license requirements under export controls.

Complying with export control and sanctions regulations for a particular sale may be time-consuming and result in the delay or loss of sales opportunities. We have set up an export controls compliance program internally. If we fail to comply with these laws and regulations, we and even some of our employees could be subject to substantial civil and/or criminal penalties, including the possible loss of export or import privileges, fines, which may be imposed on us and responsible employees or managers and, in extreme cases, the incarceration of responsible employees or managers.

A significant talent pool is comprised of nationals from countries that may require a license from the Bureau of Industry and Security to work with our technology (such as China, India, Russia, South Korea, Taiwan and Japan), which raises the cost of hiring due to the uncertainty that a license may not be granted and the candidate would be unemployable in the role envisioned. In addition, changes in our products or solutions or changes in applicable export or import laws and regulations may create delays or prohibitions in the introduction and sale of our products and solutions in international markets, increase costs due to changes in import and export duties and taxes, prevent our customers from deploying our products and solutions or, in some cases, prevent the export or import of our products and solutions to certain countries, governments or persons altogether. Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations, could also result in decreased use of our products and solutions, decreased ability to export or sell our products and solutions to customers, and decreased ability to import components or parts critical to the manufacture of our products. Any decreased use of our technology and products, limitation on our ability to export or sell our technology and products, or limitation on our ability to import raw materials, components or equipment would likely adversely affect our business, financial condition, operating results and prospects.

Changes in U.S. and foreign tax laws could have a material adverse effect on our business, cash flow, results of operations or financial conditions.

We (as well as certain of our subsidiaries) are subject to federal, state and local taxes in the United States and are also subject to tax in certain foreign jurisdictions. Changes to U.S. tax laws, including limitations on the ability of taxpayers to claim and utilize foreign tax credits and the deferral of certain tax deductions until earnings outside of the United States are repatriated to the United States, as well as changes to U.S. federal income tax laws, such as the IRA, and others that may be enacted in the future (the uncertainty of all of which is heightened by recent changes in governmental administration in the United States), could impact the tax treatment of our foreign earnings. Due to our international business activities, any changes in the taxation of such activities may increase our worldwide effective tax rate and adversely affect our financial position and results of operations.

Significant judgment is required in evaluating our tax positions and our worldwide provision for taxes. During the ordinary course of business, there are many activities and transactions for which the ultimate tax determination is uncertain. In addition, our tax obligations and effective tax rates could be adversely affected by changes in the relevant tax, accounting and other laws, regulations, principles and interpretations, including those relating to income tax nexus, if our earnings are lower than anticipated in jurisdictions where we have lower statutory rates and higher than anticipated in jurisdictions where it has higher statutory rates, by changes in foreign currency exchange rates, or by changes in the valuation of its deferred tax assets and liabilities. We may be audited in various jurisdictions, and such jurisdictions may assess additional taxes against us. Although we believe our tax estimates are reasonable, the final determination of any tax audits or litigation could be materially different from our historical tax provisions and accruals, which could have a material adverse effect on our operating results or cash flows in the period or periods for which a determination is made.

Additionally, changes in corporate tax rates, the realization of net deferred tax assets relating to our operations, the taxation of foreign earnings, and the deductibility of expenses under future tax reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges in the current or future taxable years, and could increase our future tax expense, which could have a material adverse effect on our business, financial condition, operating results, and prospects.

Certain U.S. state tax authorities may assert that we have a state nexus and seek to impose state and local income taxes which could harm our results of operations.

There is a risk that certain state tax authorities where we do not currently file a state income tax return could assert that we are liable for state and local income taxes based upon income or gross receipts allocable to such states. States are becoming increasingly aggressive in asserting a nexus for state income tax purposes. If a state tax authority successfully asserts that our activities give rise to a nexus, we could be subject to state and local taxation, including penalties and interest attributable to prior periods. Such tax assessments, penalties and interest may adversely impact our results of operations.

Risks Relating to Privacy and Security

If we experience a significant cybersecurity breach or disruption in our information systems or any of our partners' information systems, our business could be adversely affected.

Malicious actors may be able to penetrate our network and misappropriate or compromise our confidential information or that of third parties, create system disruptions or cause shutdowns. Malicious actors also may be able to develop and deploy viruses, worms and other malicious software programs that attack our products or otherwise exploit any security vulnerabilities of our products. We manage and store various proprietary information and sensitive or confidential data relating to our business as well as information from our suppliers and customers. While we employ a number of protective measures, including firewalls, network infrastructure vulnerability scanning, anti-virus and endpoint detection and response technologies, these measures may fail to prevent or detect attacks on our systems due to the frequent evolving nature of cybersecurity attacks. Although these measures are designed to ensure the confidentiality, integrity and availability of our information and technology systems, there is no assurance that these measures will detect all threats or prevent a cybersecurity attack. If there are any breaches of our or any of our third party suppliers' security measures or the accidental loss, inadvertent disclosure or unapproved dissemination of proprietary information or sensitive or confidential data about us or our employees, contractors, customers, suppliers, or other third parties, including the potential loss or disclosure of such information or data as a result of fraud, trickery or other forms of deception, it could expose us or our employees, contractors, customers, suppliers, or other third parties to a risk of loss or misuse of this information, disruption of business operations, result in litigation, regulatory scrutiny, and potential liability for us, damage our brand and reputation or otherwise harm our business.

In addition, our hardware and software or third-party components and software that we utilize in our products may contain defects in design or manufacture, including "bugs" and other problems that could unexpectedly interfere with the operation or security of the products. The costs to us to eliminate or mitigate cyber or other security problems, bugs, viruses, worms, malicious software programs and security vulnerabilities could be significant and, if our efforts to address these problems are not successful, could result in interruptions, delays, cessation of service and loss of existing or potential customers that may impede our sales, manufacturing, distribution or other critical functions.

We have experienced, and will likely continue to experience, cybersecurity incidents in the normal course of our business; however, to our knowledge, we have not experienced a material cybersecurity incident during fiscal 2024. To the extent we experience cybersecurity incidents, our relationships with our partners, suppliers and eventual customers may be materially impacted, our brand and reputation may be harmed and we could incur substantial costs in investigating, responding to and remediating the incidents, and in resolving any regulatory investigations or disputes that may arise with respect to them, any of which would cause our business, operations, or products to be adversely affected. In addition, the cost and operational consequences of implementing and adding further data protection measures could be significant.

Risks Relating to Our Common Stock and Warrants

Our CEO and certain entities affiliated with the CEO (the “SES Founder Group”) is a large and significant stockholder and, as a result, we are a “controlled company,” which exempts us from certain obligations to comply with certain corporate governance requirements.

As of February 25, 2025, the SES Founder Group owned approximately 12.1% of our outstanding common stock and 57.9% of the total voting power. Accordingly, we are a “controlled company” for purposes of the NYSE listing requirements. As such, we are exempt from the obligation to comply with certain corporate governance requirements, including the requirements that a majority of our board of directors must consist of independent directors, and that we have nominating and compensation committees that are each composed entirely of independent directors. These exemptions do not modify the requirement for a fully independent audit committee. If we cease to be a “controlled company,” we must comply with the independent board committee requirements as they relate to the nominating and compensation committees, subject to certain “phase-in” periods.

We are controlled or substantially influenced by the SES Founder Group, whose interests may conflict with other stockholders. The concentrated ownership of our dual class common stock could prevent stockholders from influencing significant decisions.

The SES Founder Group has the ability to control the outcome of most matters requiring stockholder consent. As our Chief Executive Officer, Dr. Hu has control over our day-to-day management and the implementation of major strategic investments, subject to authorization and oversight by our board of directors. As a board member and officer, Dr. Hu also owes a fiduciary duty to our stockholders and must act in good faith in a manner he reasonably believes to be in the best interests of our stockholders. However, Dr. Hu is still entitled to vote his shares, and has the ability to control the outcome of most matters requiring stockholder consent. This was designed to shepherd our long-term growth amidst significant near-term fluctuations and uncertainty in the market.

Moreover, for so long as the SES Founder Group holds at least a majority of SES’s outstanding common stock, it has the ability, through the Board, to control decision-making with respect to SES’s business direction and policies. Matters over which the SES Founder Group can, directly or indirectly, exercise control include:

- the election of SES’s board of directors and the appointment and removal of our officers;
- mergers and other business combination transactions requiring stockholder approval, including proposed transactions that would result in our stockholders receiving a premium price for their shares; and
- amendments to SES’s certificate of incorporation or increases or decreases in the size of our board of directors.

Even if the SES Founder Group’s ownership subsequently falls below 50%, the SES Founder Group may continue to be able to strongly influence or effectively control our decisions.

Provisions in our Certificate of Incorporation (the “Charter”) and Delaware law may inhibit a takeover attempt which could limit the price investors might be willing to pay in the future for our common stock and could entrench management.

Our Charter and Bylaws contain provisions to limit the ability of others to acquire control of us or cause us to engage in change-of-control transactions, including, among other things:

- provisions that authorize our board of directors (the “Board”), without action by our stockholders, to authorize by resolution the issuance of shares of preferred stock and to establish the number of shares to be included in such series, along with the preferential rights determined by our Board; provided that, our Board may also, subject to the rights of the holders of preferred stock, authorize shares of preferred stock to be increased or decreased by the approval of the Board and the affirmative vote of the holders of a majority in voting power of the outstanding shares of capital stock of the corporation;
- provisions that permit only a majority of our Board, the Chairperson of the Board or the Chief Executive Officer to call special stockholder meetings; provided, that for so long as Dr. Qichao Hu and certain entities affiliated with Dr. Hu beneficially own at least 50% of the voting power of the then outstanding shares of our capital stock, special meetings of stockholders may also be called by or at the request of stockholders holding a majority of the voting power of the issued and outstanding shares of our capital stock;
- provisions that impose advance notice requirements and other requirements and limitations on the ability of stockholders to propose matters for consideration at stockholder meetings; and
- a staggered board whereby our directors are divided into three classes, with each class subject to retirement and reelection once every three years on a rotating basis.

These provisions could have the effect of depriving our stockholders of an opportunity to sell their shares at a premium over prevailing market prices by discouraging third parties from seeking to obtain control of us in a tender offer or similar transaction. With our staggered

Board, at least two annual meetings of stockholders will generally be required in order to effect a change in a majority of our directors. Our staggered Board 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 in a relatively short period of time.

Our Charter 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 Charter requires, 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 (the "Chancery Court") and, if brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to the personal jurisdiction of the Chancery Court and having service of process made upon such stockholder in any such action on such stockholder's counsel. 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 these forum provisions. Notwithstanding the foregoing, our Charter provides that the exclusive forum provision does not apply to suits brought to enforce a duty or liability created by the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Additionally, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended (the "Securities Act") against us or any of our directors, officers, other employees or agents. However, there is uncertainty as to whether a court would enforce the exclusive forum provisions relating to causes of actions arising under the Securities Act.

Although we believe this exclusive forum provision benefits us by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, it may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provision contained in our Charter to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, operating results and financial condition.

The price of our common stock has been and may continue to be volatile.

From the closing of our Business Combination until February 25, 2025, the market price of our Class A common stock has been volatile, fluctuating between \$7.68 and \$0.84. This market price is affected by a number of factors, including:

- actual or anticipated fluctuations in our quarterly financial results or the quarterly financial results of companies perceived to be similar to us;
- changes in the market's expectations about our operating results;
- success of competitors;
- our operating results failing to meet market expectations in a particular period;
- changes in financial estimates and recommendations by securities analysts concerning SES or the industry and market in general;
- operating and stock price performance of other companies that investors deem comparable to SES;
- our ability to market new and enhanced products on a timely basis;
- changes in laws and regulations affecting our business;
- commencement of, or involvement in, litigation;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- the volume of shares of our Class A common stock available for public sale;
- any significant change in our Board or management;
- sales of substantial amounts of our Class A common stock by our directors, executive officers or significant stockholders or the perception that such sales could occur;
- general economic and political conditions such as recessions, interest rates, fuel prices, international currency fluctuations and acts of war or terrorism including disruptions resulting from regional conflicts; and
- disruptions resulting from public health crises or extreme weather events (including as a result of climate change).

Broad market and industry factors may depress the market price of our Class A common stock irrespective of our operating performance. The stock market in general and the NYSE have experienced price and volume fluctuations that have often been unrelated or

disproportionate to the operating performance of the particular companies affected. The trading prices and valuations of these stocks, and of our securities, may not be predictable. A loss of investor confidence in the market for EV battery and related battery technology stocks or the stocks of other companies which investors perceive to be similar to SES could depress our stock price regardless of our business, prospects, financial conditions or results of operations. A decline in the market price of our Class A common stock also could adversely affect our ability to issue additional securities and our ability to obtain additional financing in the future.

Our public warrants may never be in the money, and they may expire worthless.

The exercise price for our warrants is \$11.50 per-share, subject to adjustment, which exceeds the market price of our Class A common stock, which was \$0.84 per-share based on the closing price of our Class A common stock on the NYSE on February 25, 2025. There can be no assurance that the public warrants will ever be in the money prior to their expiration and, as such, the warrants may expire worthless.

We may redeem unexpired public warrants prior to their exercise at a time that is disadvantageous to the warrant holders, thereby making the warrants worthless.

We may redeem outstanding warrants (excluding any private placement warrants held by the Ivanhoe Capital Sponsor LLC (the “Sponsor”) or its permitted transferees) at any time after they become exercisable and prior to their expiration, at \$0.01 per warrant, provided that the last reported sales price (or the closing bid price of our Class A common stock in the event our Class A common stock is not traded on any specific trading day) of our Class A common stock equals or exceeds \$18.00 per-share for any 20 trading days within a 30 trading-day period ending on the third business day prior to the date we send proper notice of such redemption, provided that on the date we give notice of redemption and during the entire period thereafter until the time we redeem the warrants, there is an effective registration statement under the Securities Act covering the shares of our Class A common stock issuable upon exercise of the warrants and a current prospectus relating to them is available. If and when the warrants become redeemable by us, we may exercise our redemption right even if we are unable to register or qualify the underlying securities for sale under all applicable state securities laws. Redemption of the outstanding warrants could force a warrant holder: (i) to exercise its warrants and pay the exercise price therefore at a time when it may be disadvantageous for it to do so, (ii) to sell its warrants at the then-current market price when it might otherwise wish to hold its warrants or (iii) to accept the nominal redemption price which, at the time the outstanding warrants are called for redemption, will be substantially less than the market value of its warrants.

If the price of our Class A common stock increases, warrants to purchase SES common stock could increase the number of shares eligible for future resale in the public market and result in dilution to stockholders.

As of December 31, 2024, were 14,213,280 warrants outstanding. Each warrant entitles its holder to purchase one share of Class A common stock at an exercise price of \$11.50 per-share and will expire at 5:00 p.m., New York time, five years after the closing of the Business Combination or earlier upon redemption of our Class A common stock or our liquidation. While the warrants are currently out the money, to the extent they are exercised before expiration, additional shares of Class A common stock will be issued, which will result in dilution to our then existing stockholders and increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market could depress the market price of our Class A common stock.

We may be subject to securities litigation, which is expensive and could divert management’s attention.

The share price of our Class A common stock has been and may continue to be volatile and, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. SES may be the target of this type of litigation in the future. Litigation of this type could result in substantial costs and diversion of management’s attention and resources, which could have a material adverse effect on its business, financial condition, results of operations and prospects. Any adverse determination in litigation could also subject us to significant liabilities.

Our failure to satisfy certain NYSE listing requirements may result in our Class A common stock being delisted from the NYSE, which could eliminate or adversely affect the trading market for our Class A common stock.

In September 2024, we received notice from the New York Stock Exchange (“NYSE”) indicating that we did not satisfy the continued listing standard set forth in Section 802.01C of the NYSE’s Listed Company Manual (“Section 802.01C”), as the average closing price of our common stock was less than \$1.00 per share over a consecutive 30 trading-day period. We have since regained compliance, since at the end of January 2024 (within our six-month cure period under the NYSE’s rules), our Class A common stock reached a closing share price of at least \$1.00 on the last trading day of January 2024 and had an average closing share price of at least \$1.00 over the prior 30 trading-day period. However, given the volatility in the stock market in general and in the market price of our securities in particular, and the

resulting risk of our future non-compliance with Section 802.01C, we continue to actively monitor the market price of shares of our Class A common stock. For more information, see “—The price of our common stock has been and may continue to be volatile.” The perception among investors that we are at heightened risk of delisting could negatively affect the market price and trading volume of our Class A common stock. Additionally, if we again fall out of compliance, we are not able to cure within the NYSE’s prescribed cure period and the NYSE ultimately delists our securities from trading on its exchange for failure to meet the listing standards and we are not able to list such securities on another national securities exchange, we expect such securities could be quoted on an over-the-counter market. If this were to occur, we and our stockholders could face significant material adverse consequences, which could severely diminish or eliminate the value of an investment in our Class A common stock, including a limited availability of market quotations for our securities, reduced liquidity for our securities, a limited amount of news and analyst coverage, and a decreased ability to issue additional securities or obtain additional financing in the future.

We are a “smaller reporting company” and the reduced reporting requirements applicable to such companies may make our securities less attractive to investors.

We are a “smaller reporting company” as defined by SEC rules, which allows us to take advantage of certain scaled disclosure requirements. For example, we may continue to use reduced compensation disclosure obligations, and, provided we also remain a “non-accelerated filer,” we will not be obligated to follow the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act. We will remain a smaller reporting company until the last day of the fiscal year in which we have at least \$100 million in revenue and at least \$700 million in aggregate market value of Class A common stock held by non-affiliated persons and entities (known as “public float”), or, alternatively, if our revenue exceed \$100 million, until the last day of the fiscal year in which our public float was at least \$250.0 million (in each case, with respect to public float, as measured as of the last business day of the second quarter of such fiscal year). We cannot predict or otherwise determine if investors will find our securities less attractive as a result of our reliance on exemptions as a smaller reporting company and/or “non-accelerated filer.” If some investors find our securities less attractive as a result, there may be a less active trading market for our securities and the price of our securities may be more volatile.

We have identified material weaknesses in our internal control over financial reporting, including one ongoing material weakness and others that have been remediated. If we fail to effectively remediate the ongoing material weakness or identify additional material weaknesses in the future, there could be an adverse impact on the value of your investment.

Effective internal controls are necessary for us to provide reliable financial reports, prevent fraud and errors in our financial statements and operate successfully as a public company. We have concluded we did not maintain effective internal control over financial reporting as of each of December 31, 2024, 2023 and 2022. We have since remediated the material weaknesses that made our internal control ineffective as of December 31, 2023 and 2022, but a new material weakness has led us to determine that our internal control over financial reporting as of December 31, 2024 was not effective. We are actively engaged in developing and implementing a remediation plan designed to address these material weaknesses and are committed to remediating it as promptly as possible. For more information, see “Part II, Item 9A. Controls and Procedures.” However, we cannot be certain that our internal control over financial reporting will be remediated and considered effective going forward. Because of its inherent limitations, our system of internal control over financial reporting may not prevent or detect every misstatement.

If we are unable to remediate the existing material weakness in our internal control over financial reporting or identify additional material weaknesses, we may be unable to accurately report our financial results, or report them within the timeframes required by the SEC. If this occurs, we also could become subject to sanctions or investigations by the SEC or other regulatory authorities. In addition, if we are unable to assert that our internal control over financial reporting is effective, or, to the extent required by SEC rules, our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, or expresses an adverse opinion, investors may lose confidence in the accuracy and completeness of our financial reports, we may face restricted access to the capital markets and our stock price may be adversely affected. We also face risks associated with the cost of establishing effective internal control over financial reporting, insofar as we have incurred, and expect to continue to incur, increased costs related to our internal control over financial reporting to remediate the above-described material weakness and improve further our internal control environment.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

Cybersecurity is an important priority at SES, and we actively manage this critical risk through comprehensive measures. Our processes for assessing, identifying, and managing material risks from cybersecurity threats are still in development and have yet to be integrated into our overall risk management system and processes.

- **Proactive Defense:** We utilize industry-standard mechanisms to assess, identify, and address potential threats from cybersecurity incidents. Our dedicated information technology (IT) team continuously monitors the evolving cybersecurity landscape and develops robust response processes to swiftly and effectively handle emerging threats.
- **Structured Framework:** Our company-wide cybersecurity policy outlines our security posture and incident response protocol, ensuring clear escalation procedures to inform senior management, the Audit Committee, and the Board of Directors of cybersecurity events as needed.
- **Independent Oversight:** The Audit Committee, composed entirely of independent directors under SEC and NYSE rules, oversees our cyber risk exposure and evaluates our risk mitigation strategies. The committee was briefed by our VP, IT Services in depth, and in turn briefs the Board of Directors on any material cyber risks and events.

Additionally, we use processes to oversee and identify material risks from cybersecurity threats associated with our use of third-party technology and systems, including third party penetration tests, external security audits of our data loss prevention mechanisms and require that our vendors comply with Service Organization Control Type II requirements.

Previously, our information security program was led by our Vice President of Compliance and Information Technology, who has since left the Company. As of February 25, 2025, the responsibilities of this role are being performed on an interim basis by our IT Manager, whose experience includes two years supporting the cybersecurity function under the Vice President of Compliance and Information Technology. We are currently seeking a replacement to oversee our information security program.

While cybersecurity threats remain a reality for all organizations, SES is committed to proactive risk management and continuous improvement in our security posture. We believe that the processes we have established for assessing, identifying, and managing material risks from cybersecurity allow us to effectively mitigate potential impacts and protect our business, operations, and products:

- **In-sourced IT Services:** By in-sourcing IT services in late 2023, we gained greater control over IT decisions, established a comprehensive knowledge base, and laid a framework allowing for unbiased assessments of future IT and cybersecurity investments. We have continued improvements using in-sourced IT services throughout 2024.
- **24/7 Network Monitoring:** Our continuous 24/7 second-level maintenance and monitoring contract provides constant vigilance against network disruptions and potential cyber threats, ensuring swift detection and mitigation of incidents.
- **Data Backup:** Deployment of our new data backup system was completed in June 2024 and offers robust protection against catastrophic failures, early detection of data loss prevention events, and near real-time mitigation of ransomware attacks.
- In addition, at times we also engage assessors, consultants, auditors, or other third parties to assist with assessing, identifying, and managing cybersecurity risks.

We face risks from cybersecurity threats that could have a material adverse effect on our relationship with our partners, suppliers and eventual customers, or on our business, operations or products. We have experienced, and will likely continue to experience, cybersecurity incidents in the normal course of our business; however, to our knowledge, we have not experienced a material cybersecurity incident during fiscal 2024. See “Part I, Item 1A. Risk Factors – Risks Related to Privacy and Security – If we experience a significant cybersecurity breach or disruption in our information systems or any of our partners’ information systems, our business could be adversely affected.”

Item 2. Properties

We have leased facilities located in Woburn, Massachusetts in the United States, in the vicinity of Woburn, Massachusetts, Shanghai, China, and Chungju and Seoul, South Korea. For more information, see “Part I, Item 1. Business—Our Facilities,” as well as “Leases” in Note 12 to the consolidated financial statements included in Item 8 of this Form 10-K.

Item 3. Legal Proceedings

The information required by this Item is provided under “Legal Contingencies” in Note 13 to the consolidated financial statements included in Item 8 of this Form 10-K and is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information

Our Class A common stock is traded on The New York Stock Exchange (the “NYSE”) under the symbol “SES.” Our public warrants are traded on the NYSE under the symbol “SES WS.”

Holders of Record

As of February 25, 2025, there were 124 holders of record of our Class A common stock and one holder of record of our public warrants. Such numbers do not include Depository Trust Company (“DTC”) participants or beneficial owners holding shares through nominee names.

There is no public market for our Class B common stock and one holder of record of our Class B common stock as of February 25, 2025.

Dividends

We have not paid any cash dividends on our shares of Class A common stock to date and do not anticipate paying any cash dividends for the foreseeable future. The payment of cash dividends in the future will be dependent upon our revenues and earnings, if any, capital requirements and general financial condition as well as general business conditions. The payment of any cash dividends will be within the discretion of the Board at such time.

Recent Sales of Unregistered Securities

None.

Stock Performance Graph

Consistent with the rules applicable to “smaller reporting companies,” we have elected scaled disclosure reporting, and therefore have omitted information required by this item.

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 consolidated results of operations and financial condition. The following discussion and analysis should be read in conjunction with our audited consolidated financial statements as of and for the years ended December 31, 2024 and 2023 and the accompanying notes included in this Annual Report on Form 10-K. The following discussion may contain forward-looking statements that reflect our plans, estimates and beliefs, which are subject to risks, uncertainties and assumptions. These forward-looking statements within the meaning of the federal securities law are based on our current expectations and beliefs concerning future developments and their potential effects on us. These forward-looking statements are not statements of historical fact and may include statements regarding possible or assumed future results of operations. There can be no assurance that future developments affecting us will be those that we have anticipated. Our actual results and the timing of events may differ materially from those expressed or implied as a result of various factors, including those set forth in the sections titled “Risk Factors” and “Cautionary Note Regarding Forward-Looking Statements.” References in this section to our future plans that indicate the timing of when we expect such plans to be completed by a certain year mean at any point during that year.

Overview

We are a leading developer and manufacturer of high-performance, AI-enhanced Lithium-Metal and Li-ion rechargeable batteries for EVs, UAM, drones, robotics, BESS and other applications. Our differentiated battery technology has been designed to combine the high energy density of Li-Metal with the large-scale manufacturability of conventional Lithium-ion (“Li-ion”) batteries and will help to promote the transition from the global dependence on fossil fuel-based automotive vehicles to clean and efficient EVs and help enable an era of electric transportation in the air.

SES’s mission is to accelerate the world’s energy transition through material discovery and battery management. To assist in achieving this mission, we have partnered with leading global OEMs, including GM, Hyundai, and Honda, among other strategic partners, under JDAs and service contracts to develop and produce our Li-Metal battery cells and technology. We have transitioned from the development and production of A-Sample batteries to B-Sample batteries with specifications required by OEMs for their EVs. This transition began when we signed a B-Sample agreement for Li-Metal development of EVs. A-Sample batteries are functional prototypes developed for OEMs based on their technical specifications. These are in contrast with B-Sample batteries, which are A-sample batteries manufactured under much higher throughput and tested in actual vehicles, and C-Sample batteries, which would be fully functional, mature samples for mass production and tested for full drivability in actual vehicles.

We are also conducting research and development activities to further improve the performance, quality and cost of our battery technology by focusing on the following key areas, all of which we expect to help us achieve our commercialization goal, at our facilities in Woburn, Massachusetts in the United States, Shanghai, China, and Chungju, South Korea. These activities include:

- *Scale-up:* Our design is further being customized with and validated by several OEMs. Based on our collaborations with OEMs, we believe that a roughly 100 Ah cell-size manufactured at GWh scale (five to seven cells-per-minute) is needed to achieve commercialization in EVs and UAMs at a large, global scale. We are developing processes and upgrading equipment to scale up the manufacturing of our current cell design from three to nine Ah capacity to 50 Ah and 100 Ah capacity.
- *Module and Pack Design:* Li-Metal cells must be integrated into modules and packs as part of their integration into vehicles. Our active development efforts are focused on the integration of our Li-Metal cells in modules to enable our Li-Metal cells to perform as intended once they are integrated into vehicles.
- *AI Software and BMS:* Software is critical to the ongoing monitoring of battery health and safety. We continue to develop AI algorithms to diagnose battery cell-related health issues, develop control algorithms and charging methods to enhance cycle life and safety, and port such software on to a BMS that could be integrated into a battery pack.
- *Advanced Materials and Coatings:* We continue to research and develop advanced electrolyte and anodes to further improve cycle life and safety. In addition, we continue to develop novel methods of laminating or depositing lithium metal onto current collector that can be deployed at commercial GWh scale.
- *Cathode Materials and Design:* We develop our Li-Metal cells for a variety of different cathode materials, cathode design and cathode processing methods that can provide ultra-high energy density and/or significant cost-reduction.
- *Li-Metal Recycling:* Along with other battery components that are already being recycled today, Li-Metal foil will also need to be recycled in the future. We continue to explore methods of recycling that are productive and cost-effective.

Results of Operations

The following table sets forth a comparison of our operating results for the periods indicated:

(in thousands)	Years Ended December 31,		\$ Change	% Change
	2024	2023		
Revenue from customers	2,040	-	2,040	100.0 %
Cost of revenue	752	-	752	100.0 %
Gross profit	1,288	-	1,288	100.0 %
Operating Expenses				
Research and development	72,141	\$ 30,675	41,466	135.2 %
General and administrative	38,395	47,483	(9,088)	(19.1)%
Total operating expenses	\$ 110,536	\$ 78,158	\$ 41,466	53.1 %

Loss from operations	<u>(109,248)</u>	<u>(78,158)</u>	<u>32,378</u>	(41.4)%
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Further, we have incurred net losses of \$100.2 million and \$53.4 million for the years ended December 31, 2024 and 2023, respectively, and have an accumulated deficit of \$298.9 million and \$198.7 million from our inception through December 31, 2024 and 2023, respectively. Our historical results may not be indicative of our future results for reasons that may be difficult to anticipate and our ability to generate revenue in the future that is sufficient enough to achieve profitability will depend largely on the successful development of our products and services. Accordingly, the drivers of our future financial results, as well as the components of such results, may not be comparable to our historical results of operations.

Factors Affecting Operating Results

Revenue from Customers

In October 2024, we began to generate revenue from our principal business activities. We generate revenue from two primary sources:

- *Product revenue* generally consists of Li-Metal battery cells and battery materials, such as electrolyte, sold to automotive OEMs and other manufactures.
- *Service revenue* generally consists of services for the design and development of Li-ion and Li-Metal battery materials in accordance with the customer's specifications.

Revenue for the year ended December 31, 2024 was \$2.0 million and was primarily attributable to service-related contracts from OEM and other manufacturers.

Cost of Revenue

Cost of revenue includes materials, labor, depreciation and amortization expense, inventory, freight costs, and other direct costs related to manufacturing our products and service contracts. Labor consists of personnel-related expenses such as salaries, benefits, and stock-based compensation. We anticipate that cost of revenue will continue to increase as we enter into new revenue contracts.

Cost of revenue for the year ended December 31, 2024 was \$0.8 million primarily attributable to personnel costs.

Research and Development

We are an early-stage growth company that has just begun the commercialization stage of development and conduct our business through one operating segment. We have spent \$81.5 million and \$44.9 million on research and development activities, which is prior to credits received by our OEM partners under the JDAs during the years ended December 31, 2024 and 2023, respectively.

Research and development expenses consist primarily of costs incurred for personnel-related expenses, including salaries, benefits, and stock-based compensation expenses, for scientists, experienced engineers and technicians, expenses for materials and supplies used in product research and development, process engineering efforts and testing, as well as payments to consultants, patent related legal costs, depreciation, and allocated facilities and information technology costs.

Research and development expenses for the year ended December 31, 2024 increased \$41.5 million, or 135.2%, to \$72.1 million, compared with \$30.7 million for the year ended December 31, 2023. The increase primarily resulted from a \$14.6 million decrease in reimbursements from our JDA partners due to culmination of a couple of JDA activities. In addition, there was a \$10.5 million increase in lab consumables and material supplies and JDA equipment expenses, a \$9.2 million increase in personnel costs mainly attributable to salaries, benefits and stock-based compensation expense associated with higher headcount to support new materials discoveries and all in on AI initiatives, and a \$4.4 million increase in computer and software development costs due to AI infrastructure spend. Further, there was a \$2.7 million increase in facility costs due to newly commissioned electrolyte foundry. We expect research and development expenses to remain consistent in 2025 compared with 2024.

Out-of-Period Adjustment

During the year ended December 31, 2023, an expense of \$2.0 million related to Earn-Out Restricted Shares was erroneously reversed upon a former employee's departure. This misstatement resulted in an understatement of research and development expense by \$2.0 million for the year ended December 31, 2023, as well as an understatement of additional paid-in capital as of December 31, 2023, by the same amount.

The Company corrected this misstatement during the year ended December 31, 2024, which resulted in a \$2.0 million overstatement of research and development expense for the year ended December 31, 2024, with a corresponding impact on APIC. The correction of \$2.0 million is included in the increase of \$9.2 million noted in the above paragraph. In accordance with ASC 250 – Accounting Changes and Error Corrections, the Company evaluated the materiality of the misstatement from both quantitative and qualitative perspectives for the prior period errors and concluded that it was immaterial to both the prior period and the current period.

General and Administrative

General and administrative expenses consist primarily of costs incurred for salaries and personnel-related expenses, including stock-based compensation expense, for our finance, legal and human resource functions, expenses for director and officer insurance, outside contractor and professional service fees, audit and compliance expenses, legal, accounting and other advisory services, as well as allocated facilities and information technology costs including depreciation and amortization. Upon commencement of commercial operations, we also expect to incur customer and sales support and advertising costs.

General and administrative expenses for the year ended December 31, 2024 decreased \$9.1 million, or 19.1%, to \$38.4 million, compared with \$47.5 million for the year ended December 31, 2023. This decrease primarily resulted from a \$5.2 million decrease in personnel-related expenses, including stock-based compensation expense, that relates to lower stock-based compensation due to forfeitures from headcount reductions. In addition, a \$1.7 million decrease in general liability insurance costs due to lower rates, and a \$3.3 million decrease in audit fees, legal expenses and professional and consulting fees due to change in auditors and nonrecurring prior period expenses. These decreases were partly offset by a \$1.0 million increase in rent and facility costs due to expansion of facility in our headquarters office and a \$0.3 million increase in expenses related to investor relations, repairs and maintenance, and information technology services.

Non-Operating Items

Interest Income

Interest income primarily consists of interest earned on our cash and cash equivalents, which are primarily invested in money market funds, and short-term investments in marketable securities, which are invested in U.S. treasury securities, and accretion income from the marketable securities.

During the year ended December 31, 2024, we had interest income of \$15.0 million compared with \$16.7 million for the year ended December 31, 2023. This \$1.7 million decrease was primarily due to a decrease in investment balances resulting from cash used in operations.

Change of Fair Value of Sponsor Earn-Out Liabilities

During the year ended December 31, 2024, we incurred a \$5.3 million loss compared with a \$6.8 million gain for the year ended December 31, 2023 associated with the change in fair value of the Sponsor Earn-Out liabilities. This \$12.1 million decrease in gain on the change in fair value of the Sponsor Earn-Out liabilities is tied to SES's stock price, continued volatility in the stock price or changes in the expected term. See "Note 11 – Sponsor Earn-Out Liabilities" to the consolidated financial statements for additional information.

Miscellaneous Income (Expense), Net

During the year ended December 31, 2024, we had miscellaneous expense of \$0.5 million, compared with miscellaneous income of \$0.4 million for the year ended December 31, 2023. This \$0.9 million increase in miscellaneous expense was primarily due to \$0.7 million loss on sale of assets and \$0.6 million of interest expense related to our unearned government grant liability that was not incurred in prior year. These increases were partly offset by receipts of government subsidy, and unrealized and realized foreign currency gains due to the weakening of the Chinese renminbi and South Korean won compared with the U.S. dollar.

(Provision) Benefit from Income Taxes

Income tax expense was \$0.2 million on pre-tax loss of \$100.0 million for the year ended December 31, 2024 compared with an income tax benefit of \$0.9 million on pre-tax loss of \$54.3 million for the year ended December 31, 2023. Our effective tax rate was (0.2)% and 1.6% for the years ended December 31, 2024 and 2023, respectively. The difference between our effective tax rate and the U.S. federal statutory rate of 21% was primarily driven by deferred tax benefits and release of valuation allowances from foreign jurisdictions. See "Note 16 – Income Taxes" to the consolidated financial statements for additional information on our income tax expense.

Liquidity and Capital Resources

As of December 31, 2024, we had total cash and cash equivalents of \$128.8 million, short-term investments in marketable securities of \$133.7 million, and an accumulated deficit of \$298.9 million. As an early-stage growth company that has just begun the commercialization stage of development, the net operating losses we have incurred since inception are consistent with our strategy and budget.

We expect to sustain substantial operating expenses, without generating sufficient revenues to cover expenditures, for a number of years. Our ability to successfully develop our products and services, scale up our commercial operations and expand our business will depend on many factors, including our working capital needs, the availability of equity and/or debt financing and, over time, our ability to generate positive cash flows from operations. To date, we have funded our operations through a combination of proceeds from the Business Combination and subsequent equity private placement in 2022 and funding received through the sales of our redeemable convertible preferred stock. We believe that our cash on hand and marketable securities resulting from these proceeds will be sufficient to meet our principal working capital and capital expenditure requirements and ongoing costs, such as research and development relating to our Li-Metal batteries and the construction of additional manufacturing facilities, for a period of at least 12 months from the date of this Annual Report on Form 10-K, as well as to full commercialization. However, additional funding may be required during or after this period for a variety of reasons, including additional opportunities to purchase data and equipment to develop and train our AI models, develop commercial operations in the United States, business combinations or acquisitions, and delays in expected development of our Li-Metal battery cells. If we need such additional funding beyond these existing short- to medium-term sources of liquidity, or if following commercialization, we are not able to fund our operations from cash flows generated from anticipated product sales, we expect that we will need to raise additional funds. This may be through a variety of possible methods, including, but not limited to, entry into joint ventures or other strategic arrangements, issuance of equity, equity-related or debt securities or through obtaining credit from financial institutions, as well as anticipated future revenue from product sales. For more information about our at-the-market equity offering program with certain investment banks, through which we may offer and sell, from time to time, shares of Class A Common Stock having an aggregate offering price of up to \$150.0 million, see “Part II, Item 9.B. Other Information.”

Summary of Cash Flows

The following table provides a summary of our cash flow data for the periods indicated:

(in thousands)	Years Ended December 31,	
	2024	2023
Cash (used in) provided by:		
Operating activities	\$ (66,086)	\$ (56,412)
Investing activities	108,192	32,719
Financing activities	1,010	3,275
Effect of exchange rate changes on cash	(687)	(552)
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ 42,429	\$ (20,970)

Operating Activities

Our cash flows used in operating activities to date have been comprised of payroll, revenue from customers, consumables and supplies related to research and development, expenditures and reimbursements related to our JDAs, and facilities expense and professional services for general and administrative activities. As we continue to grow as an early commercialization company, we expect our cash used in operating activities to increase before we start to generate any material cash inflows from our operations.

Net cash used in operating activities of \$66.1 million for the year ended December 31, 2024 was primarily attributable to net loss of \$100.2 million, as adjusted for non-cash operating items such as stock-based compensation expense of \$19.9 million, depreciation and amortization expense of \$8.3 million, accretion income from available-for-sale short-term investments of \$7.2 million, a loss on change in fair value of Sponsor Earn-Out liabilities of \$5.3 million, and a loss on sale of fixed asset of \$0.7 million. These non-cash operating items were combined with a \$8.4 million working capital inflow. The working capital inflow was driven primarily by a \$7.6 million increase in accrued expenses and other liabilities and a \$3.9 million decrease in receivable from related party. These working capital inflows were partially offset by working capital outflows of a \$2.2 million increase in prepaids and other assets and a \$1.0 increase in accounts receivable. The increase in accrued expenses and other liabilities was primarily due to accruals for purchases of equipment for a JDA, accrued income taxes payable, and payroll related accruals. The decrease in receivable from related party was driven by cessation of activity from a JDA. The increase in prepaids and other assets was primarily due to AI infrastructure license and rental advance payments, license fees for software, and advance payments for research agreements. The increase in accounts receivable is due to outstanding balances for earned but unbilled revenue.

Net cash used in operating activities of \$56.4 million for the year ended December 31, 2023 was primarily attributable to net loss of \$53.4 million, as adjusted for non-cash operating items such as stock-based compensation expense of \$20.6 million, accretion income from available-for-sale short-term investments of \$11.1 million, a gain on change in fair value of Sponsor Earn-Out liabilities of \$6.8 million, and depreciation and amortization expense of \$5.5 million. These non-cash operating items were combined with a \$11.1 million working capital outflow. The working capital outflow was driven primarily by a \$8.2 million increase in prepaids and other assets, a \$1.5 million increase in receivable from related party, a \$1.1 million increase in deferred tax assets, a \$0.1 million decrease in accrued expenses and a \$0.2 million increase in inventories, partially offset by a \$0.1 million increase in accounts payable. The increase in prepaids and other assets was primarily due to insurance costs to cover potential liabilities under our indemnification obligations to our directors and certain officers, license fees for software, advance payments for research agreements, and VAT taxes. The increase in receivable from related party was driven by activity from a JDA. The decrease in accrued expenses and other liabilities was primarily due to adjustments for fixed assets in accruals at period end, accrued income taxes payable, payroll related accruals and the accounting of certain postemployment benefits. The increase in inventories was driven by current purchases with limited consumption of materials. The increase in accounts payable was primarily due to an increase in accounts payable related to the purchase of property and equipment for the South Korea and Shanghai facilities offset by a decrease in vendor payables.

Investing Activities

Net cash provided by investing activities was \$108.2 million for the year ended December 31, 2024, compared with net cash used in investing activities of \$32.7 million for the year ended December 31, 2023. Investing activities include purchases of investments, maturities of investments, and purchases of property, plant, and equipment.

Purchases and Maturities of Investments – Net proceeds of short-term investments were \$120.4 million for the year ended December 31, 2024, compared with net proceeds from maturities of short-term investments of \$48.5 million for the year ended December 31, 2023. The \$71.9 million increase in net proceeds was driven by the nature and time to maturity for the treasury securities included in our portfolio in the current year and cash needs for operations.

Capital Spending – Capital expenditures were \$12.2 million and \$15.8 million for the years ended December 31, 2024 and 2023, respectively. These expenditures primarily related to purchases of lab machinery and equipment, lab tools and instruments and leasehold improvements to our facilities in the United States. We expect capital expenditures to decrease in 2025 compared with 2024 as we continue to spend on AI related infrastructure rather than invest in manufacturing equipment.

Financing Activities

Net cash provided by financing activities of \$1.0 million for the year ended December 31, 2024 was primarily attributable to proceeds from the exercise of stock options.

Net cash provided by financing activities of \$3.3 million for the year ended December 31, 2023 related to proceeds received from a government grant and proceeds from the exercise of stock options

Contractual Obligations and Commitments

The following table summarizes our material contractual obligations for cash expenditures as of December 31, 2024, and the periods in which these obligations are due:

	Short Term	Long Term	Total
Purchase obligations ⁽¹⁾	\$ 29,774	\$ 3,870	\$ 33,644
Operating lease obligations ⁽²⁾	3,458	9,429	12,887
Total	<u>\$ 33,232</u>	<u>\$ 13,299</u>	<u>\$ 46,531</u>

⁽¹⁾ Purchase obligations include commitments for the purchase of lab supplies and equipment as well as committed spend related to a JDA. These commitments are derived from purchase orders, supplier contracts and open orders based on projected demand information.

⁽²⁾ Operating lease obligations represent the fixed lease payments for the noncancelable lease term, fixed lease payments for optional renewal periods where the Company is reasonably certain the renewal option will be exercised, variable lease payments that depend on an underlying index or rate in effect at lease commencement, and future minimal lease payments for executed but not yet commenced lease agreements.

Recent Accounting Pronouncements

See “Note 2 – Summary of Significant Accounting Policies” of our accompanying consolidated financial statements included in this Annual Report on Form 10-K for more information about recent accounting pronouncements, the timing of their adoption, and their potential impact on our financial condition, results of operations and cash flows.

Critical Accounting Estimates and Judgments

Our consolidated financial statements have been prepared in accordance with U.S. GAAP which requires management to use judgment in making estimates and assumptions that affect the reported amounts of assets, liabilities and the disclosure of contingent assets and liabilities as of the date of the financial statements, as well as the reported expenses incurred during the reporting periods.

We consider an accounting estimate or assumption to be critical when (1) the estimate or assumption is complex in nature or requires a high degree of judgment and (2) the use of different judgments, estimates and assumptions could have a material impact on the financial statements. Our significant accounting policies are described in “Note 2 – Summary of Significant Accounting Policies” of our accompanying consolidated financial statements included in this Annual Report on Form 10-K. We consider the following to be our critical accounting estimates.

Description	Judgments and Uncertainties	Effect if Results Differ From Assumptions
Stock-Based Compensation		
<p>We record stock-based compensation expense according to the provisions of ASC Topic 718 – Stock Compensation. ASC Topic 718 requires all share-based awards to employees, including grants of Restricted Stock Units (RSUs), Performance Stock Units (PSUs), Restricted Stock Awards (RSAs), and employee stock options, to be recognized in the financial statements based on their fair values.</p> <p>Prior to the Business Combination, the RSAs and stock option grant date fair value of Old SES common stock was historically determined by its board of directors with the assistance of management and an independent valuation.</p> <p>Post Business Combination, as our common stock is publicly traded, the fair value of RSU grants is based on the closing market price on the date grants are made. The fair value of PSU grants is determined through an independent valuation of the likelihood of the performance metrics being met within the terms of the award.</p>	<p>We determine the appropriate fair value model (Black-Scholes model for Options and RSAs, Monte Carlo simulation for PSUs) to be used for valuing share-based issuances and the amortization method for recording compensation cost, which can be impacted by the following assumptions:</p> <ul style="list-style-type: none"> • expected term • expected volatility • expected dividend yield • risk-free interest rate 	<p>If we were to change any of these judgments or estimates, it could cause a material increase or decrease in the amount of stock-based compensation expense reported.</p>

Description	Judgments and Uncertainties	Effect if Results Differ From Assumptions
Revenue Recognition		
<p>We recognize revenue within the scope of Accounting Standards Codification (“ASC”) 606, <i>Revenue from Contracts with Customers</i> (“ASC 606”). ASC 606 requires that an entity recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services.</p> <p>To achieve this core principle, we apply the following five-steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation.</p> <p>Satisfaction of the performance obligation based on percentage of completion or cost to completion basis, which determines the amount of revenue to be recognized using either the output method or the input method. Both methods are used in our contract revenue recognition.</p>	<p>We use estimation and judgment to determine the proper allocation of labor and overhead costs to these contracts. Direct materials, labor, and overhead costs are used to estimate total cost to complete for the contract. Adjustments to this total cost to complete estimate impact revenue recognition since actual costs for the period compared to total estimated contract costs to complete is used to determine the satisfaction of performance obligations for revenue recognition</p>	<p>If we were to change any of these judgments or estimates, it could cause a material increase or decrease in the amount of revenue reported.</p>
Earn-Out Restricted Shares		
<p>The Earn-Out Restricted Shares are accounted for as a single tranche equity award issued to employees subject to time and share price vesting hurdle. These Earn-Out Restricted Shares have a share price vesting hurdle and are also subject to forfeiture if a recipient’s service terminates prior to the vesting. Pursuant to ASC 718 – Stock Compensation, we recognize stock-based compensation based on the fair value determined as of Closing with the assistance of management and an independent valuation.</p>	<p>We determine the appropriate fair value model (Monte Carlo simulation) to be used for valuing share-based issuances and the amortization method for recording compensation cost, which can be impacted by the following assumptions:</p> <ul style="list-style-type: none"> • expected term • expected volatility • expected dividend yield • risk-free interest rate • probability of change of control 	<p>If we were to change any of these judgments or estimates, it could cause a material increase or decrease in the amount of stock-based compensation expense reported.</p>
Sponsor Earn-Out Liabilities		
<p>Certain Sponsor Earn-Out Shares are accounted for as a derivative liability measured at fair value, with changes in fair value recorded in the consolidated statements of operations and comprehensive loss at each reporting period, because the earn-out events that determine the number of Sponsor Earn-Out Shares to be earned back by the Sponsor include events that are not solely indexed to the common stock of the Company.</p> <p>The fair value of our common stock, which is publicly traded, is used in determining the fair value of the derivative liability at each valuation date with the assistance of management and an independent valuation.</p>	<p>We determine the appropriate fair value model (Monte Carlo simulation) to be used for valuing the derivative liability to record the change in fair value in our consolidated statements of operations and comprehensive loss, which may be impacted by the following assumptions:</p> <ul style="list-style-type: none"> • expected volatility • risk free rate • expected term • probability of change of control 	<p>If we were to change any of these judgments or estimates, it could cause a material increase or decrease in the amount of earn out liability reported.</p>

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The Company is exposed to a variety of markets and other risks including the effects of change in interest rates and foreign currency translation and transaction risks.

Interest Rate Risk

The market interest risk in our financial instruments and our financial positions represents the potential loss arising from adverse changes in interest rates. As of December 31, 2024, we had cash and cash equivalents of \$128.8 million, primarily consisting of interest-bearing money market funds, and short-term investments of \$133.7 million, consisting of U.S. treasury securities, respectively. A 100 basis point increase in the general level of U.S. interest rates relative to interest rates as of December 31, 2024 would decrease the fair value of our short-term investments by approximately \$0.5 million. This estimate is based on a sensitivity model that measures market value changes when changes in interest rates occur. Such a decrease in fair value would only be realized if we sold the investments prior to maturity.

Foreign Currency Risk

The functional currency of all our entities and all its subsidiaries is the U.S. dollar, except for our subsidiaries in China and South Korea, which has Chinese renminbi (RMB) and South Korean won (KRW), respectively, as its functional currency, reflecting its principal operating economic environment. We expect to be exposed to both currency transaction remeasurement and translation risk. Any fluctuations in exchange rates may adversely affect our financial position, results of operations and cash flows. However, the Company engages in a minimal number of transactions outside of the functional currency of the reporting unit, resulting in a negligible exposure to foreign currency risk. We have not hedged such exposure, although we may do so in the future.

Item 8. Financial Statements and Supplementary Data

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Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders
SES AI Corporation

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of SES AI Corporation, (a Delaware corporation) and subsidiaries (the “Company”) as of December 31, 2024 and 2023, the related consolidated statements of operations and comprehensive loss, stockholders’ equity, and cash flows for each of the two years in the period ended December 31, 2024, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2024, in conformity with accounting principles generally accepted in the United States of America.

Basis for opinion

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

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

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

Critical audit matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of 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 matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of Sponsor Earn-Out Liabilities

As described further in Notes 2 and 11 to the consolidated financial statements, the Company has issued Sponsor Earn-Out Shares that are accounted for as a derivative liability (the “Sponsor Earn-Out Liability”) measured at fair value, with changes in fair value recorded in the consolidated statement of operations and comprehensive loss each reporting period. The fair value of the Sponsor Earn-Out Liabilities are estimated using a Monte Carlo simulation model. The fair value of the Sponsor Earn-Out Liability was determined to be \$9,472,000 at December 31, 2024. The loss on change in fair value of Sponsor Earn-Out Liability was \$5,306,000 for the year ended December 31, 2024. We identified the assessment of the fair value of the Sponsor Earn-Out Liability as a critical audit matter.

The principal considerations for our determination that the valuation of the Sponsor Earn-Out Liability is a critical audit matter were (1) the high degree of subjective auditor judgment required due to the complex valuation model and expected term assumption used in the determination of fair value; and (2) the specialized skills and knowledge required to evaluate the Company’s determination of the fair value of the Sponsor Earn-Out Liability.

Our audit procedures related to the Sponsor Earn-Out Liability included the following, among others.

- We evaluated the judgments and assumptions made by management in the determination of the expected term.
- With the assistance of our valuation specialists, we:
 - Evaluated the appropriateness of the Monte Carlo simulation model.
 - Performed an independent calculation of the fair value using management's assumptions and comparing to the fair value of the Sponsor Earn-Out Liability determined by the Company.

/s/ GRANT THORNTON LLP

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

Boston, Massachusetts
February 28, 2025

SES AI Corporation
Consolidated Balance Sheets

(in thousands, except share and per share amounts)	December 31, 2024	December 31, 2023
Assets		
Current Assets		
Cash and cash equivalents	\$ 128,796	\$ 85,671
Short-term investments	133,748	246,775
Accounts receivable	950	—
Receivable from related party	—	3,911
Inventories	212	558
Prepaid expenses and other assets	13,198	11,712
Total current assets	276,904	348,627
Property and equipment, net	38,165	37,959
Intangible assets, net	1,217	1,345
Right-of-use assets, net	9,927	13,099
Deferred tax assets	1,335	1,057
Other assets, non-current	2,237	4,723
Total assets	<u>\$ 329,785</u>	<u>\$ 406,810</u>
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts payable	\$ 1,901	\$ 4,830
Operating lease liabilities	2,585	2,404
Accrued expenses and other liabilities	18,329	13,121
Total current liabilities	22,815	20,355
Sponsor Earn-Out liabilities	9,472	4,166
Operating lease liabilities, non-current	7,977	11,316
Unearned government grant	8,606	9,270
Other liabilities, non-current	2,605	2,753
Total liabilities	51,475	47,860
Commitments and contingencies (Note 13)		
Stockholders' Equity		
Common stock: Class A shares, \$0.0001 par value, 2,100,000,000 shares authorized; 317,676,034 and 310,266,922 shares issued and outstanding as of December 31, 2024 and December 31, 2023, respectively;		
Class B shares, \$0.0001 par value, 200,000,000 shares authorized; 43,881,251 shares issued and outstanding as of December 31, 2024 and December 31, 2023	36	35
Additional paid-in capital	579,378	559,214
Accumulated deficit	(298,871)	(198,686)
Accumulated other comprehensive loss	(2,233)	(1,613)
Total stockholders' equity	278,310	358,950
Total liabilities and stockholders' equity	<u>\$ 329,785</u>	<u>\$ 406,810</u>

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

SES AI Corporation
Consolidated Statements of Operations and Comprehensive Loss

(in thousands, except share and per share amounts)	Years Ended December 31,	
	2024	2023
Revenue from contracts with customers:		
Revenue	\$ 2,040	\$ —
Cost of revenues	752	—
Gross profit	1,288	—
Operating expenses:		
Research and development	72,141	30,675
General and administrative	38,395	47,483
Total operating expenses	110,536	78,158
Loss from operations	(109,248)	(78,158)
Other income (expense):		
Interest income	15,036	16,685
(Loss) Gain on change in fair value of Sponsor Earn-Out liabilities	(5,306)	6,795
Miscellaneous (expense) income, net	(479)	425
Total other income, net	9,251	23,905
Loss before income taxes	(99,997)	(54,253)
(Provision) benefit from income taxes	(188)	853
Net loss	(100,185)	(53,400)
Other comprehensive (loss) income, net of tax:		
Foreign currency translation loss	(456)	(937)
Unrealized (loss) gain on short-term investments	(164)	575
Total other comprehensive (loss), net of tax	(620)	(362)
Total comprehensive loss	\$ (100,805)	\$ (53,762)
Net loss per share attributable to common stockholders:		
Basic and diluted	\$ (0.31)	\$ (0.17)
Weighted-average shares outstanding:		
Basic and diluted	321,824,143	315,051,508

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

SES AI Corporation
Consolidated Statements of Stockholders' Equity

(in thousands, except share and per share amounts)	Class A and Class B Common Stock		Additional Paid-in-Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount				
Balance – December 31, 2022	349,714,840	\$ 35	\$ 538,041	\$ (145,286)	\$ (1,251)	\$ 391,539
Issuance of common stock upon exercise of stock options	3,691,340	—	524	—	—	524
Restricted stock units vested	1,063,863	—	—	—	—	—
Forfeitures of Restricted Stock Awards	(10,824)	—	—	—	—	—
Forfeitures of Earn-Out restricted shares	(311,046)	—	—	—	—	—
Stock-based compensation	—	—	20,649	—	—	20,649
Net loss	—	—	—	(53,400)	—	(53,400)
Foreign currency translation loss	—	—	—	—	(937)	(937)
Unrealized gain on short-term investments	—	—	—	—	575	575
Balance — December 31, 2023	354,148,173	\$ 35	\$ 559,214	\$ (198,686)	\$ (1,613)	\$ 358,950
Issuance of common stock upon exercise of stock options	6,507,475	1	1,010	—	—	1,011
Net restricted stock units vested	1,896,743	—	(635)	—	—	(635)
Forfeitures of Restricted Stock Awards	(854,008)	—	—	—	—	—
Forfeitures of Earn-Out restricted shares	(141,098)	—	(146)	—	—	(146)
Stock-based compensation	—	—	19,935	—	—	19,935
Net loss	—	—	—	(100,185)	—	(100,185)
Foreign currency translation loss	—	—	—	—	(456)	(456)
Unrealized loss on short-term investments	—	—	—	—	(164)	(164)
Balance — December 31, 2024	361,557,285	\$ 36	\$ 579,378	\$ (298,871)	\$ (2,233)	\$ 278,310

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

SES AI Corporation
Consolidated Statements of Cash Flows

(in thousands)	Years Ended December 31,	
	2024	2023
Cash Flows From Operating Activities		
Net loss	\$ (100,185)	\$ (53,400)
Adjustments to reconcile net loss to net cash used in operating activities:		
Loss (gain) on change of fair value of Sponsor Earn-Out liabilities	5,306	(6,795)
Stock-based compensation	19,935	20,649
Depreciation and amortization	8,308	5,541
Accretion income from available-for-sale short-term investments	(7,215)	(11,050)
Loss on sale of fixed assets	701	—
Other	(1,323)	(244)
Changes in operating assets and liabilities:		
Receivable from related party	3,911	(1,528)
Accounts receivable	(950)	—
Inventories	330	(184)
Prepaid expenses and other assets	(2,198)	(8,170)
Right of use assets	2,941	(1,871)
Deferred tax assets	(278)	(1,057)
Accounts payable	(72)	(62)
Lease liabilities	(2,915)	1,801
Accrued expenses and other liabilities	7,618	(42)
Net cash used in operating activities	(66,086)	(56,412)
Cash Flows From Investing Activities		
Purchases of property and equipment	(12,206)	(15,763)
Purchase of short-term investments	(215,102)	(281,518)
Proceeds from the maturities of short-term investments	335,500	330,000
Net cash provided by investing activities	108,192	32,719
Cash Flows From Financing Activities		
Proceeds from government grant	—	2,751
Proceeds from stock option exercises	1,010	524
Net cash provided by financing activities	1,010	3,275
Effect of exchange rates on cash	(687)	(552)
Net increase (decrease) in cash, cash equivalents and restricted cash	42,429	(20,970)
Cash, cash equivalents and restricted cash at beginning of period (Note 5)	86,966	107,936
Cash, cash equivalents and restricted cash at end of period (Note 5)	<u>\$ 129,395</u>	<u>\$ 86,966</u>
Supplemental Cash and Non-Cash Information:		
Accounts payable and accrued expenses related to purchases of property and equipment	\$ 1,497	\$ 3,808
Incomes taxes paid	\$ 286	\$ 222
Lease liabilities arising from obtaining right-of-use assets	\$ 12	\$ 6,008

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

SES AI Corporation
Notes to Consolidated Financial Statements

Note 1. Nature of Business

SES AI Corporation, and consolidated subsidiaries (together the “Company”) consists of SES AI Corporation (“SES”) and its wholly-owned subsidiary SES Holdings Pte. Ltd. (“SES Holdings” or “Old SES”), along with its wholly owned subsidiaries SolidEnergy Systems, LLC (“SES LLC”), SES (Shanghai) Co., Ltd. (“SES Shanghai”), SolidEnergy Systems Securities Corporation (“SES Securities”), Viking Power Systems Pte. Ltd. (“SES Viking”), SES AI Korea Co., Ltd. (“SES Korea”) and SES Energy Pte. Ltd. (“SES Energy”).

SES Holdings is a Singapore private company limited by shares formed in November 2018. SES LLC is a Delaware limited liability company formed in November 2018 as a result of the conversion from a corporation to a limited liability company by SolidEnergy Systems Corp, a Delaware corporation formed in April 2012. SES Shanghai was registered in Shanghai, China in August 2018. SES Securities was incorporated in December 2017 as a Massachusetts Security Corporation. SES Viking is a Singapore private company limited by shares and was formed in May 2019. SES Korea, formerly known as Massachusetts Solid Energy Co., Ltd., was registered in South Korea in November 2021. SES Energy is a Singapore private company and was incorporated in September 2022.

The Company is engaged in the development of AI-enhanced high-performance, Lithium-Metal (“Li-Metal”) and Lithium-ion (“Li-ion”) rechargeable battery technologies for electric vehicles (“EVs”), Urban Air Mobility (“UAM”) and other applications. The Company’s mission is to accelerate the world’s energy transition through material discovery and battery management. The Company’s differentiated battery technology has been designed to combine the high energy density of Li-Metal with the cost-effective, large-scale manufacturability of conventional Lithium-ion (“Li-ion”) batteries which will help to promote the transition from the global dependence on fossil fuel-based automotive vehicles to clean and efficient EVs. The Company’s headquarter is located in Woburn, Massachusetts with research and development facilities located there, in Shanghai, China, and in Chungju, South Korea. Principal operations have commenced, and the Company has derived revenue from its principal business activities starting in October 2024.

Note 2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements include the accounts of the Company and have been prepared on a going concern basis and in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) as determined by the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) and pursuant to the regulations of the U.S. Securities and Exchange Commission (“SEC”). The Company’s fiscal year ends on December 31.

Principles of Consolidation

The consolidated financial statements include the accounts of SES and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated upon consolidation.

Reclassification of Prior Period Amounts

Certain amounts have been reclassified to conform to the current year financial statement presentation.

Use of Estimates

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make use of estimates and assumptions that affect the reported amount of assets and liabilities, the disclosure of commitments and contingencies, and the reported amounts of revenues and expenses. The Company bases its estimates on available historical experience and on various other factors that the Company believes are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not apparent from other sources. Changes in estimates are reflected in reported results for the period in which they become known. Actual results may differ from those estimates.

Significant estimates and assumptions include those related to the valuation of (i) certain equity awards, including common stock awards prior to the Business Combination, the Sponsor Earn-Out Shares, the Earn-Out Restricted Shares, and performance stock units, (ii) revenue from customers, (iii) deferred tax assets and uncertain income tax positions, (iv) the measurement of operating lease liabilities, and (v) the evaluation of the recoverability of long-lived assets, including intangible assets. On an ongoing basis, the Company evaluates these judgments and estimates for reasonableness.

Foreign Currency Translation

For the foreign subsidiaries of the Company, assets and liabilities are translated into U.S. dollars using exchange rates as of the balance sheet date, and income and expenses are translated using the average exchange rates in effect for the related month. The net effect of these translation adjustments is reported in accumulated other comprehensive (loss) income within total stockholders' equity on the consolidated balance sheets. Net realized and unrealized gains (losses) from foreign currency transactions are included in miscellaneous income (expense), net in the consolidated statements of operations and comprehensive loss and were \$0.2 million and \$0.3 million for the years ended December 31, 2024 and 2023, respectively.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand and highly liquid investments that have original maturity periods of 90 days or less at the time of purchase that are readily convertible to known amounts of cash.

Restricted Cash

Restricted cash includes cash held in checking and money market funds as collateral to secure certain insurance policies. If the date of availability or disbursement is less than one year, restricted cash is reported within prepaid expenses and other current assets on the consolidated balance sheets. If the date of availability or disbursement is longer than one year and the balances are maintained under an agreement that legally restricts the use of such funds, restricted cash is reported within other assets on the consolidated balance sheets. As of December 31, 2024 and 2023, the Company had restricted cash balances of \$0.6 million and \$1.3 million, respectively.

Revenue from Contracts with Customers

In October 2024, the Company began to generate revenue from its planned principal business activities. The Company recognizes revenue within the scope of Accounting Standards Codification ("ASC") 606, Revenue from Contracts with Customers ("ASC 606"). ASC 606 requires that an entity recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. To achieve this core principle, the Company applies the following five-steps:

1. identify the contract(s) with the customer;
2. identify the performance obligations in the contract;
3. determine the transaction price;
4. allocate the transaction price to the performance obligations in the contract; and
5. recognize revenue as performance obligations are satisfied.

The Company only applies the five-step model to contracts when it is probable the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. The Company's contracts do not contain significant financing components.

Product Revenue

The Company manufactures and sells Li-Metal battery cells and battery materials, such as electrolytes, to automotive original equipment manufacturers ("OEMs") and other manufactures. Product revenue is recognized at a point in time upon transfer of control of the product. Transfer of control generally occurs upon delivery to the customer, which is when the customer obtains physical possession of the goods, legal title is transferred, the customer has all risks and rewards of ownership and an obligation to pay for the goods is created. The amount of revenue recognized reflects the consideration that the Company expects to be entitled to in exchange for the promised goods.

Service Revenue

The Company provides services for the design and development of Li-ion and Li-Metal battery materials in accordance with the customer's specifications. Customers of the Company's design and development services include OEM's and other companies who use our battery technology and battery materials in their products, not limited to EV, UAM, and drones. Service revenue contracts generally have a term that extends from one to two years beginning at the effective date of the contract.

Consideration for service revenue contracts generally include up-front payments as well as further payments that become payable when the Company meets specific contractual milestones. The Company has an enforceable right to payment for performance completed to date and

the deliverable has no alternative use to the Company. Judgment is required in the assessment of progress toward completion of the performance obligations. Service revenue is recognized over time using costs incurred to date relative to total estimated costs at completion to measure progress toward the satisfaction of its performance obligations.

Some of the Company's service revenue contracts contain multiple performance obligations that are to be satisfied in sequential order and require customer acceptance to progress to the next performance obligation. This creates variable consideration in the context of the contract, which is included in the transaction price if it is probable that a significant future reversal of cumulative revenue under the contract will not occur; otherwise, the Company reduces transaction price by the amount of the variable consideration.

Deferred Revenue

Deferred revenue represents situations where the cash is collected, but the related revenue has not yet been recognized. Revenue is subsequently recognized when the revenue recognition criteria are met. Service revenue is generally invoiced based on contractual milestones and recognized based the Company's estimated progress toward the satisfaction of the performance obligations.

Costs to Fulfill a Customer Contract

Certain costs, such as employee compensation for design, discovery and development services, are recognized as an asset if they relate directly to a customer contract, generate or enhance resources of the entity that will be used in satisfying future performance obligations, and are expected to be recovered. If these three criteria are not met, the costs are expensed in the period incurred. Deferred costs are recognized as cost of revenue in the period when the related revenue is recognized. As of December 31, 2024, total deferred contract costs were \$0.1 million.

Cost of Revenue

Cost of revenue includes materials, labor, inventory, freight costs, overhead and other costs related to manufacturing our products and completing service contracts. Labor consists of personnel-related expenses such as salaries and benefits, and stock-based compensation. Overhead and other costs consist primarily of expenses incurred for outside services, utilities, rent, depreciation expense and other facilities-related costs. Costs related to battery materials and design services are recognized in the same period as the associated revenue is recognized.

Investments

The Company has investments in marketable debt and equity securities. Investments in marketable debt securities consist of U.S. treasury securities and are classified as available-for-sale at the time of purchase. The Company reevaluates the available-for-sale classification at each balance sheet date. These available-for-sale marketable debt securities are recorded at fair value, with any unrealized gains and losses included as a component of accumulated other comprehensive (loss) income in total stockholders' equity on the consolidated balance sheets until realized or until a determination is made that an other-than-temporary decline in market value has occurred. The amortized cost of U.S. treasury securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion are reported within interest income in the consolidated statements of operations and comprehensive loss. Investments in marketable debt securities with a stated maturity date of less than one year are classified as short-term investments, while these with a stated maturity date of more than one year, and that are not expected to be used in current operations, are classified as long-term investments on the consolidated balance sheets, respectively. Investments in marketable equity securities are classified as short-term investments when the Company's intention is to sell within a year, otherwise they will be classified as long-term investments. Investments in marketable equity securities with a readily determinable fair value, not accounted for under the equity method, are recorded at fair value with changes to fair value reported within miscellaneous income (expense), net in the consolidated statements of operations and comprehensive loss.

Inventories

Inventories consist of raw materials and are stated at the lower of average cost or net realizable value.

Concentrations

Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash, cash equivalents, restricted cash and short-term investments. The Company seeks to mitigate its credit risk with respect to such concentrations by holding its deposits with large, reputable, domestic financial institutions and investing in high credit rated shorter-term instruments. The account balances at these institutions may exceed Federal Deposit Insurance Corporation ("FDIC") insurance coverage, and as a result, there may be a concentration

of risk related to amounts invested in excess of FDIC insurance coverage. As of December 31, 2024 and 2023, the amount of cash, cash equivalents and restricted cash held by our subsidiaries in foreign bank accounts was \$4.4 million and \$11.1 million, respectively.

The Company had one customer during the year ended December 31, 2024 that accounted for approximately 90% of the Company's revenue and outstanding accounts receivable, respectively, for the year ended December 31, 2024.

Fair Value Measurements

Fair value is defined as an exchange price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required or permitted to be either recorded or disclosed at fair value, the Company considers the principal or most advantageous market in which it would transact, and it also considers assumptions that market participants would use when pricing the asset or liability.

The Company maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. GAAP establishes a fair value hierarchy based on the level of independent, objective evidence surrounding the inputs used to measure fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is as follows:

- Level 1 Observable inputs such as quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- Level 2 Inputs other than the quoted prices in active markets that are observable either directly or indirectly.
- Level 3 Unobservable inputs in which there are little or no market data and which require the Company to develop its own assumptions.

Certain of the Company's financial instruments, including cash and cash equivalents, accounts payable, accrued expenses and other current liabilities are carried at cost, which approximates their fair value because of their short-term nature. The following table presents information about the Company's financial assets and liabilities that are measured at fair value on a recurring basis:

(in thousands)	Level 1	Level 2	Level 3	Total
December 31, 2024				
Current assets				
Cash equivalents in money market funds (Note 5)	\$ 120,888	\$ —	\$ —	\$ 120,888
U.S. treasury securities	132,782	—	—	132,782
Equity securities ⁽¹⁾	967	—	—	967
Total current assets at fair value	\$ 254,637	\$ —	\$ —	\$ 254,637
Non-current liabilities				
Sponsor Earn-Out liabilities	\$ —	\$ —	\$ 9,472	\$ 9,472
Total non-current liabilities at fair value	\$ —	\$ —	\$ 9,472	\$ 9,472
December 31, 2023				
Current assets				
Cash equivalents in money market funds (Note 5)	\$ 74,997	\$ —	\$ —	\$ 74,997
U.S. treasury securities (Note 6)	246,127	—	—	246,127
Equity securities ⁽¹⁾	648	—	—	648
Total current assets at fair value	\$ 321,772	\$ —	\$ —	\$ 321,772
Non-current assets				
Restricted cash in money market funds	\$ 614	\$ —	\$ —	\$ 614
Total non-current assets at fair value	\$ 614	\$ —	\$ —	\$ 614
Total assets at fair value	\$ 322,386	\$ —	\$ —	\$ 322,386
Non-current liabilities				
Sponsor Earn-Out liabilities	\$ —	\$ —	\$ 4,166	\$ 4,166
Total non-current liabilities at fair value	\$ —	\$ —	\$ 4,166	\$ 4,166

⁽¹⁾ Fair value was determined using publicly quoted market prices obtained from third-party sources in their respective markets.

There were no transfers in or out of Level 3 measurements during the years ended December 31, 2024 and 2023.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation for property and equipment, other than construction in progress, is based upon the following useful lives using the straight-line method:

Laboratory machinery and equipment	5 – 10 years
Office and computer equipment	3 – 5 years
Furniture and fixtures	5 years
Leasehold improvements	Shorter of useful life of asset or lease term

The Company periodically assesses the useful lives of the assets to determine whether events or circumstances may indicate that a revision to the useful life is warranted. Maintenance and repairs that do not extend the life or improve the asset are expensed as incurred. Construction in progress is stated at cost, which includes the cost of construction and other direct costs attributable to placing the asset in service.

Intangible Assets

Intangible assets purchased are recorded at cost and stated at cost less accumulated amortization. Intangibles assets with finite useful lives are amortized based on the pattern in which the economic benefits of the assets are estimated to be consumed over the following estimated useful lives:

Amortization expense is included in general and administrative expenses in the consolidated statements of operations and comprehensive loss.

Impairment of Long-Lived Assets

The Company evaluates long-lived assets, including amortizable intangible assets and ROU assets, annually or whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If such events or circumstances arise, the Company will compare the carrying amount of the asset group comprising the long-lived assets to the estimated future undiscounted cash flows expected to be generated by the asset group. If the estimated aggregate undiscounted cash flows are less than the carrying amount of the asset group, an impairment charge is recorded as the amount by which the carrying amount of the asset group exceeds the fair value of the assets, as based on the expected discounted future cash flows attributable to those assets. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less costs to sell. There were no impairments of long-lived assets during the years ended December 31, 2024 and 2023.

Leases

The Company determines if an arrangement includes a lease at inception. Lease arrangements generally have lease and non-lease components, which the Company has elected to account for as a single lease component. At the lease commencement date, the Company recognizes an operating lease liability and an operating lease asset, which represents the right to use the underlying asset for the lease term (the “ROU asset”). The operating lease liability is equal to the present value of (1) fixed lease payments for the noncancelable lease term, (2) fixed lease payments for optional renewal periods where it is reasonably certain the renewal option will be exercised, and (3) variable lease payments that depend on an underlying index or rate in effect at lease commencement. Variable lease payments as the difference between underlying index and the actual index, or that do not depend on an underlying index or rate in effect at lease commencement, such as common area maintenance, insurance, and property tax, are recognized in operating expenses when incurred. The operating ROU asset is initially measured at cost, which primarily comprises the initial amount of the lease liability and lease payments made prior to lease commencement, less any lease incentives received.

As the Company’s leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at lease commencement in determining the present value of lease payments. The Company’s incremental borrowing rate estimates a secured rate that reflects the term of the lease, the nature of the underlying asset and the economic environment. The Company recognizes rent expense on a straight-line basis over the lease term, with any lease incentives amortized as a reduction of rent expense over the lease term. All ROU assets are periodically reviewed for impairment in accordance with standards that apply to long-lived assets. The Company excludes leases with an expected term of one year or less from recognition on the consolidated balance sheets. See “Note 12 – Leases” for additional information about the Company’s leases.

Government Grants

The Company occasionally receives government grants that provide financial assistance for certain eligible expenditures. Government grants are not recognized until there is reasonable assurance that the Company will comply with the conditions attached to it, and that the grant will be received. The Company records such grants either as a reduction of the related expense or as other income, depending on the nature of the grant, in the consolidated statements of operations and comprehensive loss or as a reduction of the cost of the related asset in the consolidated balance sheets. If a grant amount is received but not earned, then such amount is deferred and shown as a liability in the

consolidated balance sheet. See “Note 10 – Government Grant” for additional information about a government grant awarded to the Company.

Sponsor Earn-Out Liabilities

On February 2, 2022, in connection with the Domestication, 6,900,000 of Ivanhoe’s Class B ordinary shares held by Ivanhoe Capital Sponsor LLC (the “Sponsor”) converted into an equal number of shares of duly authorized, validly issued, fully paid and nonassessable Class B common stock, par value \$0.0001 per share (the “Class B common stock”), of the Company. At Closing, these 6,900,000 shares of Class B common stock converted into an equal number of shares of duly authorized, validly issued, fully paid and nonassessable Class A common stock, par value \$0.0001 per share (the “Class A common stock,” and together with the Class B common stock, “common stock”), of the Company (the “Sponsor Earn-Out Shares”). These Sponsor Earn-Out Shares are subject to certain transfer restrictions and forfeiture terms following the Closing, which will be released as follows:

- 20% are subject to transfer restrictions until the date that is 180 days after the Closing (“Tranche 1”);
- 20% are subject to transfer restrictions until SES’s closing stock price equals or exceeds \$12.00 for 20 out of 30 consecutive trading days following the date that is 150 days after the Closing (“Tranche 2”);
- 20% are subject to transfer restrictions until SES’s closing stock price equals or exceeds \$14.00 for 20 out of 30 consecutive trading days following the date that is 150 days after the Closing (“Tranche 3”);
- 20% are subject to transfer restrictions until SES’s closing stock price equals or exceeds \$16.00 for 20 out of 30 consecutive trading days following the date that is 150 days after the Closing (“Tranche 4”); and
- 20% are subject to transfer restrictions until SES’s closing stock price equals or exceeds \$18.00 for 20 out of 30 consecutive trading days following the date that is 150 days after the Closing (“Tranche 5”).

If there is a change in control of SES at a per share value of greater than \$18.00, then 100% of the Sponsor Earn-Out Shares will be released from these transfer restrictions; however if the per share value is less than \$18.00 upon a change in control, then the Sponsor Earn-Out Shares will be released pro rata based on the per share value of the change in control and the stock price thresholds for release specified above. Any Sponsor Earn-Out Shares not released will be forfeited and cancelled.

The Sponsor Earn-Out Shares in Tranche 1 are accounted for as equity instruments because they are legally owned by the Sponsor, cannot be forfeited and were subject only to transfer restrictions that lapsed 180 days after February 3, 2022 (the “Closing Date”), which occurred on August 2, 2022, and as such meet the equity classification criteria in accordance with ASC 505, *Equity*. The Sponsor Earn-Out Shares under Tranche 2 through Tranche 5 are accounted for as a derivative liability measured at fair value, with changes in fair value reported within other expense, net on the consolidated statements of operations and comprehensive loss at each reporting period, because the earn-out triggering events that determine the number of Sponsor Earn-Out Shares to be earned back by the Sponsor include events that are not solely indexed to the shares of Class A common stock. As of December 31, 2024, the earn-out triggering events were not achieved for any of Tranche 2 through Tranche 5. See “Note 11 – Sponsor Earn-Out Liabilities” for further information on fair value.

Earn-Out Shares

In connection with the Business Combination, holders of Old SES common stock, redeemable convertible preferred stock, options and restricted shares received 29,999,947 earn-out shares of common stock, including (i) 23,691,182 shares of Class A common stock (the “Earn-Out Shares”) issued for the benefit of the former holders of Old SES common and redeemable convertible preferred stock; (ii) 2,308,969 shares of restricted Class A common stock (the “Earn-Out Restricted Shares”) issued to Old SES option holders and pre-Closing recipients of Old SES restricted shares; and (iii) 3,999,796 shares of Class B common stock (“Founder Earn-Out Shares”) issued to the CEO and certain entities affiliated with the CEO (the “SES Founder Group”).

The Earn-Out Shares and the Founder Earn-Out Shares (collectively, the “Escrowed Earn-Out Shares”) were placed into escrow at the Closing and shall vest on the date that the closing price of shares of Class A common stock is equal to or greater than \$18.00 (“Triggering Event”) during the period beginning on the date that is one year following the Closing and ending on the date that is five years following the Closing (the “Earn-Out Period”). If a Triggering Event has not occurred by the expiration of the Earn-Out Period, then the Escrowed Earn-Out Shares shall be cancelled, and holders of such shares shall have no right to receive such Escrowed Earn-Out Shares. The Earn-Out Restricted Shares are subject to vesting based on the same terms as the Escrowed Earn-Out Shares and are also subject to forfeiture if such recipient’s service with the Company terminates prior to vesting. Any such forfeited Earn-Out Restricted Shares shall be available for

grant pursuant to the Company's incentive plan. If, during the earn-out period of five years, there is a change in control transaction at a per share price of greater than or equal to \$18.00 per share, then all 29,999,947 earn-out shares will vest immediately prior to the consummation of such change in control, otherwise, all earn-out shares will be forfeited.

The Escrowed Earn-Out Shares to be released upon achievement of the vesting condition are classified as equity instruments and recorded at fair value in stockholders' equity as vesting is indexed to the common stock of the Company. The Earn-Out Restricted Shares are accounted for as a single tranche equity award. See "Note 15 – Stock-Based Compensation" for further information on fair value of the Earn-Out Restricted Shares.

Common Stock Warrants

Prior to the Business Combination, Ivanhoe had issued 9,200,000 public warrants ("Public Warrants") and 5,013,333 private placement warrants ("Private Warrants" and collectively with the Public Warrants, the "Warrants") which were assumed by the Company at Closing. On February 1, 2022, prior to Closing, the Ivanhoe warrant holders approved certain amendments to the terms of the Warrants such that the Warrants met the derivative scope exception for contracts in the Company's own stock and were recorded in stockholders' equity. Prior to the amendment, the Warrants were accounted for as derivative liabilities measured at fair value, with changes in fair value recorded in the consolidated statements of operations and comprehensive loss at each reporting period. Each whole Warrant entitles the registered holder to purchase one share of Class A common stock at a price of \$11.50 per share. Pursuant to the Warrant agreement, a Warrant holder may exercise its Warrants only for a whole number of shares of Class A common stock. This means only a whole Warrant may be exercised at a given time by a warrant holder.

The amendments, among other things, include the following:

- amendments to the rights specific to the Private Warrants such that (a) the rights specific to Private Warrants are retained by the holder thereof regardless of such holder's identity, (b) the Private Warrants are no longer subject to redemption by the Company when such warrants are trading at a price equal to or in excess of \$10.00 per share but less than \$18.00 per share and (c) the Private Warrants are no longer generally exercisable on a "cashless basis";
- eliminates the Company's ability to redeem any Public Warrants unless the Class A common stock is trading at a price equal to or in excess of \$18.00 per share; and
- removes certain language related to the treatment of Warrants in the event of a tender offer for the shares underlying such Warrants.

Subsequent to the Closing, the Company registered 14,213,280 shares of Class A common stock issuable upon the exercise of the Warrants.

Research and Development

Research and development costs with no alternative future use are expensed as incurred. Research and development costs are comprised of expenses incurred in performing research and development activities, including compensation and benefits for employees, materials and supplies, payments to consultants, patent related legal costs, facility costs, depreciation, and travel expenses. Additionally, payments received by the Company under its JDAs are recognized as a reduction to research and development expense in the consolidated statements of operations and comprehensive loss.

General and Administrative

General and administrative expenses consist primarily of costs incurred for salaries and personnel-related expenses, including stock-based compensation expense, for our finance, legal and human resource functions, expenses for director and officer insurance, outside contractor and professional service fees, audit and compliance expenses, legal, accounting and other advisory services, as well as allocated facilities and information technology costs including depreciation and amortization.

Stock-Based Compensation

The Company measures compensation expense for all stock-based awards made to employees, directors, and non-employees, based on estimated fair values as of the grant date and recognizes the compensation expense using the straight-line method over the requisite service period, which is generally the vesting period. The Company accounts for forfeitures when they occur. Changes in the assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized. The inputs used in valuation

models to estimate the fair value of certain stock-based awards are subjective and generally require significant analysis and judgment to develop. See “Note 15 – Stock-Based Compensation” for additional information about stock-based awards.

Income Taxes

Income tax expense has been provided using the asset and liability method. Deferred tax assets and liabilities are determined based on the estimated future tax consequences attributable to differences between the financial statement carrying amounts and tax bases of existing assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Deferred tax expense or benefit is the result of changes in the deferred tax asset and liability. The Company provides a valuation allowance against net deferred tax assets if, based upon the available evidence, it is more likely than not that the deferred tax assets will not be realized. In evaluating the Company’s ability to recover deferred tax assets, the Company considers all available positive and negative evidence, including historical operating results, ongoing tax planning, and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis.

The Company recognizes a tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the Company’s consolidated financial statements from such positions are measured based on the largest benefit that has a greater than 50% likelihood of being realized. The Company recognizes interest and penalties associated with tax matters as part of the income tax provision and includes accrued interest and penalties with the related income tax liability within accrued expenses and other current liabilities on the consolidated balance sheets.

Other Comprehensive Income (Loss)

Other Comprehensive income (loss) includes changes in the balances of items that are reported directly as a separate component of stockholders’ equity on the consolidated balance sheets. The components of comprehensive loss are net loss, foreign currency translation adjustments and unrealized gains and losses from available-for-sale marketable debt securities. The Company does not provide for income taxes on foreign currency translation adjustments since it does not provide for taxes on the unremitted earnings of its foreign subsidiaries. The tax effects of unrealized gains and loss from available-for-sale marketable debt securities is recorded in deferred tax assets (liabilities) and fully offset by the valuation allowance. The changes in accumulated other comprehensive income (loss) are included in the Company’s consolidated statements of operations and comprehensive loss.

Net Income (Loss) Per Share

As the liquidation and dividend rights of Class A common stock and Class B common stock are identical, the net loss attributable to common stockholders is allocated on a proportionate basis, and the resulting net loss per share is identical for Class A common stock and Class B common stock under the two-class method.

Basic net income or loss per share attributable to Class A common stock and Class B common stock stockholders is computed by dividing the net income or loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. The diluted net income or loss per share attributable to common stockholders is calculated by giving effect to all potentially dilutive common stock equivalents outstanding during the period.

Recently Adopted Accounting Pronouncements

In November 2023, the FASB issued ASU 2023-7, *Improvements to Reportable Segment Disclosures*, which requires disclosures of significant reportable segment expenses that are regularly provided to the Chief Operating Decision Maker (“CODM”) and included within each reported measure of a segment’s profit or loss. This ASU also requires disclosure of the title and position of the individual identified as the CODM and an explanation of how the CODM uses the reported measures of a segment’s profit or loss in assessing segment performance and deciding how to allocate resources. The Company adopted the new guidance beginning for fiscal year 2024. See Note 18 for the Company’s disclosures in accordance with this new guidance.

In December 2023, the FASB issued ASU 2023-9, *Improvements to Income Tax Disclosures*, which requires disaggregated information about a reporting entity’s effective tax rate reconciliation as well as additional information on income taxes paid. The ASU is effective on a prospective basis for annual periods beginning after December 15, 2024. Early adoption is also permitted for annual financial statements that have not yet been issued or made available for issuance. We are currently evaluating the impact this ASU will have when adopted and anticipate this ASU will likely result in the required additional disclosures being included in our consolidated financial statements.

In November 2024, The FASB issued ASU No. 2024-03, *Disaggregation of Income Statement Expenses*, which requires more detailed information about the types of expenses included in certain expense captions presented on the consolidated statements of operations. Additionally, this amendment requires the disclosure of a qualitative description of the amounts remaining in relevant expense captions that are not separately disaggregated quantitatively and the disclosure of the total amount of selling expenses. The new standard is effective for annual periods beginning after December 15, 2026, and interim periods within fiscal years beginning after December 15, 2027. We are currently evaluating the impact of adoption on our consolidated financial statements.

The Company has reviewed all other accounting pronouncements issued during the year ended December 31, 2024 and concluded they were either not applicable or not expected to have a material impact on the Company's consolidated financial statements.

Note 3. Revenue

We disaggregate our revenue from customers by the type of arrangement, primarily from the sale of battery products and from providing research and development services, as this depicts how the nature, amount, timing, and cash flows are affected by economic factors. The following table summarizes the Company's disaggregated revenue:

(in thousands)	Year Ended December 31, 2024
Revenue from customers:	
Service revenue	\$ 1,920
Product revenue	120
Total revenue from customers	\$ 2,040

Remaining Performance Obligations

We have performance obligations associated with commitments in customer contracts for future services that have not yet been recognized as revenue. As of December 31, 2024, the aggregate amount of the transaction price allocated to the remaining performance obligations related to customer contracts that were unsatisfied or partially unsatisfied, was approximately \$3.4 million, which is expected to be recognized as revenue within one year. This amount does not include contracts to which the customer is not committed. The estimated timing of the recognition of remaining unsatisfied performance obligations is subject to change and is affected by changes to scope, changes in timing of delivery of products and services, or contract modifications.

Note 4. Partnerships

In December 2020, the Company established a partnership with Hyundai Motor Company ("Hyundai") when it entered into a joint development agreement ("JDA") to jointly research and develop Li-Metal battery technology, which concluded in November 2023. Further, in May 2021, the Company executed another JDA with Hyundai to jointly develop the A-Sample Li-Metal batteries effective August 31, 2021. In March 2024, the Company extended this JDA until December 2025 to develop the B-sample Li-Metal batteries.

In February 2021, the Company established a partnership with GM Global Technology Operations LLC ("GM Technology"), an affiliate of GM Ventures LLC ("GM Ventures"), and General Motors Holdings LLC ("GM Holdings") (collectively, "General Motors" or "GM") when it entered into a JDA to jointly research and develop the A-Sample Li-Metal batteries and build-out a prototype manufacturing line for GM Technology. The JDA concluded in September 2024.

In December 2021, the Company established a partnership with Honda Motor Company, Ltd. ("Honda") when it entered into a JDA to jointly research and develop the A-Sample Li-Metal batteries, which concluded in June 2023. The Company entered into a B-sample services agreement with Honda to replace the JDA in January 2025, with a term through the end of 2025.

In November 2023, the Company entered into a B-Sample JDA with one of our OEM partners for delivery of the B-Sample batteries. The JDA has a term of two and half years.

Under the terms of certain JDAs, the Company will fund research and development activities and capital expenditures related to the buildout of pilot manufacturing lines and the JDA partner will be required to refund such expenses to the Company, regardless of the results of the

R&D activities. The following table summarizes credits to research and development recorded in accordance with the terms of the JDA agreements:

(in thousands)	Year Ended December 31,	
	2024	2023
Research and development (related party)	\$ 3,190	\$ 10,594
Research and development	5,385	12,472
Total credits to research and development	\$ 8,575	\$ 23,065

As of December 31, 2024, there were no receivables from related party outstanding compared to \$3.9 million outstanding as a receivable from related party as of December 31, 2023, as disclosed in the consolidated balance sheets. As of December 31, 2024, there was no non-related party receivable outstanding compared to \$5.1 million outstanding as of December 31, 2023. Amounts for non-related party receivables are recorded within prepaid expenses and other current assets in the consolidated balance sheets.

Note 5. Cash and Cash Equivalents

The following table presents information about the Company's cash, cash equivalents, and restricted cash, as shown in the consolidated statements of cash flows:

(in thousands)	December 31, 2024	December 31, 2023
Cash	\$ 7,908	\$ 10,674
Money market funds	120,888	74,997
Total cash and cash equivalents	128,796	85,671
Restricted cash included in other assets	599	1,295
Total cash, cash equivalents, and restricted cash	\$ 129,395	\$ 86,966

Note 6. Short-Term Investments

The following table provides amortized costs, gross unrealized gains and losses, and fair values for the Company's investments in available-for-sale U.S treasury securities as of December 31, 2024 and December 31, 2023, which had maturity dates that range from 0 months to 10 months, respectively. Fair value was determined using market prices obtained from third-party sources. Realized gains or losses were insignificant for the years ended December 31, 2024 and 2023.

<u>December 31, 2024</u>		Gross		Fair Value
(in thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	
Short-term U.S. treasury securities	\$ 132,615	\$ 167	\$ —	\$ 132,782
Total	\$ 132,615	\$ 167	\$ —	\$ 132,782

<u>December 31, 2023</u>		Gross		Fair Value
(in thousands)	Amortized Cost	Unrealized Gains	Unrealized Losses	
Short-term U.S. treasury securities	\$ 245,797	\$ 337	\$ (7)	\$ 246,127
Total	\$ 245,797	\$ 337	\$ (7)	\$ 246,127

The Company has \$1.0 million and \$0.6 million marketable equity securities as of December 31, 2024 and 2023, respectively, with an initial cost of \$0.5 million. Total unrealized gain of \$0.5 million and \$0.1 million is recorded under miscellaneous (expense) income, net in the consolidated statements of operations and comprehensive loss for the years ended December 31, 2024 and 2023, respectively.

Note 7. Property and Equipment, Net

Property and equipment, net consisted of the following:

(in thousands)	As of December 31,	
	2024	2023
Laboratory machinery and equipment	\$ 31,092	\$ 21,762
Office and computer equipment	1,595	1,169
Leasehold improvements	24,390	18,228
Construction in progress	1,971	9,773
Total property and equipment	59,048	50,932
Less: accumulated depreciation	(20,883)	(12,973)
Property and equipment, net	\$ 38,165	\$ 37,959

Depreciation expense was \$8.2 million and \$5.4 million for the years ended December 31, 2024 and 2023, respectively.

Note 8. Intangible Assets, Net

Intangible assets, net consisted of the following:

(in thousands)	As of December 31,	
	2024	2023
Intellectual property	\$ 1,918	\$ 1,918
Less: accumulated amortization	(701)	(573)
Intangible assets, net	\$ 1,217	\$ 1,345

Amortization expense was \$0.1 million for each of the years ended December 31, 2024 and 2023, respectively. Amortization expense associated with the intangible assets included on the Company's consolidated balance sheets as of December 31, 2024 is expected to be as follows:

Years Ending December 31,	(in thousands)
2025	\$ 128
2026	128
2027	128
2028	128
2029	128
Thereafter	577
Total	\$ 1,217

Note 9. Accrued Expenses and Other Current Liabilities

The components of accrued expenses and other current liabilities consisted of the following:

(in thousands)	As of December 31,	
	2024	2023
Vendor project charges	\$ 7,500	\$ —
Employee compensation and related costs	6,646	7,022
Professional and consulting services	1,480	1,273
Construction in process	1,408	3,182
Income taxes payable	313	288
Other	982	1,356
Accrued expenses and other current liabilities	\$ 18,329	\$ 13,121

Note 10. Government Grant

In December 2022, the Company was awarded a grant (the "Grant") from certain government agencies. The incentives received under the Grant, which is in the form of cash, can be used for facilities related expenses and the purchase of property and equipment. The Company is required to adhere to the following conditions attached to the incentives, which include purchase of a government grant guarantee insurance policy, required minimum investments into specified spending categories and the creation of a minimum amount of permanent

full-time jobs in a certain geographical location over the next five years, with the option to extend to 10 years by remaining in a certain geographical location. If determined that we were ineligible to receive the Grant, we could be required to repay the Grant in its entirety with interest. The Company has yet to fulfill the required minimum investment and minimum employment conditions hence interest payable was recorded. The compliance with these conditions will continue to be monitored over the remaining grant period.

As of December 31, 2024 and 2023, respectively, the Company had received, but not yet earned 12 billion Korean won. These balances are equivalent to \$8.1 million and \$9.3 million, after translation, as of December 31, 2024 and December 31, 2023, respectively, which is disclosed as a noncurrent liability in the consolidated balance sheets.

Note 11. Sponsor Earn-Out Liabilities

The Sponsor Earn-Out shares in Tranche 2 through Tranche 5 have been measured at their estimated fair value using a Monte Carlo simulation valuation model. Inherent in the valuation model are assumptions related to expected stock price volatility, risk-free interest rate, expected life, and dividend yield. The key inputs used in the Monte Carlo simulation model for the Sponsor Earn-Out liabilities at their measurement dates were as follows:

	December 31, 2024	December 31, 2023
Expected term (in years)	5.9	3.1
Risk free rate	4.38%	4.04%
Expected volatility	95.0%	91.0%
Expected dividends	0%	0%
Stock price	\$ 2.19	\$ 1.83

The stock price is based on the closing price of the Company's Class A common stock as of the valuation date and simulated through the end of the earn-out period following Geometric Brownian Motion. Expected volatility is based on the weighted average historical volatilities of the Company's Class A common stock and public warrants as well as the common stock of select peer companies' that matches the expected term of the awards (range of the weighted average of volatility is 87.3% - 122.5% and 83.8% - 96.2% for the years ended December 31, 2024 and 2023, respectively). The expected term is derived from the probability weighted model, considering the number of inputs, including the probability of a change in control. The risk-free interest rate is based on the yield curve for zero-coupon U.S. Treasury notes with maturities corresponding to the expected term of the awards. The dividend rate is based on the historical rate, which the Company anticipates remaining at zero.

The following table provides a reconciliation of the beginning and ending balances for the Sponsor Earn-Out liabilities:

	(in thousands)
Balance as of December 31, 2022	\$ 10,961
Change in fair value	(6,795)
Balance as of December 31, 2023	4,166
Change in fair value	5,306
Balance as of December 31, 2024	\$ 9,472

Note 12. Leases

The Company's operating leases consist primarily of leases for office and plant spaces. Certain of the Company's operating leases include escalating rental payments, some of which include the option to extend the lease term for up to 5 years, and some include options to terminate the lease at certain times within the lease term. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

The Company's total operating lease cost was \$3.5 million and \$2.9 million for the years ended December 31, 2024 and 2023, respectively. Cash paid for amounts included in the measurement of lease liabilities was \$3.5 million and \$2.9 million for the years ended December 31, 2024 and 2023.

The following table summarizes the future minimum undiscounted lease payments under existing operating leases as of December 31, 2024:

Years Ending December 31,	(in thousands)	
2025	\$	3,458
2026		2,789
2027		1,900
2028		1,664
2029		1,163
Thereafter		1,913
Total future minimum lease payments		12,887
Less: imputed interest		(2,325)
Total future minimum lease payments	\$	10,562

As of December 31, 2024 and 2023, the weighted average remaining lease term for operating leases was 4.9 years and 5.6 years, respectively, and the weighted average discount rate used to determine the operating lease liability was 7.4% and 7.4%, respectively.

Woburn Lease

In August 2016, the Company entered into an operating lease agreement to lease an office space in Woburn, Massachusetts with the original lease term expiring in August 2021. The lease agreement has one five-year renewal option and has variable lease payment that depends on the CPI index and is measured annually. In May 2020, the Company extended the term of the lease by 5 years through August 2026. In February and March 2021, the Company amended the lease agreement increasing the leased space. In December 2021, the Company further amended the lease agreement reducing the leased space. The amendment includes an obligation to pay monthly relinquishment charges (equal to the total rental obligation for the duration of the lease term), only if the new tenant does not pay monthly rental amount and lessor has provided a notice to collect the relinquishment charges from the Company. As of December 31, 2024, the Company assessed the probability of any liability to be incurred for relinquishment charges as remote. Total future minimum lease payments under this lease are \$6.0 million.

In October 2022, the Company entered into an amendment to the operating lease agreement for its Woburn facility to add additional space and is accounted for as a separate lease ("Addition Lease"). Pursuant to the amendment, the landlord has agreed to construct an addition to the existing facility for such additional space, which commenced in June 2023 and expires at the same time as the original lease. The Addition Lease also contains a variable lease payment that depends on the CPI Index and is measured annually. The additional space consists of approximately 5,000 square feet and the total undiscounted future minimum lease payments for the addition through the expected 8-year term will be approximately \$1.3 million.

Electrolyte Foundry Lease

In June 2023, the Company entered into an operating lease agreement to lease a lab space in Woburn, Massachusetts with the original lease term expiring five years after the delivery date upon completion of the build-out. The lease agreement has renewal terms that can extend the lease term by providing application for renewal at least six months before the expiry and has variable lease payment that depends on the CPI index and is measured annually. In January 2024, the Company started using the lab space. Total future minimum lease payments under this lease are \$2.3 million.

Shanghai Lease

In September 2018, the Company entered into an operating lease agreement to lease a manufacturing space in Shanghai, China with the original lease term expiring in August 2023. In September 2021, the Company amended the lease agreement. The amendment increased the amount of leased space and extended the term of the lease by three years through August 2026. Total future minimum lease payments under this lease are \$2.4 million. The lease agreement has renewal terms that can extend the lease term by providing application for renewal at least 90 days before the expiry and provides for annual cost of living increases of up to 3%.

South Korea Leases

In November 2022, the Company entered into an operating lease agreement with a lease commencement date of July 2022 to lease a manufacturing building in the Chungju, South Korea industrial complex with the original lease term expiring in September 2024. The lease agreement was renewed in September 2024 for an additional two-year term that can be terminated with 90-day notice and provides for annual cost of living increases in rent. Total future minimum lease payments under this lease are \$1.0 million.

In February 2023, the Company entered into an operating lease agreement with a commencement date of February 1, 2023 to lease a second manufacturing space in the Chungju, South Korea industrial complex with the original lease term expiring in December 2024. In June 2024, the Company terminated this lease agreement resulting in no future lease payments and the removal of the corresponding lease asset and liability.

Note 13. Commitments and Contingencies

Commitments

Under the terms of one of the JDAs entered into in 2021, the Company is committed to undertake certain research and development activities to the benefit of both itself and its OEM Partners which involves expenditures related to engineering efforts and purchases of related equipment. The JDA has an agreed-upon value of up to \$35 million, of which the Company has spent \$16.1 million as of December 31, 2024.

Legal Contingencies

From time-to-time, the Company may be subject to claims arising in the ordinary course of business or become involved in litigation or other legal proceedings. While the outcome of such claims or other proceedings cannot be predicted with certainty, the Company's management expects that any such liabilities, to the extent not provided for by insurance or otherwise, would not have a material effect on the Company's financial condition, results of operations or cash flows.

Indemnifications

The Company enters into indemnification provisions under agreements with other companies in the ordinary course of business, including, but not limited to, partnerships, landlords, vendors, and contractors. Pursuant to these arrangements, the Company agrees to indemnify, defend, and hold harmless the indemnified party for certain losses suffered or incurred by the indemnified party as a result of the Company's activities. The maximum potential amount of future payments the Company could be required to make under these agreements is not determinable. The Company has never incurred costs to defend lawsuits or settle claims related to these indemnification provisions. In addition, the Company indemnifies its officers, directors, and certain key employees against claims made with respect to matters that arise while they are serving in their respective capacities as such, subject to certain limitations set forth under applicable law, and applicable indemnification agreements. The Company maintains insurance, including commercial general liability insurance, product liability insurance, and directors and officers insurance to offset certain potential liabilities under these indemnification provisions. To date, there have been no claims under these indemnification provisions.

Note 14. Stockholders' Equity

Class A and Class B Common Stock

Pursuant to the Company's certificate of incorporation, the Company is authorized to issue 2,100,000,000 shares of Class A common stock, par value \$0.0001 per share and 200,000,000 shares of Class B common stock, par value \$0.0001 per share. Class A common stock and Class B common stock are referred to as common stock throughout the notes to these financial statements, unless otherwise noted.

The rights of holders of Class A common stock and Class B common stock are identical, except with respect to voting. The holder of each share of Class A common stock is entitled to one vote, while the holder of each share of Class B common stock is entitled to ten votes. Each share of Class B common stock is convertible on a one-for-one basis into a share of Class A common stock at the holder's option or otherwise automatically upon the occurrence of certain events, namely: (i) each share of Class B common stock that is transferred by SES Founder Group, or certain permitted transferee holders ("Qualified Holders"), will convert into a share of Class A common stock; (ii) all outstanding shares of Class B common stock will convert into shares of Class A common stock if the SES Founder Group or Qualified Holders collectively cease to beneficially own at least 20 percent of the number of shares of Class B common stock (as such number of shares is equitably adjusted in respect of any reclassification, stock dividend, subdivision, combination or recapitalization of the Class B common stock) collectively held by the SES Founder Group and Qualified Holders of Class B common stock as of the time the Business

Combination took effect; or (iii) all outstanding shares of Class B common stock will convert into shares of Class A common stock upon the date specified by the affirmative vote of the holders of at least two-thirds of the then-outstanding shares of Class B common stock, voting as a separate class. Each outstanding share of Class B common stock is entitled to ten votes per share and each outstanding share of Class A common stock is entitled to one vote per share.

As of December 31, 2024, the Company had 317,676,034 and 43,881,251 shares of Class A common stock and Class B common stock issued and outstanding, respectively and as of December 31, 2023 had 310,266,922 and 43,881,251 shares of Class A common stock and Class B common stock issued and outstanding, respectively. For accounting purposes, only shares that are fully vested or that are not subject to repurchase are considered issued and outstanding.

Below is a reconciliation of shares of common stock issued and outstanding:

	December 31, 2024	December 31, 2023
Total shares of common stock legally issued and outstanding	361,557,285	354,148,173
Less: Shares subject to future vesting:		
Escrowed Earn-Out Shares	(27,690,978)	(27,690,978)
Sponsor Earn-Out Shares	(5,520,000)	(5,520,000)
Earn-Out Restricted Shares	(765,990)	(1,619,998)
RSAs	(255,458)	(649,567)
Total shares issued and outstanding	327,324,859	318,667,630

Preferred Stock

Pursuant to the Company's certificate of incorporation, the Company is authorized to issue 20,000,000 shares of preferred stock having a par value of \$0.0001 per share. The Company's board of directors has the authority to issue preferred stock and to determine the rights, preferences, privileges, and restrictions, including voting rights of such preferred stock. As of December 31, 2024 and 2023, no shares of the Company's preferred stock were issued and outstanding.

Dividends

Common stock is entitled to dividends when and if declared by the Company's board of directors, subject to the rights of all classes of stock outstanding having priority rights to dividends. The Company has not paid any cash dividends on common stock to date. The Company may retain future earnings, if any, for the further development and expansion of its business and has no current plans to pay cash dividends for the foreseeable future.

Common Stock Warrants

Prior to the Business Combination, Ivanhoe issued 9,200,000 Public Warrants and 5,013,333 Private Warrants and prior to the Closing, Ivanhoe amended the terms of the Warrants, as discussed in "Note 2 – Summary of Significant Accounting Policies," which resulted in the Warrants being classified as a component of stockholders' equity. There is an effective registration statement and prospectus relating to the shares issuable upon exercise of the Warrants.

Public Warrants

Public Warrants have an exercise price of \$11.50 and the Company may, in its sole discretion, reduce the exercise price of the Public Warrants to induce early exercise, provided that adequate notice is provided to warrant holders pursuant to the terms of the Warrant Agreement. The exercise price and number of shares of Class A common stock issuable upon exercise of the Warrants may also be adjusted in certain circumstances including in the event of a share dividend, recapitalization, reorganization, merger or consolidation. In no event is the Company required to net cash settle the Public Warrants.

The Public Warrants became exercisable 30 days following the Business Combination and expire at the earliest of five years following the Business Combination, liquidation of the Company, or the date of redemption elected at our option provided that the value of the Class A common stock exceeds \$18.00 per share.

Under certain circumstances, the Company may elect to redeem the Public Warrants at a redemption price of \$0.01 per Public Warrant at any time during the term of the Warrant in which the Class A common stock share trading price has been at least \$18.00 per share for 20 trading days within the 30 trading-day period. If the Company elects to redeem the Warrants, it must notify the Public Warrant holders in

advance, who would then have at least 30 days from the date of notification to exercise their respective Warrants. If any such Warrants are not exercised within that 30-day period, they will be redeemed pursuant to this provision.

As of December 31, 2024 and 2023, the Company had outstanding Public Warrants to purchase 9,199,947 shares of Class A common stock.

Private Warrants

The Private Warrants have similar terms to the Public Warrants, except that the Private Warrants are not redeemable. As of December 31, 2024 and 2023, the Company had outstanding Private Warrants to purchase 5,013,333 shares of Class A common stock.

The Company has the following shares of common stock available for future issuance on an as-if converted basis:

	December 31, 2024	December 31, 2023
Shares reserved for issuance under the SES AI Corporation 2021 Plan	37,263,345	34,965,909
Common stock options outstanding	6,063,110	13,619,793
Public Warrants	9,199,947	9,199,947
Private Warrants	5,013,333	5,013,333
RSUs	13,282,923	6,359,474
PSUs	5,973,050	3,364,810
Total common stock available for future issuance	76,795,708	72,523,266

Note 15. Stock-Based Compensation

Equity Award Plan

Old SES established its initial share incentive plan in 2013 (the “2013 Plan”), which was subsequently replaced with a new share incentive plan in 2018 (the “2018 Plan”). Under the terms of the 2013 Plan and 2018 Plan, certain number of shares were reserved for the issuance of incentive stock options (“ISOs”) and non-statutory stock options (“NSOs”) to employees, officers, directors, consultants and advisors. On March 30, 2021, the Company amended the 2018 Plan with the SES Holdings Pte. Ltd. 2021 Share Incentive Plan (the “2021 Plan”) and increased the total shares reserved for future issuance by 486,975 shares. Upon approval of the 2021 Plan, any shares that, as of the date of stockholder approval, were reserved but not issued pursuant to any awards granted under the Company’s 2018 Plan were rolled into the 2021 Plan. In addition, any shares issued pursuant to or subject to stock options or similar awards granted under the 2018 Plan that expired or otherwise terminated without having been exercised in full or that were forfeited or repurchased by the Company, rolled into the 2021 Plan. The 2021 Plan provided for the discretionary grant of ISOs, NSOs, and Restricted Share Awards (“RSAs”).

In connection with the Business Combination, the 2021 Plan was terminated and the remaining unallocated share reserve was cancelled, and no new awards will be granted under the 2021 Plan. At Closing, a total of 20,748,976 ISOs and NSOs and 2,273,727 RSAs (as converted, due to retroactive application of reverse recapitalization) outstanding under the 2021 Plan were assumed by the Company under the SES AI Corporation 2021 Plan (defined below).

SES AI Corporation 2021 Plan

In connection with the Business Combination, the Company adopted the SES AI Corporation 2021 Incentive Award Plan (the “SES 2021 Plan”) under which 36,862,002 shares of Class A common stock were initially reserved for issuance of ISOs, NSOs, stock appreciation rights (“SARs”), RSAs, restricted stock units (“RSUs”), performance compensation awards (“PSUs”), other stock-based and cash-based awards, and dividend equivalents. In addition, and subject to certain limitations, any shares issued pursuant to or subject to awards granted under the 2021 Plan that expired or otherwise terminated without having been exercised in full or that were forfeited or repurchased by the Company, rolled into the SES 2021 Plan. The SES 2021 Plan allows for the maximum number of shares issuable to automatically increase on January 1st of each year for a period of ten years commencing on January 1, 2023 and ending on (and including) January 1, 2031, in an amount equal to two percent of the total number of shares of stock outstanding on December 31st of the preceding year. As of December 31, 2024, 37,263,345 shares remain available for future issuance under the SES 2021 Plan.

Stock-Based Compensation Expense

Compensation expense related to stock-based awards was recorded as follows:

(in thousands)	Years Ended December 31,	
	2024	2023
Research and development	\$ 8,021	\$ 3,796
General and administrative	11,896	16,853
Cost of revenue	18	—
Total	\$ 19,935	\$ 20,649

The following table summarizes share-based compensation expense by award type:

(in thousands)	Years Ended December 31,	
	2024	2023
Earn-Out Restricted Shares	\$ 1,997	\$ 2,689
RSUs	12,733	9,644
PSUs	2,885	4,781
RSAs	1,950	3,133
Stock options	370	402
Total	\$ 19,935	\$ 20,649

Restricted Stock Units

RSUs granted under the SES 2021 Plan vest in equal annual installments over a three-year period and have only service vesting conditions. The fair value of RSUs is estimated based on the closing price of the Company's Class A common stock at the date of grant and is amortized to expense on a straight-line basis over the vesting period. RSU activity is as follows:

	Number of Shares	Weighted Average Fair Value
Outstanding at December 31, 2022	2,807,660	\$ 8.61
Granted	5,365,427	\$ 2.25
Vested	(1,063,863)	\$ 8.41
Forfeited and canceled	(749,750)	\$ 4.95
Outstanding at December 31, 2023	6,359,474	\$ 3.71
Granted	11,729,289	\$ 1.32
Gross vested units	(2,413,455)	\$ 4.14
Forfeited and canceled	(2,392,385)	\$ 1.95
Outstanding at December 31, 2024	13,282,923	\$ 1.83

The total fair value of RSUs vested was \$10.0 million and \$8.9 million for the years ended December 31, 2024 and 2023, respectively.

As of December 31, 2024, there was \$14.3 million of unrecognized compensation cost related to RSUs, which is expected to be recognized over a weighted-average period of 1.0 years.

Restricted Stock Awards

RSAs granted under the 2021 Plan and assumed under the SES 2021 Plan generally vest 1/4th upon completion of one year of service and 1/48th per month thereafter and have only service vesting conditions. The fair value of RSAs is estimated based on the closing price of the Company's Class A common stock at the date of grant and is amortized to expense on a straight-line basis over the vesting period. RSA activity is as follows:

	Number of Shares	Weighted Average Fair Value
Outstanding at December 31, 2022	1,270,726	\$ 5.09
Granted	—	\$ -
Vested	(610,335)	\$ 5.14
Forfeited and canceled	(10,824)	\$ 5.13
Outstanding at December 31, 2023	649,567	\$ 5.05
Granted	—	\$ —
Vested	(386,964)	\$ 5.05
Forfeited and canceled	(7,145)	\$ 5.07
Outstanding at December 31, 2024	255,458	\$ 5.04

The total fair value of RSAs vested was \$2.0 million and \$3.1 million for the years ended December 31, 2024 and 2023, respectively.

As of December 31, 2024, there was \$1.2 million of unrecognized compensation cost related to RSAs, which is expected to be recognized over a weighted-average period of 0.3 years.

Performance Stock Units

PSUs granted under the SES 2021 Plan generally vest over a three-year period and have both service and market vesting conditions. PSUs are measured at their estimated fair value using a Monte Carlo simulation valuation model with the effect of the market condition reflected in the grant date fair value of the award. The fair value of PSU awards is amortized to expense on a straight-line basis over the requisite service period, irrespective of whether the market vesting condition is satisfied, which is generally two to three years. The key inputs used in the Monte Carlo simulation model for PSUs granted during the years ended December 31, 2024 and 2023 at their measurement date were as follows:

	2024	2023
Expected term (in years)	3.0	5.0
Risk free rate	4.06%	3.57%
Expected volatility	90.0%	80.0%
Expected dividends	0%	0%
Stock price	\$ 1.36	\$ 2.25

The stock price is based on the closing price of the Company's Class A common stock as of the valuation date and simulated through the end of the earn-out period following Geometric Brownian Motion. Expected volatility is based on the weighted average historical volatilities of the Company's Class A common stock and select peer companies' common stock that matches the expected term of the awards. The expected term is derived from the vesting period. The risk-free interest rate is based on the yield curve for zero-coupon U.S. Treasury notes with maturities corresponding to the expected term of the awards. The dividend rate is based on the historical rate, which the Company anticipates remaining at zero.

PSU activity is as follows:

	Number of Shares	Weighted Average Fair Value
Outstanding at December 31, 2022	2,116,942	\$ 5.98
Granted	1,631,800	\$ 0.58
Vested	—	\$ —
Forfeited and canceled	(383,932)	\$ 3.86
Outstanding at December 31, 2023	3,364,810	\$ 3.60
Granted	3,637,556	\$ 0.42
Vested	—	\$ —
Forfeited and canceled	(1,029,316)	\$ 6.96
Outstanding at December 31, 2024	5,973,050	\$ 1.34

As of December 31, 2024, there was \$1.8 million of unrecognized compensation cost related to PSUs, which is expected to be recognized over a weighted-average period of 1.5 years.

Earn-Out Restricted Shares

The Earn-Out Restricted Shares granted in connection with the Business Combination have a contractual term of five years and have both service and market vesting conditions. The Earn-Out Restricted Shares have been measured at their estimated fair value using a Monte Carlo simulation valuation model with the effect of the market condition reflected in the grant date fair value of the award. The aggregate grant date fair value of the Earn-Out Restricted Shares is \$15.0 million and is amortized to expense on a straight-line basis over the requisite service period, irrespective of whether the market vesting condition is satisfied, which is 1.45 years. The key inputs used in the Monte Carlo simulation model for the Earn-Out Restricted Shares at their measurement dates were as follows:

	February 3, 2022 (Closing Date)
Contractual term (in years)	5.0
Risk-free rate	1.63%
Expected volatility	81.0%
Expected dividends	0%
Stock price	\$ 7.68

The stock price is based on the closing price of the Company's Class A common stock as of the valuation date and simulated through the end of the earn-out period following Geometric Brownian Motion. The Company estimates the volatility of its common stock by using select peer companies' common stock that matches the contractual term of the awards. The risk-free interest rate is based on the yield curve for zero-coupon U.S. Treasury notes with maturities corresponding to the contractual term of the restricted shares. The dividend rate is based on the historical rate, which the Company anticipates remaining at zero.

Earn-Out Restricted Shares activity is as follows:

	Number of Shares	Weighted Average Fair Value
Outstanding at December 31, 2022	1,931,044	\$ 6.53
Granted/vested	—	\$ —
Forfeited and canceled	(311,046)	\$ 6.53
Outstanding at December 31, 2023	1,619,998	\$ 6.53
Granted/vested	—	\$ —
Forfeited and canceled	(854,008)	\$ 6.53
Outstanding at December 31, 2024	765,990	\$ 6.53

During the year ended December 31, 2023, the Earn-Out Restricted Shares met the requisite service period and the related expense was fully amortized.

Stock Options

Options granted under the 2021 Plan and assumed under the SES 2021 Plan vest 1/4th upon completion of one year of service and 1/48th per month thereafter, however in certain instances options have been granted with immediate vesting. Options under the Plan generally expire 10 years from the date of grant and have only service vesting conditions. Stock option activity is as follows:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at December 31, 2022	18,308,233	\$ 0.17	7.6	\$ 54.6
Granted	—	\$ —		
Exercised	(3,691,340)	\$ 0.14		\$ 7.0
Forfeited and canceled	(997,100)	\$ 0.18		
Outstanding at December 31, 2023	13,619,793	\$ 0.17	6.8	\$ 22.7
Granted	—	\$ —		
Exercised	(6,507,475)	\$ 0.16		\$ 4.0
Forfeited and canceled	(1,049,208)	\$ 0.19		
Outstanding at December 31, 2024	6,063,110	\$ 0.19	5.5	\$ 12.2
Vested, December 31, 2024	5,848,933	\$ 0.18	5.5	\$ 11.8
Vested or expected to vest, December 31, 2024	6,063,110	\$ 0.19	5.5	\$ 12.2

No income tax benefit was recognized for stock options exercised as the Company does not anticipate realizing any such benefit in the near future. The fair value of stock options vested for the years ended December 31, 2024 and 2023 were \$11.8 million and \$16.4 million, respectively.

The Company uses the Black-Scholes pricing model to determine the fair value of options granted. The calculation of the fair value of stock options is affected by the stock price on the grant date, the expected volatility of the Company's stock over the expected term of the award, the expected life of the award, the risk-free interest rate and the dividend yield. There were no options granted during the years ended December 31, 2024 and 2023.

As of December 31, 2024, there was less than \$0.1 million of unrecognized compensation cost related to stock options, which is expected to be recognized over a weighted-average period of 0.1 years.

Note 16. Income Taxes

As discussed in "Note 1 – Nature of Business," SES Holdings Pte. Ltd. is a Singapore private limited company and was formed in November 2018. As a result of the reorganization the Company undertook in 2018, SES Holdings Pte. Ltd. is also treated as a U.S. taxpayer for U.S. Federal income tax purposes in accordance with Internal Revenue Code Section 7874. SES Holdings Pte. Ltd. is the parent of the U.S. Federal consolidated income tax group.

The U.S. and foreign components of loss before income taxes were as follows:

(in thousands)	Years Ended December 31,	
	2024	2023
U.S.	\$ (13,573)	\$ (15,314)
Foreign	(86,424)	(38,939)
Loss before income taxes	\$ (99,997)	\$ (54,253)

Income tax expense consists of the following:

(in thousands)	Years Ended December 31,	
	2024	2023
Current:		
Federal	\$ —	\$ —
State	7	89
Foreign	459	115
Total current expense	466	204
Deferred:		
Federal	—	—
State	—	—
Foreign	(278)	(1,057)
Total deferred expense	(278)	(1,057)
Income tax (benefit) expense	\$ 188	\$ (853)

Reconciliations of the federal statutory income tax rate to the Company's effective income tax rate are as follows:

	Years Ended December 31,	
	2024	2023
Tax provision (benefit) at U.S. statutory rate	21.0%	21.0%
State income taxes, net of federal benefit	(0.0)%	(0.2)%
Foreign tax	(0.3)%	0.9%
Foreign income taxed at non US rates	0.0%	(0.1)%
Other permanent items	(0.1)%	(0.1)%
Section 162(m)	(0.7)%	(4.4)%
Stock-based compensation	(1.0)%	(0.8)%
Research and development tax credits	1.3%	2.7%
Unrecognized tax benefits	(0.4)%	(0.8)%
GILTI	0.0%	(0.3)%
Change in valuation allowance	(16.5)%	(18.3)%
Deferred adjustments	(2.5)%	0.0%
Change in Sponsor Earn-Out liabilities	(1.1)%	2.6%
Others	0.0%	(0.6)%
Effective tax rate	(0.2)%	1.6%

The Company files federal, state and foreign tax returns, which are subject to examination by the relevant tax authorities. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment. The statute of limitations for assessment by the Internal Revenue Service ("IRS"), and state tax authorities remains open for all tax years ended after 2012. To the extent the Company has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the IRS or state tax authorities to the extent utilized in a future period.

The components of the net deferred tax asset at the end of each year are as follows:

(in thousands)	As of December 31,	
	2024	2023
Deferred tax assets:		
Net operating losses	\$ 35,191	\$ 30,453
Section 174	25,306	12,146
Research and development tax credits	4,298	3,720
Lease liabilities	3,060	3,980
Stock-based compensation	2,741	3,349
Accruals and reserves	1,547	1,499
Fixed assets	562	321
Intangibles	138	—
Other	94	120
Total deferred tax assets	72,937	55,588
Deferred tax liabilities:		
ROU assets	(2,781)	(3,801)
Total deferred tax liabilities	(2,781)	(3,801)
Net deferred tax asset before valuation allowance	70,156	51,787
Valuation allowance	(68,821)	(50,730)
Net deferred tax asset	\$ 1,335	\$ 1,057

The difference between the provision for income taxes and the income tax determined by applying the statutory federal income tax rate of 21% was due primarily to the research and development credit and change in valuation allowance. The Company maintains full valuation allowance against its U.S. and Viking Power System Pte. Ltd., net deferred tax assets as it believes these deferred tax assets were not realizable on a more likely than not basis as of December 31, 2024. The Company's valuation allowance balance increased by \$18.1 million and \$11.9 million for the years ended December 31, 2024 and 2023, respectively.

A full valuation allowance was established for SES AI Korea Co., Ltd since the fiscal year 2021. However, SES Korea operates under a cost-plus model in adherence to transfer pricing (TP) regulations, ensuring its profitability in accordance with U.S. GAAP. Upon reevaluation of the subsidiary's consistent profitability and other favorable indicators, it is determined that a valuation allowance was no longer warranted. In the fiscal year 2023, the Company released the Korean valuation allowance.

As of December 31, 2024, the Company has Federal net operating loss (“NOLs”) carryforward of approximately \$144.5 million, of which \$9.2 million is for pre-2018 and \$135.3 million is post 2017. The pre-2018 Federal NOLs carryforwards will begin to expire in 2033. The post-2017 Federal NOLs will carryforward indefinitely but can only offset 80% of annual taxable income. The Company also has Massachusetts NOLs carryforwards of approximately \$81.2 million, which begins to expire in 2033.

As of December 31, 2023, the Company had Federal NOLs carryforward of approximately \$124.7 million, of which \$9.3 million was for pre-2018 and \$115.4 million was post 2017. The pre-2018 Federal NOLs carryforwards will begin to expire in 2033. The post-2017 Federal NOLs will carryforward indefinitely but can only offset 80% of annual taxable income. The Company also had Massachusetts NOLs carryforwards of approximately \$74.9 million, which begins to expire in 2033.

As of December 31, 2024 and 2023, the Company had federal research credit carryforwards of approximately \$4.5 million and \$3.8 million, respectively, which begins to expire in 2033, and Massachusetts research credit carryforwards of approximately \$2.1 million and \$1.9 million, respectively, which begins to expire in 2030.

The utilization of the Company’s NOLs and R&D credits and carryforwards may be subject to a limitation due to the “change in ownership provisions” under Section 382 of the Internal Revenue Code. The annual limitation may result in the expiration of the NOL carryforwards before their utilization. During 2024, management does not believe there were significant ownership changes that would trigger a Section 382 limitation.

The Company records unrecognized tax benefits in accordance with ASC 740-10, *Income Taxes*. ASC 740-10 which prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of uncertain tax positions taken or expected

to be taken in the Company's income tax return and also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition.

As of December 31, 2024 and 2023, the total amount of unrecognized tax benefits was \$7.6 million and \$5.5 million respectively, of which \$7.3 million would affect 2024 income tax expense, if recognized, without considering any valuation allowance. The Company does not expect the unrecognized tax benefits to change significantly over the next 12 months.

The Company includes interest and penalties related to unrecognized tax benefits within the benefit from (provision for) income taxes. As of the years ended December 31, 2024 and 2023 the total amount of gross interest accrued in each year was less than \$0.1 million, respectively.

A reconciliation of the beginning and ending balances of unrecognized tax benefits is as follows:

(in thousands)	As of December 31,	
	2024	2023
Beginning of the year	\$ 5,502	\$ 4,573
Increase – prior year positions	1,521	311
Increase – current year positions	577	618
Decrease – prior year positions	—	—
End of the year	<u>\$ 7,600</u>	<u>\$ 5,502</u>

The Company is subject to income taxes in the U.S. federal, state, and various foreign jurisdictions. Tax regulations within each jurisdiction are subject to the interpretation of the related tax laws and regulations and require significant judgment to apply. The Company's tax years remain open for examination within the U.S. and foreign authorities for all years, until such time as the NOLs are initially utilized. The Company's tax years remain open for examination by foreign authorities beginning with the tax year ended December 31, 2018.

Beginning in 2022, the 2017 Tax Cuts and Jobs Act amended Section 174 to eliminate current-year deductibility of research and experimentation (R&E) expenditures and software development costs (collectively, R&E expenditures) and instead require taxpayers to charge their R&E expenditures to a capital account amortized over five years (15 years for expenditures attributable R&E activity performed outside the United States). The Company generated a deferred tax asset for capitalized R&E expenditures for the year ended December 31, 2024 which was fully offset with a valuation allowance.

Note 17. Net Income (Loss) Per Share

Basic net loss per share is computed by dividing net loss by the weighted average number of common shares outstanding for the period. Diluted net loss per share is computed by dividing net loss, as adjusted for changes in fair value recognized in earnings from equity contracts classified as liabilities, by the weighted average number of common shares outstanding and, when dilutive, common share equivalents from outstanding stock options and restricted stock units (using the treasury-stock method). The weighted-average number of common shares used in the computation of basic and diluted net income per share were as follows:

(in thousands, except share and per share amounts)	Years Ended December 31,	
	2024	2023
Numerator:		
Net loss attributable to common stockholders - basic and diluted	\$ (100,185)	\$ (53,400)
Denominator:		
Weighted average shares of common stock outstanding - basic and diluted	321,824,143	315,051,508
Net loss per share attributable to common stockholders - basic and diluted	\$ (0.31)	\$ (0.17)

The number of common stock equivalents excluded from the computation of diluted net loss per share because either the effect would have been anti-dilutive, or the performance criteria related to such shares and awards had not been met, were as follows:

	Years Ended December 31,	
	2024	2023
Escrowed Earn-Out Shares	27,690,978	27,690,978
Options to purchase common stock	6,063,110	13,619,793
Public Warrants	9,199,947	9,199,947
Sponsor Earn-Out Shares	5,520,000	5,520,000
Private Warrants	5,013,333	5,013,333
Unvested RSUs	13,282,923	6,359,474
Unvested PSUs	5,973,050	3,364,810
Earn-Out Restricted Shares	765,990	1,619,998
Unvested RSAs	255,458	649,567
Total	73,764,789	73,037,900

Note 18. Segment and Geographic Information

Operating Segments

Operating segments are defined as components of an entity for which separate financial information is available and that is regularly reviewed by the Chief Operating Decision Maker (“CODM”) in deciding how to allocate resources to an individual segment and in assessing performance. The Company’s CODM is its Chief Executive Officer. The Company has determined that it operates in one operating and reportable segment, as the CODM reviews financial information presented on a consolidated basis for purposes of making operating decisions, allocating resources, and evaluating financial performance. The CODM uses operating income (loss) as the measure of financial performance and for resource allocation decisions.

Significant Expenses

The Company concluded it operates as one operating and reportable segment based on the information regularly reviewed by the CODM for decision making, resource allocation, and evaluating financial performance. The information included is categorized into different significant expense lines such as compensation and benefits, lab and equipment, professional services, general and administrative, facility, and sales and marketing. For the year ended December 31, 2024, the Company reported to its CODM \$33.5 million in compensation and benefits excluding stock compensation and net of reimbursements, \$18.3 million in lab and equipment net of reimbursements, \$16.0 million in general and administrative, \$12.7 million in professional services, \$8.6 million in facility, and \$1.6 million in sales and marketing. For the year ended December 31, 2023, the Company reported to its CODM \$16.9 million in compensation and benefits excluding stock compensation and net of reimbursements, \$5.7 million in lab and equipment net of reimbursements, \$13.7 million in general and administrative, \$12.6 million in professional services, \$7.4 million in facility, and \$1.2 million in sales and marketing.

Geographic Information

For the year ended December 31, 2024, revenue outside of the United States, based on customer billing address in the Asia Pacific region, was 100% of total revenue.

The Company’s long-lived assets consist primarily of property and equipment and intangible assets and are attributed to the geographic location in which they are located. Long-lived assets by geographical area were as follows:

(in thousands)	As of December 31,	
	2024	2023
Property and equipment, net:		
Asia Pacific	\$ 24,041	\$ 24,032
United States	14,124	13,927
Total property and equipment, net	\$ 38,165	\$ 37,959

Note 19. Defined Contribution Plan

The Company offers a defined contribution retirement savings plan under Section 401(k) of the Internal Revenue Code. This plan covers employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pre-tax basis. The Company contributed \$0.7 million and \$0.5 million to the defined contribution retirement savings plan for the years ended December 31, 2024 and 2023, respectively.

Note 20. Related-Party Transactions

Pursuant to the director nomination agreement, dated as of July 12, 2021, with the Company (the “Director Nomination Agreement”), General Motors Company and its affiliates (“GM”) were considered related parties due to their board representation and the board member’s employment position at GM, which remained in effect as long as GM continues to hold more than 5% of the fully diluted outstanding equity securities of SES as per the agreement. On October 29, 2024, GM and the Company mutually agreed to terminate the Director Nomination Agreement and GM terminated its board representation. Hence, GM is no longer considered a related party. See “Note 4 – Partnerships” for more details about our prior partnership with GM.

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

Under the supervision and with the participation of our management, including our chief executive officer (“CEO”) and chief financial officer (“CFO”), we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2024, as such term is defined in Rules 13a-15(e) and 15d-15(e) under Securities Exchange Act of 1934, as amended (the “Exchange Act”). Disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow for timely decisions regarding required disclosure. Based on this evaluation, our principal executive officer and principal financial officer have concluded that as of December 31, 2024, our disclosure controls and procedures were not effective due to a material weakness in our internal control over financial reporting, as discussed below.

Management’s Report on Internal Controls Over Financial Reporting

As required by SEC rules and regulations implementing Section 404 of the Sarbanes-Oxley Act of 2002 (“SOX”), our management is responsible for establishing and maintaining adequate internal control over financial reporting, as this term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with U.S. GAAP. Our internal control over financial reporting includes those policies and procedures that:

- (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of our Company;
- (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors, and
- (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

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

Management with participation of the CEO and CFO under the oversight of the Audit Committee of our Board of Directors evaluated the effectiveness of our internal control over financial reporting as of December 31, 2024 using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) in Internal Control – Integrated Framework (2013).

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

Based on the evaluation described above, management determined that our internal control over financial reporting was not effective as of December 31, 2024, because of a material weakness. Specifically, a management review control associated with the valuation of the sponsor earn-out liabilities did not operate effectively as it did not evaluate a key assumption used in the valuation at an appropriate level of precision.

The material weaknesses did not result in any material misstatements to our consolidated financial statements or disclosures in the years ended December 31, 2024 and 2023.

This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm regarding internal controls over financial reporting because we are exempt from this requirement as a smaller reporting company and non-accelerated filer.

Remediation Plan for Current Material Weakness

We are taking the following actions to remediate the material weakness described in this Item 9A and to enhance our overall control environment. We will design updated processes and controls and maintain sufficient and appropriate review documentation for the assessment of all key assumptions related to the valuation of sponsor earn out liabilities.

Remediation of Previously Reported Material Weaknesses

We previously identified a material weakness, as disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, the Company did not design and maintain sufficient user access and monitoring controls to ensure appropriate segregation of duties and adequately restrict access to a financial application. As a result, automated and manual business process controls that are dependent on the affected IT general controls were also deemed ineffective, as they could have been adversely affected due to their reliance on information and configurations from the affected IT system.

Further, as disclosed in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, in the first quarter of 2024 we identified an additional material weakness in a review control because we failed to detect an error in the accounting for forfeitures of Earn-Out Restricted Shares upon a holder’s termination of employment.

In response to the above material weaknesses, the Company executed a remediation plan in 2024. The remediation actions taken were as follows:

- We have hired professionally qualified personnel who have the appropriate level of expertise in the areas of accounting, financial reporting, and IT general controls.
- We have taken steps to enhance the design of existing control activities related to IT environment and implemented additional process-level control activities.
- We have restricted, and will continue to restrict, access to the financial application to ensure appropriate segregation of duties.
- We have designed updated processes and controls around change management monitoring to ensure that all changes have sufficient documentation and are reviewed by an authorized person.
- We have added, and will continue to maintain, an additional layer of internal review over the accounting of the Earn-Out Restricted Shares’ expense in relation to employees’ terminations and forfeitures.

As a result, we have concluded that, as of December 31, 2024, we have remediated the above-mentioned material weaknesses related to IT application, user access and monitoring controls, and to accounting for forfeitures of Earn-Out Restricted Shares upon a holder's termination of employment.

Changes in Internal Control over Financial Reporting

As described above, we have taken and continue to take steps to remediate material weaknesses in our internal control over financial reporting described in "Remediation Plan for Current Material Weakness" and "Remediation of Previously Reported Material Weaknesses." Other than in connection with the remediation process described above, no change in our internal control over financial reporting occurred during the most recent fiscal quarter that materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

(a) Item 1.01 *Entry into a Material Definitive Agreement.*

ATM Equity Offering Program

On February 28, 2025, we entered into a Controlled Equity Offering Agreement (the "ATM Agreement") with Cantor Fitzgerald & Co., Canaccord Genuity LLC, Needham & Company, LLC and Oppenheimer & Co. Inc. (each an "Agent" and together, the "Agents"), pursuant to which we may offer and sell from time to time, at our option, shares of our Class A common stock. The issuance and sale, if any, of the Class A common stock under the ATM Agreement will be made pursuant to our registration statement on Form S-3 (File No. 333-271423), which became effective on April 28, 2023, and the related prospectus supplement dated February 28, 2025 (the "Prospectus Supplement"), in each case filed with the SEC. In accordance with the terms of the ATM Agreement, under the Prospectus Supplement, we may offer and sell shares of our Class A common stock having an aggregate offering price of up to \$150.0 million from time to time through the Agents.

Sales of shares of Class A common stock through the Agents, if any, will be made by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415(a)(4) under the Securities Act, including, without limitation, sales made directly on the NYSE or any other existing trading market for the shares of Class A common stock. Subject to the terms and conditions of the ATM Agreement, the Agents will use their commercially reasonable efforts to sell shares of our Class A common stock from time to time, based on instructions from us (including any price, time or size limits or other parameters or conditions we may impose).

We have agreed to pay the Agents a commission equal to up to 3.0% of the aggregate gross proceeds from the sales of shares of Class A common stock sold through the Agents under the ATM Agreement and will also reimburse the Agents for certain specified expenses in connection with entering into the ATM Agreement as well as in connection with each Representation Date (as defined in the ATM Agreement). Pursuant to the ATM Agreement, we have also provided the Agents with customary indemnification and contribution rights. The ATM Agreement contains customary representations and warranties and conditions to the sale of the shares of Class A common stock pursuant thereto.

We are not obligated to sell any Class A common stock under the ATM Agreement and may at any time suspend solicitation and offers thereunder.

The foregoing description of the material terms of the ATM Agreement is not complete and is qualified in its entirety by reference to the full text of the ATM Agreement, a copy of which is filed as Exhibit 10.32 to this Annual Report and is incorporated herein by reference.

The representations, warranties and covenants contained in the ATM Agreement were made solely for the benefit of the parties to the ATM Agreement, and may be subject to limitations agreed upon by the contracting parties. Accordingly, the ATM Agreement is filed with this Annual Report only to provide investors with information regarding the terms of the ATM Agreement and not to provide investors with any other factual information regarding us or our business, and should be read in conjunction with the disclosures in our periodic reports and other filings with the SEC.

(b) Rule 10b5-1 Trading Arrangements

During the quarter ended December 31, 2024, no director or Section 16 officer adopted or terminated any Rule 10b5-1 trading arrangements or non-Rule 10b5-1 trading arrangements as defined in Item 408 of Regulation S-K.

Item 9C. Disclosure Regarding Foreign Jurisdictions That Prevent Inspections

Not applicable.

PART III – OTHER INFORMATION

Item 10. Directors, Executive Offices and Corporate Governance

The information required by this Item will be set forth in our definitive proxy statement for our 2025 Annual Meeting of Stockholders (the “Proxy Statement”) and is incorporated herein by reference.

Item 11. Executive Compensation

The information required by this Item will be set forth in the Proxy Statement is incorporated herein by reference.

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

The information required by this Item will be set forth in the Proxy Statement is incorporated herein by reference.

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

The information required by this Item will be set forth in the Proxy Statement is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The information required by this Item will be set forth in the Proxy Statement is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules

- (1) *Financial Statements and Schedules* – the required information is set forth in “Part 2, Item 8 – Financial Statements and Supplementary Data” in this Annual Report.
- (2) *Exhibits* – the exhibits listed below are filed as part of this Annual Report or incorporated herein by reference to the location indicated.

Exhibit No.	Description
2.1†	Business Combination Agreement, dated as of July 12, 2021, among Ivanhoe Capital Acquisition Corp., Wormhole Merger Sub Pte. Ltd. and SES Holdings Pte. Ltd., as amended by Amendment No. 1 thereto, dated September 20, 2021 (incorporated by reference to Exhibit 2.1 to the Company’s Registration Statement on Form S-4/A (File No. 333-258691), filed with the Securities and Exchange Commission on January 5, 2022).
2.2†	Amendment No. 1 to Business Combination Agreement, dated as of September 20, 2021, among Ivanhoe Capital Acquisition Corp., Wormhole Merger Sub Pte. Ltd. and SES Holdings Pte. Ltd. (incorporated by reference to Exhibit 2.1 to the Company’s Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on September 21, 2021).
3.1	Certificate of Incorporation of SES AI Corporation (incorporated by reference to Exhibit 3.1 to the Company’s Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
3.2	Bylaws of SES AI Corporation (incorporated by reference to Exhibit 3.2 to the Company’s Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).

Exhibit No.	Description
4.1	Amended and Restated Warrant Agreement, dated as of February 3, 2022, by and between the Company and Continental Stock Transfer & Company, as warrant agent (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
4.2	Description of Securities (incorporated by reference to Exhibit 4.2 to the Company's Annual Report on Form 10-K (File No. 001-39845), filed with the Securities and Exchange Commission on March 31, 2022).
10.1	Amended and Restated Registration Rights Agreement, dated February 3, 2022, by and among SES AI Corporation, the Sponsor and certain other holders of SES AI Corporation (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.2#	Form of Director and Executive Officer Indemnification Agreement (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.3#*	SES AI Corporation 2021 Incentive Award Plan.
10.4#	SES Holdings Pte. Ltd. 2021 Share Incentive Plan (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.5#	Employment Agreement, dated as of March 19, 2021, by and between Dr. Qichao Hu and SES Holdings Pte. Ltd. (incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.6#	Employment Agreement, dated as of February 16, 2021, by and between Jing Nealis and SES Holdings Pte. Ltd. (incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.7#	Employment Agreement, dated as of July 1, 2018, by and between Dr. Hong Gan and SolidEnergy Systems Corporation (incorporated by reference to Exhibit 10.10 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.8#	Employment Agreement, dated as of March 3, 2023, by and between Daniel (Gang) Li and SolidEnergy Systems LLC (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-39845), filed with the Securities and Exchange Commission on May 9, 2023).
10.9#	Employment Agreement, dated as of March 2, 2022, by and between Kyle Pilkington and SolidEnergy Systems, LLC (incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 27, 2024).
10.10#*	Employment Agreement, dated as of June 15, 2023, by and between Kang Xu and SolidEnergy Systems, LLC.
10.11	Board Observation Agreement, dated as of July 12, 2021, by and among Ivanhoe Capital Acquisition Corp., SES Holdings Pte. Ltd. and Hyundai Motor Company (incorporated by reference to Exhibit 10.12 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.12	Letter Agreement, dated January 6, 2021, by and among Ivanhoe, its executive officers and directors and Ivanhoe Capital Sponsor LLC (incorporated by reference to Exhibit 10.13 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).

Exhibit No.	Description
10.13	IPO Letter Agreement Amendment, dated as of July 12, 2021, by Ivanhoe Capital Sponsor LLC and the officers and directors of Ivanhoe Capital Acquisition Corp. (incorporated by reference to Exhibit 10.14 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.14	English Translation of Shanghai Lease Agreement, dated as of August 28, 2018 (incorporated by reference to Exhibit 10.15 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.15	English Translation of Amendment to Shanghai Lease Agreement, dated as of August 28, 2021 (incorporated by reference to Exhibit 10.16 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.16	English Translation of Amendment to Shanghai Lease Agreement, dated as of September 20, 2022 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 001-39845), filed with the Securities and Exchange Commission on November 14, 2022).
10.17	Commercial Lease Agreement, dated as of March 30, 2016, by and between SolidEnergy Systems Corp. and Cummings Properties, LLC (incorporated by reference to Exhibit 10.17 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.18	Amendment No. 1 to Commercial Lease Agreement, dated as of January 10, 2020 (incorporated by reference to Exhibit 10.18 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.19	Amendment No. 2 to Commercial Lease Agreement, dated as of February 19, 2020 (incorporated by reference to Exhibit 10.19 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.20	Amendment No. 3 to Commercial Lease Agreement, dated as of March 26, 2021 (incorporated by reference to Exhibit 10.20 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.21	Amendment No. 4 to Commercial Lease Agreement, dated as of December 30, 2021 (incorporated by reference to Exhibit 10.21 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.22	Amendment No. 5 to Commercial Lease Agreement, dated as of October 21, 2022 (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K (file No. 001-39845) filed with the Securities and Exchange Commission on March 16, 2023).
10.23#	Form of Restricted Share Award Grant (incorporated by reference to Exhibit 10.22 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.24#	Form of Share Option Award Grant (incorporated by reference to Exhibit 10.23 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.25#	Form of Non-Disclosure and Non-Competition Agreement (incorporated by reference to Exhibit 10.24 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.26#	Form of Restricted Stock Unit Award Grant Notice pursuant to the SES AI Corporation 2021 Incentive Award Plan for restricted stock unit awards to employees, consultants and advisors (incorporated by reference to Exhibit 10.5 to the

Exhibit No.	Description
	Company's Quarterly Report on Form 10-Q (File No. 001-39845), filed with the Securities and Exchange Commission on May 13, 2022).
10.27#	Form of Restricted Stock Unit Award Grant Notice pursuant to the SES AI Corporation 2021 Incentive Award Plan for restricted stock unit awards to non-employee directors (incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q (File No. 001-39845), filed with the Securities and Exchange Commission on May 13, 2022).
10.28#	Form of Performance Stock Unit Award Grant Notice pursuant to the SES AI Corporation 2021 Incentive Award Plan for performance vesting restricted stock unit awards to employees and consultants (incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q (File No. 001-39845), filed with the Securities and Exchange Commission on May 13, 2022).
10.29#	Form of Share Option Award Grant pursuant to the SES Holdings Pte. Ltd. 2021 Share Incentive Plan (incorporated by reference to Exhibit 10.23 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on February 8, 2022).
10.30	Form of Subscription Agreement for Institutional Investors (incorporated by reference to Exhibit 10.13 to the Company's Registration Statement on Form S-4/A (File No. 333-258691), filed with the Securities and Exchange Commission on January 5, 2022).
10.31	Form of Subscription Agreement for Individual Investors (incorporated by reference to Exhibit 10.14 to the Company's Registration Statement on Form S-4/A (File No. 333-258691), filed with the Securities and Exchange Commission on January 5, 2022).
10.32*	Controlled Equity Offering Agreement, dated February 28, 2025, by and among SES AI Corporation, Cantor Fitzgerald & Co., Canaccord Genuity LLC, Needham & Company, LLC and Oppenheimer & Co. Inc.
16.1	Letter from Withum Smith+Brown, PC (incorporated by reference to Exhibit 16.1 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on April 18, 2022).
16.2	Letter from KPMG LLP (incorporated by reference to Exhibit 16.1 to the Company's Current Report on Form 8-K (File No. 001-39845), filed with the Securities and Exchange Commission on June 16, 2023).
19.1*	SES AI Corporation - Compliance with United States Federal Securities Laws Regarding Insider Trading: Security Trading Policy
21.1*	List of Subsidiaries.
23.1*	Consent of Independent Registered Public Accounting Firm (Grant Thornton LLP).
24.1*	Power of Attorney (included on the signature page to this Annual Report).
31.1*	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1**	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2**	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Exhibit No.	Description
97.1	Policy for the Recovery of Erroneously Awarded Compensation. (incorporated by reference to Exhibit 97.1 to the Company's Annual Report on Form 10-K (File No. 001-39845) filed with the Securities and Exchange Commission on February 27, 2024).
101.INS*	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104*	Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibit 101).

* Filed herewith.

† Certain schedules and exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K.

Indicates management contract or compensatory plan or arrangement.

** Furnished herewith.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 28, 2025

SES AI CORPORATION

By: /s/ Qichao Hu
Name: Qichao Hu
Title: Chief Executive Officer
(Principal Executive Officer)

By: /s/ Jing Nealis
Name: Jing Nealis
Title: Chief Financial Officer
(Principal Financial Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kyle Pilkington and Jing Nealis, and each or any one of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the United States Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or his or her substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Qichao Hu</u> Qichao Hu	Chief Executive Officer and Chairman (Principal Executive Officer)	February 28, 2025
<u>/s/ Jing Nealis</u> Jing Nealis	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 28, 2025
<u>/s/ Jang Wook Choi</u> Jang Wook Choi	Director	February 28, 2025
<u>/s/ Eric Luo</u> Eric Luo	Director	February 28, 2025
<u>/s/ Jiong Ma</u> Jiong Ma	Director	February 28, 2025
<u>/s/ Michael Noonan</u> Michael Noonan	Director	February 28, 2025

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

FORM 10-K/A
(Amendment No. 1)

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2024
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission File Number: 001-39845

SES AI Corporation
(Exact name of registrant as specified in its Charter)

Delaware (State or other jurisdiction of incorporation or organization)	88-0641865 (I.R.S. Employer Identification No.)
35 Cabot Road Woburn, MA (Address of principal executive offices)	01801 (Zip Code)

Registrant’s telephone number, including area code: (339) 298-8750

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

Title of Each Class	Trading Symbol(s)	Name of Exchange on which registered
Class A common stock, par value \$0.0001 per share	SES	The New York Stock Exchange
Warrants to purchase one share of Class A common stock, each at an exercise price of \$11.50	SES WS	The 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 ☐ No ☒

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

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

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

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

The aggregate market value of the voting and non-voting stock held by non-affiliates of the registrant as of June 28, 2024, the last business day of the registrant’s most recently completed second fiscal quarter, was approximately \$392.0 million, calculated by using the closing price of the registrant’s Class A common stock on such date on the New York Stock Exchange of \$1.25.

As of February 25, 2025, there were 320,778,608 shares of the registrant’s Class A common stock and 43,881,251 shares of the registrant’s Class B common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

EXPLANATORY NOTE

The purpose of this Amendment No. 1 (the “Amendment”) to the Annual Report on Form 10-K of SES AI Corporation (the “Company”) for the fiscal year ended December 31, 2024 (“Fiscal 2024”), filed with the Securities and Exchange Commission (the “SEC”) on February 28, 2025 (the “Original Form 10-K”), is to include the information required by Part III, Items 10 through 14. This information was previously omitted from the Original Form 10-K in reliance on General Instruction G to Form 10-K, which provides that registrants may incorporate by reference certain information from a definitive proxy statement prepared in connection with the election of directors and filed no later than 120 days after an issuer’s fiscal year end. The Company has determined to include such Part III information by amendment of the Original Form 10-K rather than incorporation by reference to a proxy statement. Accordingly, Part III of the Original Form 10-K is hereby amended and restated as set forth below.

In addition, in connection with the filing of this Form 10-K/A and pursuant to the rules of the SEC, we are including with this Form 10-K/A new certifications of our principal executive officer and principal financial officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. Item 15 of Part IV has also been amended to reflect the filing of these new certifications.

Except as described above, no other changes have been made to the Original Form 10-K. This Amendment does not affect any other section of the Original Form 10-K and speaks as of the filing date of the Original Form 10-K. Among other things, forward-looking statements made in the Original Form 10-K have not been revised to reflect events that occurred or facts that became known to us after the filing of the Original Form 10-K, and such forward-looking statements should be read in their historical context. Accordingly, this Amendment should be read in conjunction with the Company’s other filings made with the SEC subsequent to the filing of the Original Form 10-K.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Directors

Under our Certificate of Incorporation and Bylaws (the “Bylaws”), our Board of Directors (the “Board”) is divided into three classes. Only one class of directors is elected in each year and each class serves a three-year term. The term length of each Class is, for each Class III director, a term that expires at the 2025 annual meeting of stockholders; for each Class II director, a term that expires at the Company’s 2026 annual meeting of stockholders; and, for each Class I director, a term that expires at the Company’s 2027 annual meeting of stockholders. Biographies of our directors are listed below. Ages set forth below are as of April 15, 2025.

Dr. Qichao Hu, 39, serves as the Company’s Chief Executive Officer (“CEO”) and Chairman of the Board. Dr. Hu has served as Founder, Chief Executive Officer and Director of SES since 2012. Dr. Hu is also a board member on the MIT Enterprise Forum Cambridge. Dr. Hu is recipient of MIT Technology Review’s “Innovators Under 35” and was named among the 2013 Forbes “30 Under 30.” Dr. Hu earned his PhD in Applied Physics from Harvard University, and his BS in Physics from MIT.

We believe that Dr. Hu is qualified to serve both as a member of our management team and the Board because of his visionary leadership of SES from inception to date, his scientific and managerial expertise in the EV battery development industry, his innovative plans for SES’s future and his ability to execute on those plans. Dr. Hu is currently a Class III director.

Dr. Jiong Ma, 61, serves as a director of the Company, a position she has held since February 2022. Dr. Ma is a General Partner of Phoenix Venture Partners (PVP). Before joining PVP in 2024, she was founder and CEO of Chavant Capital Acquisition Corp., which successfully merged with Mobix Labs (NASDAQ: MOBX) in 2023. From 2008 to 2020, Dr. Ma served as a Partner at Braemar Energy Ventures (“Braemar”), a venture capital firm investing in early to mid-stage technology companies operating in the mobility, power, resources and infrastructure sectors. At Braemar, Dr. Ma focused on investments in digitization of industry, resource efficiency, mobility, renewable energy infrastructure, and deeptech. Prior to joining Braemar, Dr. Ma served in the Venture Capital Group at 3i Group plc (“3i”), a global private equity firm, from 2004 to 2008, where she was responsible for investment in the information technology and cleantech sectors. Prior to 3i, Dr. Ma served as Senior Manager of the Optical Networking Group, Technology and Business Leadership at Lucent

Technologies and Bell Labs, where she was responsible for product portfolio strategy, new product launches for Optical and Data Networking, and research and product development. Dr. Ma was also a founding team member of Onetta, a fiber networks company. Dr. Ma has served on the boards of Chavant and Anavex Life Sciences (NASDAQ: AVXL) since 2021. Dr. Ma received her PhD in electrical engineering from the University of Colorado at Boulder, MS in electrical engineering from the Worcester Polytechnic Institute in Massachusetts and BS in Physics from Lanzhou University.

We believe that Dr. Ma is qualified to serve as a director of our Board because of her extensive experience in research, operations and venture capital, particularly in the technology industry. Dr. Ma is currently a Class I director.

Michael Noonan, 62, serves as a director of the Company, a position he has held since February 2022. Since October 2022, Mr. Noonan has served as Chief Executive Officer of Swave Photonics, based in Leuven, Belgium. Previously, Mr. Noonan has served as Chief Executive Officer of MixComm Inc., a leader in RFSOI mmWave solutions based in New Jersey, which was acquired by Sivers Semiconductors in February 2022. Mr. Noonan brings 25 years of experience in leading technology businesses. Mr. Noonan has held various leadership positions, including as chairman and co-founder of Silicon Catalyst from 2013 to 2015, the world's first semiconductor incubator and the EE Times 2015 Start-up of the Year, and as chairman of the board of Socle in Taiwan in 2013 (which was acquired by Foxconn), and was also previously Executive Vice President of Global Products, Design, Sales & Marketing at GlobalFoundries from 2011 to 2013. From 2008 and 2011, Mr. Noonan served as Executive Vice President of Worldwide Sales and Marketing at NXP Semiconductors (NASDAQ: NXPI). He has served on the board of SK Growth Opportunities Corporation (NASDAQ: SKGR) since June 2022 and previously served on the board of Energous (NASDAQ: WATT) from 2019 to 2021. Mr. Noonan received his B.S. from Colorado State University in Electrical Engineering and was named the College of Engineering Distinguished Alumni in 2012, was elected to the Global Semiconductor Alliance Board of Directors and holds multiple patents in the areas of Internet telephony and video communications.

We believe Mr. Noonan is qualified to serve as a director of our Board because of his experience in executive leadership positions and expertise in information technology, innovation and the electronics industry. Mr. Noonan is currently a Class I director.

Eric Luo, 59, serves as a director of the Company, a position he has held since February 2022. From 2017 until 2021, Mr. Luo served as Chairman and Chief Executive Officer of GCL System Integration Limited, GCL New Energy USA ("GCL"), an international energy conglomerate specializing in clean and sustainable energy. Prior to his position at GCL, Mr. Luo served as the Chief Executive Officer and Board Member of Shunfeng International Clean Energy Limited (SFCE), a Hong Kong-based supplier of low-carbon and energy saving integrated solutions from 2015 to 2017. Mr. Luo received his MBA from Michigan State University and BS in Operational Management from Zhejiang Gongshang University.

We believe that Mr. Luo is qualified to serve as a director of our Board because of his experience in executive leadership positions and expertise in clean and sustainable energy. Mr. Luo is currently a Class III director.

Dr. Jang Wook Choi, 49, serves as a director of the Company, a position he has held since February 2022. Since September 2020, Dr. Choi has served as Professor at Seoul National University, where he was previously Associate Professor from 2017 to 2020. Prior to joining Seoul National University, he was Associate Professor from 2012 until 2017 and Assistant Professor from 2010 until 2012 at Korea Advanced Institute of Science and Technology. Dr. Choi received his PhD in Chemical Engineering from California Institute of Technology and BS in Chemical Engineering from Seoul National University.

We believe that Dr. Choi is qualified to serve as a director of our Board because of his extensive academic experience and expertise in chemistry, engineering and battery technologies. Dr. Choi is currently a Class II director.

Executive Officers

Our executive officers are appointed by, and serve at the discretion of, our Board. There are no family relationships among our directors and executive officers. Biographies of our executive officers who are not also directors are listed below. For information on Dr. Qichao Hu, see “- Directors” above. Ages set forth below are as of April 15, 2025.

Name	Position
Dr. Qichao Hu	Chief Executive Officer and Chairman
Jing Nealis	Chief Financial Officer
Dr. Hong Gan	Chief Science Officer
Kyle Pilkington	Chief Legal Officer
Gang “Daniel” Li	Chief Manufacturing Officer
Kang Xu	Chief Technology Officer

Jing Nealis. Ms. Nealis, 46, serves as the Company’s Chief Financial Officer, a position she has held since March 2021. Ms. Nealis served as Senior Director, Corporate Finance at View Inc., from 2019 until March 2021. Previously, she served as Chief Financial Officer of SunPower Systems International Ltd. from 2017 until 2019, after having served in the same role in the International Division of Shunfeng International Clean Energy Ltd from 2014 until 2017. From 2012 to 2014, Ms. Nealis was Finance Director/Global Tax Director of Suntech Power, prior to which she was a manager at Deloitte from 2006 to 2012 and worked at Deloitte offices in Chicago, Shanghai, and Hong Kong. Ms. Nealis earned her MS in Accounting from the University of Hawaii and her Bachelor’s in International Business from China University of Petroleum in Beijing.

Dr. Hong Gan. Dr. Gan, 64, serves as the Company’s Chief Science Officer, a position he has held since 2020. Dr. Gan was previously SES’s Director of Research & Development from 2018 to 2020. From 2013 to 2018, he was Group Leader of the Energy Storage Group at the Sustainable Energy Department at the Brookhaven National Laboratory, and from 2011 to 2013, he was Senior Director of Research & Development at Enevate Corporation. From 1993 to 2011, Dr. Gan held various positions at Greatbatch Medical, culminating in his roles as Director, Battery Research and Director, Research & Development Power Sources, Primary Battery. Dr. Gan earned his PhD in Chemistry from the University of Chicago in 1990, and his BS in Chemistry from Peking University in 1982.

Kyle Pilkington. Mr. Pilkington, 43, serves as the Company’s Chief Legal Officer, a position he has held since July 2022. Mr. Pilkington previously served as SES’s Vice President, Legal from April 2022 to July 2022, and prior to that, was Associate General Counsel at International Game Technology PLC from March 2020 to April 2022. From 2019 to 2020, Mr. Pilkington was Of Counsel at Gibson, Dunn & Crutcher LLP in Singapore. Prior to that, Mr. Pilkington was a Local Principal at Baker & McKenzie from 2010 to 2019 and prior to that he was an associate at Sullivan & Cromwell LLP. Mr. Pilkington earned a BA in Economics at Middlebury College and a JD at the University of Chicago Law School.

Gang “Daniel” Li. Mr. Li, 57, serves as the Company’s Chief Manufacturing Officer, a position he has held since March 2023. Mr. Li previously served as Senior Vice President, Hyzon Motors from July 2021 to March 2023. Prior to that, he was General Manager at A123 Systems from March 2020 to July 2021 and Deputy General Manager at Wanxiang A123 Systems Corp from June 2020 to July 2021. Mr. Li served as Executive Vice President of Wanxiang Clean Energy USA from August 2012 to July 2021. Mr. Li earned a Masters in Engineering and a BS in Materials Science from Tsinghua University in Beijing, China.

Kang Xu. Mr. Xu, 60, serves as the Company’s Chief Technology Officer, a position he has held since October 2024. Mr. Xu previously served as SES’s Chief Scientist from August 2023 to October 2024. Prior to that, Mr. Xu served as an ARL Fellow at the U.S. Army Research Laboratory for 26 years, from August 1997 to August 2023. Mr. Xu is an MRS Fellow, ECS Fellow, emeritus ARL fellow and one of the world’s leading researchers in electrolyte materials and interfacial science. He has published more than 350 papers in this field, with an h-index of 118, and has been recognized with many awards for the discovery of new electrolyte materials as well as understanding of the fundamental mechanisms.

Controlled Company Exemption

SES is a “controlled company” for purposes of the NYSE listing requirements because our Chief Executive Officer and certain entities affiliated with him own more than 50% of the total voting power of our Common Stock. As such, SES is exempt from the obligation to comply with certain corporate governance requirements, including the requirements that a majority of the Board consist of independent directors, and that SES have nominating and compensation committees that are each composed entirely of independent directors operating under a written charter in line with the rules of the New York Stock Exchange (“NYSE Rules”). Even though SES is a controlled company, it is required to have, and does have, a fully independent Audit Committee. Notwithstanding its eligibility for the exemption from these requirements, SES currently has a majority of independent directors serving on the Board, the Compensation Committee is comprised entirely of independent directors, the Nominating and Corporate Governance Committee is comprised of a majority of independent directors and both committees have written charters in line with NYSE Rules.

Board Structure

The Board retains the flexibility to determine whether the roles of Chief Executive Officer and Chairperson should be combined or separated, based on what the Board believes is in the best interests of the Company at a given point in time. The Board believes that this flexibility is in the best interests of the Company and that a one-size-fits-all approach to corporate governance, with a mandated independent Chairperson, would not result in better governance or oversight.

Currently, Dr. Hu holds both Chief Executive Officer and Chairman positions. We believe that combining the positions of Chief Executive Officer and Chairman helps to ensure that our board of directors and management act with a common purpose. In addition, we believe that a combined Chief Executive Officer and Chairman is better positioned to act as a bridge between management and our board of directors, facilitating the regular flow of information. We also believe that it is advantageous to have a chairperson with significant history with and extensive knowledge of SES, as is the case with Dr. Hu.

We also maintain the position of a lead director (“Lead Director”), which is held by one of our independent directors. The Board believes that the responsibilities of the Lead Director help to ensure appropriate oversight of the Company’s management by the Board and optimal functioning of the Board. The effectiveness of the Lead Director is also enhanced by the Board’s majority independence, as discussed above under “Director Independence.” Our Chairperson and Lead Director are appointed annually by the Board.

Dr. Ma currently serves as our Lead Director. The responsibilities of our Lead Director include, but are not limited to, the following (for more information, see the Corporate Governance Guidelines on our website under the heading “Investors” at <https://ses.ai>):

- presiding over all meetings of the Board at which the Chairperson is not present, including any executive sessions of the independent directors or the non-management directors.
- assisting in scheduling Board meetings and approve meeting schedules to ensure that there is sufficient time for discussion of all agenda items;
- communicating to the CEO the results of the Board’s evaluation of CEO performance;
- collaborating with the CEO on Board meeting agendas and approving such agendas;
- collaborating with the CEO in determining the need for special meetings of the Board;
- being available for consultation and direct communication if requested by major stockholders; and
- calling meetings of the independent or non-management directors when necessary and appropriate.

Executive Sessions

Dr. Hu, as Chief Executive Officer and Chairman is currently the only employee director serving on the Board. The Board regularly meets in executive session without Dr. Hu or any other members of management present. Executive sessions of the Board are chaired by Dr. Ma as our Lead Director. Each of the standing committees of the Board also meets regularly in executive session without any members of management present.

Audit Committee Members and Financial Expert

The Audit Committee consists of Mr. Luo, Dr. Ma and Mr. Noonan. All members of the Audit Committee are “independent” in accordance with the NYSE Rules and rules of the U.S. Securities and Exchange Commission (the “SEC”) applicable to boards of directors in general and audit committee members in particular. The Board has determined that each member of the Audit Committee meets the requirements for financial literacy under NYSE Rules. In addition, the Board has determined that Mr. Luo qualifies as an “audit committee financial expert” as defined by Item 407(d) of Regulation S-K,

Code of Business Conduct and Ethics and Corporate Governance Guidelines

Corporate Governance Guidelines. To further our commitment to sound governance, our Board has adopted the Corporate Governance Guidelines to ensure that the necessary policies and procedures are in place to facilitate the Board’s review and make decisions with respect to the Company’s business operations that are independent from management. The Corporate Governance Guidelines set forth the practices regarding Board and committee composition, selection and performance evaluations; Board meetings; director qualifications and expectations, including with respect to continuing education obligations; and management succession planning, including for the CEO. The Corporate Governance Guidelines are available on our website under the heading “Investors” at <https://ses.ai>.

Code of Business Conduct and Ethics. We maintain a Code of Business Conduct and Ethics (the “Code of Conduct”) that is applicable to all of our directors, officers and employees, including our Chairperson and CEO, CFO and other members of management. The Code of Conduct sets forth standards of ethical business conduct, including conflicts of interest, compliance with applicable laws, rules and regulations, timely and truthful disclosure, protection and proper use of our assets and reporting mechanisms for illegal or unethical behavior. The Code of Conduct also satisfies the requirements for a code of ethics as defined by Item 406 of Regulation S-K promulgated by the SEC. We intend to disclose any future amendments to, or waivers from, the Code of Conduct within four business days of the waiver or amendment through a website posting to the extent required by the rules and regulations of the SEC and the NYSE. The Code of Conduct is available on our website under the heading “Investors” at <https://ses.ai>.

Insider Trading

We have adopted insider trading policies and procedures governing the purchase, sale, and other dispositions of the Company’s securities by directors, officers and employees that are reasonably designed to promote compliance with insider trading laws, rules and regulations. For more information on compensation-related aspects of this policy, see “Executive Compensation— Compensation Risk Mitigation—Policy on Hedging and Pledging.” It is also the policy of the Company to comply with all applicable securities laws when transacting in its own securities. A copy of our insider trading policy is attached as Exhibit 19.1 to the Original Form 10-K.

Item 11. Executive Compensation

Director Compensation

Our Non-Employee Director Compensation Program, approved by the Board in March 2022 and last revised in February 2024, provides for the following compensation in accordance with industry practice and standards:

- An annual cash fee of \$50,000, with supplemental cash fees of (i) \$10,000, \$7,500 and \$5,000 for non-Chairperson members of the Audit Committee, the Compensation Committee, and the Nominating and Corporate Governance Committee, respectively, (ii) \$22,500, \$15,000 and \$15,000 for the Chairpersons of the Audit Committee, the Compensation Committee, and the Nominating and Corporate Governance Committee respectively and (iii) \$20,000 for the Lead Director. Cash fees will be paid quarterly, with a pro

rata fee applicable to service for less than a whole quarter. Additionally, if the Chairperson of our Board is a non-employee director, he/she will receive an additional \$50,000 annually.

- Annual equity grant of RSUs with an award value of \$160,000 starting in the second year of board service, and initial equity grant of restricted stock units with an award value of \$320,000. All such RSUs will vest, vesting fully in one installment one year after the grant date subject to the director's continued service on such vesting date.

The Compensation Committee recommends to the Board the annual compensation to be paid to the directors of our Board and may, in its discretion, revise or replace the compensation program described above. The Company reimburses each director for any reasonable transportation and lodging expenses actually incurred to attend meetings of our board or committees.

The following table sets forth the total compensation paid to each of our non-employee directors who served during fiscal 2024 for service on the Board during that period.

Name ⁽¹⁾	Fee Earned or Paid in Cash (\$)	Stock Awards(\$) ⁽²⁾	Total (\$)
Dr. Jang Wook Choi	\$ 50,000	\$ 163,983	\$ 213,983
Eric Luo	\$ 85,000	\$ 163,983	\$ 248,983
Dr. Jiong Ma	\$ 100,000	\$ 163,983	\$ 263,983
Michael Noonan	\$ 67,500	\$ 163,983	\$ 231,483
Brian Krzanich ⁽³⁾	\$ 39,500	\$ 327,966	\$ 367,466
Anirvan Coomer ⁽⁴⁾	\$ —	\$ —	\$ —

- (1) Represents all non-employee directors who served on our Board during fiscal 2024. Dr. Qichao Hu, our Founder and Chief Executive Officer, does not receive any additional compensation for his service as a director.
- (2) The amounts in this column represents the aggregate grant date fair value of RSUs granted during each of the years presented, computed in accordance with FASB ASC Topic 718, without taking into account estimated forfeitures. The assumptions made when calculating the amounts are found in Note 15 to the consolidated audited financial statements for the year ended December 31, 2024.
- (3) Because Mr. Krzanich was appointed to our Board on January 26, 2024 and resigned from our Board effective November 1, 2024, his cash fees reflect a prorated amount for such period of service and his stock awards reflect his initial equity grant upon appointment.
- (4) Mr. Coomer, who was nominated to the Board by GM Ventures, elected to forgo all of his compensation for Fiscal 2024. Mr. Croomer resigned from our Board on October 29, 2024 in connection with the termination of GM Ventures' director nomination rights, as discussed in "Item 13. Certain Relationships and Related Transactions, and Director Independence—Related Person Transactions."

The below table lists all outstanding equity awards held by our non-employee directors as of December 31, 2024.

Name	Stock Awards ⁽¹⁾
Dr. Jang Wook Choi	127,119
Anirvan Coomer	—
Eric Luo	127,119
Dr. Jiong Ma	127,119
Michael Noonan	127,119
Brian Krzanich	—

- (1) Includes RSUs unvested as of December 31, 2024. The RSUs were granted to each non-employee director on February 6, 2024 and vest in full on the first anniversary of the grant date, subject to the director's continued service through such vesting date.

Regarding the two directors included in the first table above who left the Board in 2024, Mr. Croomer has no outstanding equity awards upon his departure because, as discussed above, he elected to forgo all of his compensation for Fiscal 2024, and Mr. Krzanich's unvested RSUs were cancelled on November 1, 2024 when he resigned as a director.

Director Stock Ownership Guidelines

Beginning in fiscal 2022 we adopted stock ownership guidelines that require each director to beneficially own shares of our Class A Common Stock (including Class A Common Stock held in trust or by certain family members and stock underlying unvested RSUs or restricted stock awards) with the equivalent value, calculated annually at the end of each fiscal year, of at least five times the aggregate annual cash retainer for a director. Each director is required to achieve such stock ownership requirements by the date of the fifth anniversary of such director's appointment (or, for those directors serving at the time of adoption of these ownership guidelines, within 5 years after such adoption). Until the required ownership level is reached, directors are required to retain at least 100% of the shares, net of applicable tax withholding and the payment of any exercise or purchase price (if applicable), received upon the vesting or settlement of equity awards or the exercise of stock options. As of April 1, 2025, all of our directors then serving had met the stock ownership requirement or were within the applicable five-year grace period for compliance.

Executive Compensation

Overview

Our compensation program is centered on a pay-for-performance philosophy and is designed to reward our named executive officers for their abilities, experience and efforts. The compensation programs we offer directly influence our ability to attract, retain and motivate the highly qualified and experienced professionals who are vital to our success as a company.

We believe that having compensation programs designed to align executive officers' interests with those of the Company and its stockholders in achieving positive business results and to reinforce accountability is the cornerstone to successfully implementing and achieving our strategic plans. In determining the compensation of our named executive officers, we are guided by the following key principles:

- ***Attract, Retain, Motivate and Reward.*** Attract, retain, motivate and reward highly qualified and talented executives who possess the skills to achieve innovation and growth objectives in a competitive industry for rechargeable batteries.
- ***Pay for Performance.*** Align executive compensation with performance against our short-term and long-term company performance objectives by rewarding results that meet or exceed our growth and profitability goals.
- ***Competitive Compensation.*** Set executive compensation at levels competitive with peer companies and consistent with market practice.
- ***Stockholder Alignment.*** Align executive interests with those of our stockholders to create long-term value by rewarding our executives for their contributions to the Company.

We seek to maintain a performance-oriented culture and a compensation approach that rewards our named executive officers when we achieve our goals and objectives, while putting at risk an appropriate portion of their compensation if our goals and objectives are not achieved. Consistent with this philosophy, we have sought to create an executive compensation package that balances short-term versus long-term components, cash versus equity elements and fixed versus contingent payments in ways that we believe are most appropriate to motivate our named executive officers.

We have opted to comply with the executive compensation disclosure rules applicable to "smaller reporting companies" as such term is defined in the rules promulgated under the Securities Act, which require compensation disclosure for our principal executive officer and our two other most highly compensated executive officers. We have not included a compensation discussion and analysis of our executive compensation programs or tabular compensation information other than the Summary Compensation Table and the Outstanding Equity Awards at Fiscal 2024 Year-End table.

Our named executive officers, consisting of our principal executive officer and the two most highly compensated executive officers (other than our principal executive officer), as of December 31, 2024, were:

- Dr. Qichao Hu, our Chairman of the Board and CEO;
- Jing Nealis, our CFO; and
- Dr. Hong Gan, our Chief Science Officer;

We collectively refer to these individuals as our “named executive officers” or “NEOs.”

Compensation Risk Mitigation

Policy on Hedging and Pledging

Pursuant to the Company’s Compliance with United States Federal Securities Laws Regarding Insider Trading: Security Trading Policy (the “Insider Trading Policy”), all directors, officers and employees of the Company, together with its subsidiaries and affiliates reported on a consolidated basis, are prohibited from entering into hedging, monetization transactions or similar arrangements with respect to Company securities, and, subject to limited exceptions that may be granted by the Company, all directors, officers and employees of the Company, together with its subsidiaries and affiliates reported on a consolidated basis, are prohibited from holding Company securities in a margin account or pledging Company securities as collateral for a loan.

Equity Grant Procedures

The Company’s Compensation Committee approves equity awards for our NEOs on or before the date of grant, and it is the Compensation Committee’s general practice to approve annual equity awards in the first half of each year. On occasion, equity awards may be granted outside of our annual grant cycle for new hires, promotions, retention, or other purposes. Generally, the date of grant for equity awarded to our NEOs is when the Company otherwise has no material non-public information. The Company does not permit the timed disclosure of material non-public information for the purpose of affecting the value of executive compensation.

Claw-back Policy

We maintain a robust compensation claw-back policy covering each of our executive officers in line with NYSE Rules. Our claw-back policy covers each of our current and former executive officers. The policy provides that, subject to the limited exemptions provided by the NYSE rules, if the Company is required to restate its financial results due to material noncompliance with financial reporting requirements under the securities laws, the Compensation Committee must reasonably and promptly seek recovery of any cash- or equity-based incentive compensation (including vested and unvested equity) paid or awarded to the executive officer, to the extent that the compensation (i) was based on erroneous financial data and (ii) exceeded what would have been paid to the executive officer under the restatement. Recovery applies to any such excess cash- or equity-based bonus/other incentive compensation received by any covered executive officer, while he/she was an executive officer, on or after October 2, 2023 during the three completed fiscal years immediately preceding the date on which the Company determines an accounting restatement is required. For more information, see the full text of our claw-back policy, which is filed as Exhibit 97.1 to the Original Form 10-K.

NEO Stock Ownership Guidelines and Share Retention Requirements

We maintain stock ownership guidelines intended to align further the interests of our NEOs with those of our stockholders. The guidelines require covered roles to hold our Class A Common Stock (including Class A Common Stock held in trust, by certain family members or in the Company’s 401(k) plan and stock underlying unvested RSUs, restricted stock awards and unvested or unearned PSUs or other performance stock awards, but excluding stock underlying options or stock appreciation rights) worth a value expressed as a multiple of their salary. For our CEO, the multiple is five times his annual base salary and for all other executive officers, the multiple is three times their annual base salary.

Each of our NEOs is required to meet these ownership levels by five years after his or her initial designation as an executive officer of the Company (or, for those executive officers serving at the time of adoption of these ownership

guidelines, within five years after such adoption). Until reaching the required ownership level, executive officers are required to retain at least 100% of the shares, net of applicable tax withholding and the payment of any exercise or purchase price (if applicable), received upon the vesting or settlement of equity awards or the exercise of stock options. As of April 1, 2025, all of our current executive officers had timely met the stock ownership requirement or were within the five-year grace period to come into compliance with it.

Details regarding the employment agreements with our named executive officers can be found in the narrative disclosure to the Summary Compensation Table set forth below.

Summary Compensation Table

The following table summarizes the compensation earned by each of our named executive officers for the fiscal years indicated.

Name and Principal Position	Year	Salary (\$) ⁽¹⁾	Bonus (\$)	Stock Awards (\$) ⁽²⁾	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$) ⁽³⁾	All Other Compensation (\$) ⁽⁴⁾	Total (\$)
Dr. Qichao Hu <i>Founder, Chief Executive Officer and Director</i>	2024	530,000	—	3,043,220	—	424,000	102,726	4,099,946
	2023	530,000	—	2,368,201	—	477,363	152,488	3,528,052
Jing Nealis <i>Chief Financial Officer</i>	2024	470,000	—	1,044,114	—	225,600	17,250	1,756,964
	2023	470,000	—	592,050	—	253,993	17,765	1,333,808
Dr. Hong Gan <i>Chief Science Officer</i>	2024	335,000	—	724,575	—	134,000	9,922	1,203,497
	2023	335,000	—	592,050	—	150,865	11,747	1,089,662

(1) The amount reflects the named executive officer's base salary earned for the fiscal years shown.

(2) Amounts represent the aggregate grant date fair value of restricted stock unit and performance stock unit awards made to the named executive officer computed in accordance with Financial Accounting Standards Codification Topic 718, Compensation - Stock Compensation ("FASB ASC Topic 718"). \$2,420,339, \$830,406, and \$576,270 represent the grant date fair value of all RSU awards to each of Dr. Hu, Ms. Nealis, and Dr. Gan, respectively, which are calculated in accordance with the accounting standards for share-based compensation using SES's closing stock price on the date of grant. Each RSU represents the right to receive one share of Common Stock upon vesting. The "Stock Awards" column above also reflects the \$622,881, \$213,708, and \$148,305 grant date fair values of the target number of PSUs for each of Dr. Hu, Ms. Nealis, and Dr. Gan, respectively, that are subject to the achievement of certain Class A Common Stock price milestones and the executive officer's continued service with the Company through the vesting date, which for accounting purposes is based on the probable outcome (determined as of the grant date) of the performance-based condition applicable to the grant, determined by using a Monte Carlo valuation model. Assuming the maximum level of performance achievement for the PSUs, which is 100% of the target number of PSUs granted, the aggregate values of PSUs for our named executive officers in 2024 would be \$32,033,898, \$10,990,674, and \$7,627,104 for each of Dr. Hu, Ms. Nealis, and Dr. Gan, respectively. The assumptions made when calculating the amounts are found in Note 15 to the consolidated audited financial statements for the year ended December 31, 2024. See also "Narrative Disclosure to Summary Compensation Table" for information on awards reported in these columns.

(3) Amounts represent an annual performance bonus for performance from January 1, 2024 to December 31, 2024. See also "Narrative Disclosure to Summary Compensation Table" for information on the amounts reported in these columns.

(4) The amounts reported in the "All Other Compensation" column for fiscal 2024 reflect the following: for Dr. Hu, reimbursement of rent expenses for an apartment in Boston, Massachusetts (\$38,827), 401(k) matching contributions (\$17,250), a charitable donation made by the Company in Dr. Hu's name (\$3,025), payments for a personal driver when traveling (\$33,708) and an allowance for a personal use of a car (\$9,916); and for Ms. Nealis, 401(k) matching contributions (\$17,250); and, for Dr. Gan, 401(k) matching contributions (\$9,922).

Narrative Disclosure to Summary Compensation Table

Employment Arrangements

SES entered into employment agreements with Dr. Hu on May 4, 2021, Ms. Nealis on February 15, 2021, and Dr. Gan on July 1, 2018, providing for the terms of their at-will employment with SES and including (i) annual base salary, (ii) eligibility for an annual performance bonus, (iii) participation in SES's benefit plans and vacation in accordance with SES's policies and (iv) in the case of Dr. Hu, and Ms. Nealis, severance benefits in the event of certain terminations of employment.

AIP Payouts for Fiscal 2024

We maintain an Annual Incentive Plan (the "AIP") for executive officers providing them the opportunity to receive competitive annual cash bonuses based on the achievement of short-term performance goals which we believe are critical to the creation of long-term stockholder value. The annual bonuses cover performance during our fiscal year ending on December 31 each year. Near the beginning of each year, the Compensation Committee selects the performance targets, target amounts, target award opportunities and other terms and conditions of annual cash incentive opportunities for the named executive officers, subject to the terms of their employment agreements. Following the end of each year, the Compensation Committee determines the extent to which the performance targets were achieved and the amount of the award that is payable to the named executive officers. The annual cash incentives may be paid in cash or equity at the discretion of the Compensation Committee.

Under the AIP for fiscal 2024, each NEO's annual target incentive opportunity was a percentage of their eligible base salary, that were targeted at a level that represented a meaningful portion of each named executive officer's base salary and were competitive with our peers. The target awards as a percentage of salary were as follows: for Dr. Hu, 100%, for Ms. Nealis, 60%, and for Dr. Gan, 50%. The amount that each NEO was eligible to earn under the fiscal 2024 AIP was based 100% on such executive officer's achievement against key performance targets. We undergo a rigorous process to ensure our targets are challenging, aligning management incentives with enhancement of long-term stockholder value. We believe that these high and demanding targets, when looked against the payouts, helped to maintain a solid and balanced incentive structure. The key performance targets are shown below.

- Dr. Hu's key performance targets were the same as those applicable to our other executive officers and included goals related to improved material development and cell development, meeting targets relating to the Company's partnerships with OEM partners, meeting specifications required for UAM customers and entering into UAM contracts, effective cash management and development of intellectual property;
- Ms. Nealis's key performance target were to ensure efficient cash management and build robust internal processes and controls; and
- Dr. Gan's key performance targets were related to improving material development through improving cycle life, ensuring the Company's partnerships with OEM partners remain on track, meeting specifications required for UAM customers and entering into UAM contracts.

Following its review of the achievement of the key performance targets listed above as of December 31, 2024, the Compensation Committee determined that 80% of the key performance targets had been achieved for each of Dr. Hu, Ms. Nealis and Dr. Gan, leading to 80% payouts for each of them in the amounts shown in the "Non-Equity Incentive Plan" column of the "Summary Compensation Table."

Equity Incentive Awards

In fiscal 2024, each of the NEOs were granted equity incentive awards under the 2021 Incentive Award Plan (the "New 2021 Plan"), which is the only plan under which we currently grant equity (although awards remain outstanding certain older equity plans referenced in this Annual Report on Form 10-K). These awards are designed to align a portion of our named executive officers' compensation with the interests of our existing stockholders and to build retention value by incentivizing our named executive officers to remain in our service. For more information, see the footnotes to "Outstanding Equity Awards at 2024 Fiscal Year-End."

Outstanding Equity Awards at 2024 Fiscal Year-End

The following table provides information regarding outstanding equity awards held by each of our named executive officers as of December 31, 2024.

Name	Grant Date	Option Awards			Option Exercise Price (\$)	Option Expiration Date	Stock Awards			
		Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)			Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$) ⁽¹⁾	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#) ⁽²⁾	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$) ⁽¹⁾
Dr. Qichao Hu	4/1/2020 ⁽³⁾	91,554	—	—	0.14	3/31/2030				
	2/3/2022 ⁽⁴⁾								9,182	16,803
	4/18/2022 ⁽⁵⁾						186,223	407,828		
	4/18/2022 ⁽⁶⁾								—	—
	4/14/2023 ⁽⁵⁾						557,880	1,287,462		
	4/14/2023 ⁽⁶⁾								—	—
	2/6/2024 ⁽⁵⁾						1,779,661	3,897,458		
Jing Nealis	2/10/2021 ⁽⁷⁾	887,115	49,440	49,440	0.16	2/10/2031				
	8/16/2021 ⁽⁸⁾						247,199	541,366		
	2/3/2022 ⁽⁴⁾								267,755	586,383
	4/18/2022 ⁽⁵⁾						148,976	272,626		
	4/18/2022 ⁽⁶⁾								—	—
	4/14/2023 ⁽⁵⁾						139,470	305,439		
	4/14/2023 ⁽⁶⁾								—	—
Dr. Hong Gan	2/9/2024 ⁽⁵⁾						610,593	1,337,199		
	2/9/2024 ⁽⁶⁾								—	—
	3/14/2019 ⁽⁷⁾	243,277	—	—	0.15	3/14/2029				
	2/10/2021 ⁽⁷⁾	1,137,115	49,440	49,440	0.16	2/10/2031				
	2/3/2022 ⁽⁴⁾								186,950	342,119
	4/18/2022 ⁽⁵⁾						93,111	203,913		
	4/18/2022 ⁽⁶⁾								—	—
	4/14/2023 ⁽⁵⁾						139,470	382,845		
	4/14/2023 ⁽⁶⁾								—	—
	2/9/2024 ⁽⁵⁾						209,205	1,337,199		
	2/9/2024 ⁽⁶⁾								—	—

⁽¹⁾ Based on the closing market price of the Company's Class A Common Stock on December 31, 2024 of \$2.19.

⁽²⁾ Reflects stock options that were granted under the Company's 2018 Share Incentive Plan (the "2018 Plan") to compensate grantees, including Dr. Hu, for COVID-19-related salary cuts. The stock options became fully vested on the date of grant.

⁽³⁾ Reflects the right to receive earn-out shares of Class A Common Stock (the "Earn-Out Restricted Shares") pursuant to the Business Combination Agreement (the "Business Combination Agreement") by and among Ivanhoe Capital Acquisition Corp., Wormhole Merger Sub Pte. Ltd. and SES Holdings Pte. Ltd. The Earn-Out Restricted Shares were placed into escrow at the closing of the Business Combination Agreement on February 3, 2022 (the "Closing") and will vest on the date that the closing price of the shares of the Class A common stock equals or exceeds \$18.00 during the period beginning on the date that is one year following the Closing and ending on the date that is five years following the Closing. The vesting of the Earn-Out Restricted Shares is also subject to the executive officer's continued service on the vesting date. For more information regarding the vesting of the Earn-Out Restricted Shares, see Note 2 to the consolidated audited financial statements for the year ended December 31, 2024.

⁽⁴⁾ Reflects RSUs that were granted pursuant to the 2021 Plan. The RSUs will vest, and an equal number of shares of Class A Common Stock will be deliverable, in three equal installments on the first, second and third anniversaries of the grant date, subject to the executive officer's continued employment or service through each applicable vesting date.

- (5) Reflects, with respect to the PSUs that were granted pursuant to the 2021 Plan in April 2022, April 2023, and February 2024, an outstanding amount of zero PSUs, because as of December 31, 2024, the minimum stock price milestones required for any portion of such PSUs to vest had not been met. The PSUs granted in each of 2022, 2023, and 2024 vest in one installment following the end of a three-year period (the “Initial Performance Period”) commencing on the grant date, subject to the achievement of certain Class A Common Stock price milestones and the executive officer’s continued employment or service through such date. If following the applicable Initial Performance Period there are PSUs that have not vested, then such PSUs remain eligible to vest in an additional installment following the end of a five-year period commencing on the grant date, subject to the achievement of certain Class A Common Stock price milestones and the reporting person’s continued employment or service through such date. For more information regarding the PSUs granted in 2024, including the stock price milestones, see the section titled “Compensation Discussion and Analysis—Equity Incentive Awards.” The PSUs granted in 2022 have the same vesting terms as the PSUs granted in 2024, except that they have the following stock price milestones: under \$12.50, 0%; \$12.50 or greater, 10%; \$15.00 or greater, 20%; \$17.50 or greater, 30%; \$20.00 or greater, 40%; \$22.50 or greater, 50%; \$25.00 or greater, 60%; \$27.50 or greater, 70%; \$30.00 or greater, 80%; \$32.50 or greater, 90%; and \$35.00 or greater, 100%.
- (6) Reflects time-based stock options that were granted under the 2018 Plan and vest 25% on the first anniversary of the grant date and in equal monthly installments over the following 36 months.
- (7) Reflects a restricted share award that was granted under the 2021 Plan and vests 25% on the first anniversary of the grant date and in equal monthly installments over the following 36 months.

Potential Payments Upon Termination or Change in Control

The following summaries and table describe and quantify the potential payments and benefits that the Company would provide to our named executive officers in connection with their termination of employment and/or change in control. In determining amounts payable, we have assumed in all cases that the terms of the executive’s current equity award and any employment agreements with us were in effect on, and the termination of employment and/or change in control occurred on, December 31, 2024 the last business day of fiscal 2024.

Severance

Under SES’s offer letters with Dr. Hu and Ms. Nealis, in the event that SES terminates Dr. Hu or Ms. Nealis without cause or in the event that any of them resigns for good reason (each of “cause” and “good reason” as defined in such offer letters), such named executive officer would receive, in addition to accrued but unpaid base salary, earned but unpaid annual bonus, and reimbursement for all reasonable and necessary expenses incurred in connection with the named executive officer’s performance, the following: (i) continuation of annual base salary for a period of 12 months following the termination date for Dr. Hu, and 9 months following the termination date for Ms. Nealis; and (ii) reimbursement of SES’s portion for continued health insurance coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985 for a period of 12 months for Dr. Hu, and 12 months for Ms. Nealis, or an earlier date if such named executive officer has secured alternate health insurance coverage. Severance is subject to the execution and non-revocation of a release of claims in favor of SES. Under SES’s offer letter with Dr. Gan, there are no severance benefits in the event that he is terminated without cause or resigns for good reason.

Equity Awards

With respect to the stock options granted to Ms. Nealis, and Dr. Gan in fiscal 2021, in the event of a termination without cause by SES or a resignation by the named executive officer for good reason, these options will accelerate and become 50% vested upon such a termination. In the event of a merger or acquisition, Ms. Nealis’s and Dr. Gan’s options will become fully vested and exercisable.

With respect to the restricted share award granted to Ms. Nealis in fiscal 2021, in the event of a termination without cause by SES or a resignation by her for good reason, the award will vest 50% upon such a termination. In the event of a merger, acquisition or Initial Public Offering (but not the Business Combination), her restricted share award will become fully vested and exercisable.

With respect to the RSUs granted to the named executive officers, in the event of termination of service caused by the death or disability of a named executive officer, a pro-rata portion of the RSUs will vest as of the date of such termination.

Under the Old 2021 Plan, in the event of a “change in control transaction” (as defined in the Old 2021 Plan), the Board may, in its discretion, make adjustments including: (i) providing for the assumption or substitution of options, (ii) causing outstanding options to be paid out in cash based on the excess, if any, of the fair market value over the exercise price, and (iii) providing that all outstanding options and restricted share awards will vest in part or in full immediately prior to such transaction.

Under the New 2021 Plan, in the event of a “change in control” (as defined in the New 2021 Plan), the Compensation Committee may, in its discretion, make adjustments, including: (i) providing for the assumption or substitution of awards, (ii) accelerating the exercisability or vesting of the terms of awards for a period of time prior to the occurrence of such event, (iii) modifying the terms of awards to add events, conditions or circumstances (including termination of employment within a specified period of time following the occurrence of such events) upon which the exercisability or vesting of or lapse of restrictions will accelerate, (iv) deeming any performance measures satisfied at target, maximum or actual performance through closing or such other level determined by the Compensation Committee in its sole discretion, including providing for the performance measures (as is or as adjusted) to continue after closing, (v) providing that any options or stock appreciation rights that would not be exercisable prior to the change in control will be exercisable as to all common shares subject thereto (contingent upon the occurrence of the change in control), and (vi) canceling and causing outstanding awards to be paid out in cash based on the excess, if any, of the fair market value over the exercise price.

The Earn-Out Shares and Founder Earn-Out Shares (collectively, the “Escrowed Earn-Out Shares”) were placed into escrow at the Closing of the Business Combination and shall vest on the date that the closing price of shares of Class A common stock is equal to or greater than \$18.00 (“Triggering Event”) during the period beginning on the date that is one year following the Closing and ending on the date that is five years following the Closing (the “Earn-Out Period”). If a Triggering Event has not occurred by the expiration of the Earn-Out Period, then the Escrowed Earn-Out Shares shall be cancelled and holders of such shares shall have no right to receive such Escrowed Earn-Out Shares. The Earn-Out Restricted Shares are subject to vesting based on the same terms as the Escrowed Earn-Out Shares and are also subject to forfeiture if such recipient’s service with the Company terminates prior to vesting. If, during the Earn-Out Period, there is a change in control transaction at a per share price of greater than or equal to \$18.00 per share, then all Escrowed Earn-Out Shares and Earn-Out Restricted Shares will vest immediately prior to the consummation of such change in control.

Compensation Committee Interlocks and Insider Participation

This item does not apply to us as “smaller reporting company.”

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

The following table sets forth information known to us regarding the beneficial ownership of our Class A Common Stock as of April 15, 2025 by:

- each of our current directors;
- each of our named executive officers;
- all of our current directors and executive officers as a group; and
- each person or “group” (as such term is used in Section 13(d)(3) of the Exchange Act) who is a beneficial owner of more than 5% of the outstanding Class A Common Stock or Class B Common Stock.

Beneficial ownership is determined according to the rules of the SEC, which generally provide that a person has beneficial ownership of a security if he, she or it possesses sole or shared voting or investment power over that security. Under those rules, beneficial ownership includes securities that the individual or entity has the right to acquire, such as through the exercise of warrants or stock options, within 60 days of April 15, 2025. Shares subject to warrants, options or restricted stock units that are currently exercisable or exercisable within 60 days of April 15, 2025 or that vest within

60 days of April 15, 2024 are considered outstanding and beneficially owned by the person holding such warrants, options or restricted stock units for the purpose of computing the percentage ownership of that person but are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

Except as noted by footnote, and subject to community property laws where applicable, based on the information provided to us, the persons and entities named in the table below have sole voting and investment power with respect to all shares shown as beneficially owned by them.

The beneficial ownership of shares of our Class A Common Stock is based on 321,909,619 shares of our Class A Common Stock, including 24,463,455 earn-out Shares in the form of Class A Common Stock (including restricted Class A Common Stock or “Earn-Out Shares”) but excludes 1,536,696 Earn-Out Shares which have been forfeited due to the recipients’ termination of service with the Company, and 43,881,251 shares of Class B Common Stock, including 3,999,796 founder earn-out shares (“Founder Earn-Out Shares”), in each case, issued and outstanding as of April 15, 2025. The Earn-Out Shares and the Founder Earn-Out Shares were placed into escrow at the closing of the Business Combination and will vest on the date that the closing price of the shares of Class A Common Stock equals or exceeds \$18.00 during the period beginning on the date that is one year following the closing of the Business Combination and ending on the date that is five years following the Closing (the “Earn-Out Period”). The restricted Earn-Out Shares are subject to vesting based on the same terms as other Earn-Out Shares and are also subject to forfeiture if such recipient’s service with the Company terminates prior to the vesting. During the Earn-Out Period, the holders of the Earn-Out Shares and Founder Earn-Out Shares are entitled to exercise the voting rights carried by each Earn-Out Share or Founder Earn-Out Share, as applicable, and are entitled to receive any dividends or other distributions made in respect thereof while such shares remain in escrow.

Percentage of voting power is calculated based on one vote per share for each share of Class A Common Stock and ten votes per share for each share of Class B Common Stock. The table is based upon information supplied by officers, directors and greater-than-5% beneficial owners, Section 13(d) filings made with the SEC and other SEC filings under Section 16 of the Exchange Act.

Name and Address of Beneficial Owner	Number of shares of SES Class A common stock	% of SES Class A common stock	Number of Shares of SES Class B common stock	% of SES Class B common stock	% of Total Voting Power**
<i>Directors & named executive officers⁽¹⁾</i>					
Dr. Qichao Hu ⁽²⁾	1,282,248	*	43,881,251	100 %	57.9 %
Jing Nealis ⁽³⁾	2,367,377	*	—	—	*
Dr. Hong Gan ⁽⁴⁾	2,007,540	*	—	—	*
Dr. Jang Wook Choi ⁽⁵⁾	223,400	*	—	—	*
Eric Luo ⁽⁵⁾	223,400	*	—	—	*
Dr. Jiong Ma ⁽⁵⁾	223,400	*	—	—	*
Michael Noonan ⁽⁵⁾	223,400	*	—	—	*
<i>All current directors and executive officers as a group (10 individuals)⁽⁶⁾</i>	6,902,403	2.1 %	43,881,251	100 %	58.5 %
<i>Greater-than-5% beneficial owners</i>					
Dr. Qichao Hu ⁽²⁾	1,282,248	*	43,881,251	100 %	57.9 %
Vertex Legacy Continuation Fund Pte. Ltd. ⁽⁷⁾	32,256,315	10.0 %	—	—	4.2 %
Tianqi Lithium HK Co., Ltd. ⁽⁸⁾	30,522,386	9.5 %	—	—	4.0 %
Affiliates of Temasek Holdings (Private) Limited ⁽⁹⁾	30,675,757	9.5 %	—	—	4.0 %

* Indicates beneficial ownership of less than 1%.

** Percentage of total voting power represents the combined voting power with respect to all shares of Class A Common Stock and Class B Common Stock, voting as a single class. Subject to certain conditions, each share of Class B Common Stock is entitled to 10 votes per share and each share of Class A Common Stock is entitled to one vote per share.

⁽¹⁾ The business address of each of these stockholders is c/o SES AI Corporation, 35 Cabot Road, Woburn, MA 01801.

- (2) Includes (i) 970,289 shares of Class A common stock, 91,554 shares of Class A common stock underlying SES options, 186,223 shares of Class A common stock underlying RSUs, and 9,182 Earn-Out Shares, in each case held directly by Dr. Qichao Hu; (ii) 30,716,882 shares of our Class B common stock, 2,799,859 of which are Founder Earn-Out Shares, held directly by Dr. Hu and (iii) an aggregate of 13,164,369 shares of Class B common stock, 1,199,937 of which are Founder Earn-Out Shares, held by various trusts affiliated with Dr. Hu. These trusts consist of: (i) Qichao Hu 2021 Irrevocable Trust U/A/D March 31, 2021; (ii) Qichao Hu Family Delaware Trust U/A/D March 31, 2021; and (iii) Qichao Hu 2021 Annuity Trust March 31, 2021 (collectively, the “Trusts”), each owning 4,388,123 shares of Class B common stock and 399,979 Founder Earn-Out Shares.
- (3) Consists of 1,076,778 shares of Class A common stock, 886,555 shares of Class A common stock underlying SES options, 136,289 shares of Class A common stock underlying RSUs, and 267,755 of which are Earn-Out Shares held by Ms. Nealis.
- (4) Consists of 297,647 shares of Class A common stock, 1,429,832 shares of Class A common stock underlying SES options, 93,111 shares of Class A common stock underlying RSUs, and 186,950 of which are Earn-Out Shares held by Dr. Gan.
- (5) Consists of 893,600 shares of Class A common stock.
- (6) Includes shares beneficially owned by (i) all directors, (ii) all named executive officers, and (iii) all other executive officers (namely, Messrs. Li, Pilkington and Xu).
- (7) Based on information provided in a Schedule 13G filed February 10, 2022. Consists of (i) 29,361,729 shares of Class A common stock and (ii) 2,894,586 Earn-Out Shares. Vertex Legacy Continuation Fund Pte. Ltd. (“VLCF”) is the record holder of the shares of Class A common stock. Vertex Legacy Fund (SG) LP (“VLFSG”) is the 100% shareholder of VLCF. VLC GP Pte. Ltd. (“VLCGP”) is the general partner of VLFSG and has appointed Vertex Ventures SEA Management Pte. Ltd. (“VVSEAMPL”) to serve as the fund manager of VLCF. VVSEAMPL is deemed to have dispositive and voting power over the shares of Class A common stock directly owned by VLCF pursuant to a management agreement between VLFSG and VVSEAMPL, whereby dispositive and voting decisions require the majority approval of the members of an investment committee established by VVSEAMPL. The principal business address of all persons named in this footnote is 250 North Bridge Road, #11-01 Raffles City Tower, Singapore 179101.
- (8) Based on information provided in a Schedule 13G filed February 22, 2023. Consists of (i) 27,740,256 shares of Class A common stock and (ii) 2,782,130 Earn-Out Shares. Tianqi Lithium HK Co., Limited (“Tianqi HK”) is the record holder of such shares of Class A common stock. Tianqi HK is wholly owned by Chengdu Tianqi Lithium Limited (“Tianqi Limited”), and Tianqi Lithium is wholly owned by Tianqi Lithium Corporation (“Tianqi Lithium”). Tianqi Limited and Tianqi Lithium may thus be deemed to share beneficial ownership over the shares of Class A common stock owned by Tianqi HK. The principal business address of all persons named in this footnote is No.10 East Gaopeng Road, Chengdu, Sichuan 610041, China.
- (9) Based on information provided in a Schedule 13G filed October 25, 2024. Anderson Investments Pte. Ltd. (“Anderson”) is the record holder of 25,882,916 shares of Class A common stock and 2,595,854 Earn-Out Shares. Aranda Investments Pte. Ltd. (“Aranda”) is the record holder of 1,632,129 shares of Class A common stock and 564,858 Earn-Out Shares. Anderson is a direct wholly-owned subsidiary of Thomson Capital Pte. Ltd. (“Thomson”), which in turn is a direct wholly-owned subsidiary of Tembusu Capital Pte. Ltd. (“Tembusu”). Aranda is a direct wholly-owned subsidiary of Seletar Investments Pte. Ltd. (“Seletar”), which in turn is a direct wholly-owned subsidiary of Temasek Capital (Private) Limited (“Temasek Capital”). Each of Tembusu and Temasek Capital is a direct wholly-owned subsidiary of Temasek Holdings (Private) Limited (“Temasek Holdings”). In such capacities, each of Thomson, Tembusu, and Temasek Holdings may be deemed to have beneficial ownership over the shares of Class A common stock directly owned by Anderson, and each of Seletar, Temasek Capital and Temasek Holdings may be deemed to have beneficial ownership over the shares of Class A common stock directly owned by Aranda. The principal business address of all persons named in this footnote is 60B Orchard Road, #06-18 Tower 2, The Atrium@Orchard, Singapore 238891.

Equity Compensation Plan Information

The following table summarizes share and exercise price information about the Company's equity compensation plans as of December 31, 2024.

	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans
Equity Compensation plans approved by security holders ⁽¹⁾	19,255,973 ⁽²⁾	\$ — ⁽²⁾	37,263,345
Equity Compensation plans not approved by security holders	—	—	—
Total	19,255,973 ⁽³⁾		37,263,345

- ⁽¹⁾ Relates only to the New 2021 Plan which was approved by the Company's board and stockholders in connection with the Business Combination. The New 2021 Plan allows for the maximum number of shares issuable to automatically increase on January 1 of each year (beginning January 1, 2023) through 2031 in an amount equal to two percent of the total number of shares of Class A common stock outstanding on December 31 of the preceding year; provided, however that the Board may act prior to January 1 of a given year to provide that the increase for such year will be a lesser number of Common Shares. On January 1, 2024, the number of shares available for issuance under the New 2021 Plan increased by 7,082,963 shares pursuant to this provision, which are reflected in the table above.
- ⁽²⁾ Includes 13,282,923 shares issuable pursuant to RSUs, and 5,973,050 shares issuable pursuant to PSUs. The RSUs and PSUs were granted without consideration. Accordingly, there is no weighted-average exercise price of outstanding awards.
- ⁽³⁾ This table does not include equity awards granted by SES Holdings Pte. Ltd. that were assumed by the Company in connection with the Business Combination. As of December 31, 2024, the following assumed equity awards were outstanding: 6,063,110 incentive stock options and non-statutory stock options. The weighted average exercise price of such outstanding options was \$0.19 per share. No additional equity awards may be granted under the SES Holdings Pte. Ltd. Plans that were assumed by the Company.

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

Related Person Transactions Policy

We have adopted a formal written policy that sets forth the policies and procedures for the review and approval or ratification of related party transactions. This policy covers, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we were or are to be a participant, where the amount involved exceeds \$120,000 in any fiscal year and a related person had, has or will have a direct or indirect material interest, including without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related party. The policy provides for the review and approval of any such transactions with related persons, and requires, among other things, that:

- The Audit Committee or disinterested members of the board shall review the material facts of all related person transactions.
- In reviewing any related person transaction, the committee will take into account, among other factors that it deems appropriate: the importance and fairness of the transaction to us and the related person; the business rationale for engaging in the transaction; whether the value and terms of the transaction are substantially similar as compared to those of similar transactions previously entered into by us with non-related persons; the extent of the related person's interest in the transaction; whether the transaction would likely impair the judgment of a director or executive officer to act in the best interests of us and our stockholders; and the impact on a director's or a director nominee's independence in the event the related person is a director or director nominee or an immediate family member of the director or director nominee.

- In reviewing any related person transaction, the Audit Committee will take into account, among other factors that it deems appropriate: the importance and fairness of the transaction to us and the related person; the business rationale for engaging in the transaction; whether the value and terms of the transaction are substantially similar as compared to those of similar transactions previously entered into by SES with non-related persons; the extent of the related person's interest in the transaction; whether the transaction would likely impair the judgment of a director or executive officer to act in the best interests of SES and its stockholders; and the impact on a director's or a director nominee's independence in the event the related person is a director or director nominee or an immediate family member of the director or director nominee;

In connection with its review of any related person transaction, we shall provide the committee or disinterested members of the board with all material information regarding such related person transaction, the interest of the related person and any potential disclosure obligations of ours in connection with such related person transaction.

- If a related person transaction will be ongoing, the committee may establish guidelines for our management to follow in its ongoing dealings with the related person.

In addition, under our Code of Conduct, our employees, directors and director nominees will have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest.

The transactions described in this section were entered into prior to the adoption of the Related Person Transaction Policy; however, the ongoing payments associated with these transactions were approved in line with the Related Person Transaction Policy.

Related Person Transactions

As a "smaller reporting company," we describe below all transactions required to be disclosed by us under Item 404(a) of Regulation S-K under the Securities Act since January 1, 2023.

GM Joint Development Agreement

In February 2021, SES executed a JDA with GM Global Technology Operations LLC ("GM Technology") and General Motors Holdings LLC ("GM Holdings"), with a budget over \$50.0 million, to jointly develop an A-Sample battery cell with a capacity of almost 100 Ah and build out a prototype manufacturing line for GM Technology. GM Technology is an affiliate of GM Ventures and a subsidiary of GM Holdings (GM Ventures and GM Holdings collectively, the "GM Funds"), both of which are stockholders of SES. GM Holdings is also a subsidiary of GM. The JDA has an initial term of three years. Under the terms of the JDA, SES would receive reimbursement of research and development and prototype buildout costs. SES will not be required to refund such fees once due to SES regardless of the results of the research and development activities, however, ownership of the prototype line would remain with GM, unless purchased by SES. During the fiscal years ended December 31, 2024 and 2023, SES invoiced approximately \$3.2 million and \$10.6 million, respectively, pursuant to the terms of the JDA. On October 29, 2024, the Company and GM Ventures mutually agreed to terminate the Director Nomination Agreement. Hence, GM is no longer a related party as of December 31, 2024.

Director Nomination Agreement

Concurrently with the execution of the Business Combination Agreement, the Company and Old SES entered into the Director Nomination Agreement with GM Ventures, pursuant to which, among other things, GM Ventures has the right to nominate one person for election to the Board from and after the Effective Time for so long as GM Ventures together with its affiliates, collectively continue to beneficially own at least 5% of the fully diluted outstanding equity securities of SES. On October 29, 2024, the Company and GM Ventures mutually agreed to terminate the Director Nomination Agreement.

Director Independence and Independence Determinations

The Board has established guidelines (the “Corporate Governance Guidelines”) to assist it in making independence determinations for each director of our Board. The Corporate Governance Guidelines define an “independent director” to align with the definition provided in the NYSE Listed Company Manual. Under Section 303A.02 of the NYSE Rules, a director is not independent unless the Board affirmatively determines that he or she does not have a direct or indirect material relationship with the Company or any of its subsidiaries. Directors who serve on the Audit Committee and Compensation Committee are subject to the additional independence requirements under applicable SEC rules and NYSE Rules.

It is the policy of the Board, upon the recommendation of the Nominating and Corporate Governance Committee, to make affirmative independence determinations for all directors at least annually. In making independence determinations, the Board will broadly consider all relevant facts and circumstances in addition to the requirements of Section 303A.02 of the NYSE Rules.

The Nominating and Corporate Governance Committee undertook its annual review of director independence and made a recommendation to the Board regarding director independence. As a result of this review, the Board affirmatively determined that each of Drs. Ma and Choi and Messrs. Luo and Noonan (as well as, during the period in which he served in 2024, Mr. Krzanich) is an “independent director” under NYSE Rules, including with respect to their respective committee service. The Board has determined that each member of the Audit Committee (Messrs. Luo and Noonan and Dr. Ma) is “independent” for purposes of service on the Audit Committee in accordance with Section 10A(m)(3) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and that each member of the Compensation Committee (Messrs. Luo and Noonan and Dr. Ma) is “independent” for purposes of service on the Compensation Committee in accordance with Section 10C(a)(3) of the Exchange Act. In making these determinations, the Board considered the current and prior relationships that each non-employee director has with SES and all other facts and circumstances the Board deemed relevant in determining their independence, including the beneficial ownership of SES capital stock by each non-employee director, and the transactions involving them described in the section titled “Transactions with Related Persons.”

Item 14. Principal Accountant Fees and Services (Grant Thornton LLP, PCAOB ID Number 248, Boston, Massachusetts)

Fees Paid to Independent Registered Public Accounting Firm

The following table sets forth the aggregate fees billed to us for the fiscal years ended December 31, 2024 and 2023 by Grant Thornton LLP:

	2024	2023
Audit Fees ⁽¹⁾	\$ 1,022,906	\$ 1,109,556
Audit-Related Fees ⁽²⁾	—	—
Tax Fees ⁽³⁾	—	—
All Other Fees ⁽⁴⁾	—	—
Total:	\$ 1,022,906	\$ 1,109,556

(1) Audit Fees represent the aggregate fees billed for professional services rendered for the audits of the annual financial statements and the Company’s internal control over financial reporting; for review of the consolidated financial statements included in the Company’s Quarterly Reports on Form 10-Q filings; for review of registration statements filed by the Company and comfort letter procedures; for the audits and reviews of certain of our subsidiaries; and for services that are normally provided by the independent registered public accounting firm in connection with statutory and regulatory filings.

(2) Audit-Related Fees, if any, relate to assurance and related services rendered by Grant Thornton LLP.

(3) Tax Fees, if any, represent the aggregate fees billed for international tax compliance, tax advice, and tax planning services.

(4) All Other Fees, if any, represent fees billed for all other services.

Audit Committee Pre-Approval Procedures for Independent Registered Public Accounting Firm

The Audit Committee has sole authority to engage and determine the compensation of our independent registered public accounting firm. The Audit Committee also is directly responsible for evaluating the independent registered public accounting firm, reviewing and evaluating the lead partner of the independent registered public accounting firm and overseeing the work of the independent registered public accounting firm. In addition, and pursuant to its charter and the Company's Audit and Non-Audit Services Pre-Approval Policy, the Audit Committee annually reviews and pre-approves the audit services to be provided by Grant Thornton LLP and also reviews and pre-approves the engagement of Grant Thornton LLP for the provision of other services during the year, including audit-related, tax and other permissible non-audit. For each proposed service, the Company's management and the independent registered public accounting firm are required to jointly submit to the Audit Committee detailed supporting documentation at the time of approval to permit the Audit Committee to make a determination as to whether the provision of such services would impair the independent registered public accounting firm's independence, and whether the fees for the services are appropriate.

PART IV

Item 15. Exhibits, Financial Statement Schedules

- (1) *Financial Statements and Schedules* - the required information is set forth in "Part 2, Item 8 – Financial Statements and Supplementary Data" in the Original Form 10-K.
- (2) *Exhibits* – The exhibits listed below are filed as part of this Amendment or incorporated herein by reference to the location indicated.

EXHIBIT INDEX

Exhibit	
No.	Description
31.3*	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.4*	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
104*	Cover Page Interactive Data File from SES AI Corporation's Annual Report on Form 10-K for the year ended December 31, 2024 (formatted in Inline XBRL and contained in Exhibit 101).

* Filed herewith.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: April 30, 2025

SES AI CORPORATION

By: /s/ Qichao Hu

Name: Qichao Hu

Title: Chief Executive Officer

(Principal Executive Officer)

By: /s/ Jing Nealis

Name: Jing Nealis

Title: Chief Financial Officer

(Principal Financial Officer)