
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q**

(Mark One)

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

For the quarterly period ended March 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 001-39525



ESS Tech, Inc.

(Exact name of registrant as specified in its charter)

Delaware

98-1550150

(State or other jurisdiction of
incorporation or organization)

(I.R.S. Employer
Identification No.)

26440 SW Parkway Ave. , Bldg. 83

97070

Wilsonville , Oregon

(Zip Code)

(Address of Principal Executive Offices)

(855) 423-9920

Registrant's telephone number, including area code

Not Applicable

(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, \$0.0001 par value per share	GWH	New York Stock Exchange
Warrants, each whole warrant exercisable for one share of common stock at an exercise price of \$11.50	GWH.W	New York Stock Exchange

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

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

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

Large accelerated filer	<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 checked="" 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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of May 3, 2024, the registrant had 174,918,926 shares of common stock, par value \$0.0001, issued and outstanding.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q, including, without limitation, statements in “*Part I—Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations*,” includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These forward-looking statements can be identified by the use of forward-looking terminology, including the words “believes,” “estimates,” “anticipates,” “expects,” “intends,” “plans,” “possible,” “may,” “might,” “will,” “potential,” “projects,” “predicts,” “continue,” “could,” “would” or “should,” or, in each case, their negative or other variations or comparable terminology. These words and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, our anticipated growth strategies and anticipated trends in our business.

These statements are based on management’s current expectations, but actual results may differ materially due to various factors, risks, and uncertainties, including, but not limited to:

- our financial and business performance, including financial projections and business metrics;
- changes in our strategy, future operations, financial position, estimated revenues and losses, projected costs, prospects and plans;
- the implementation, market acceptance and success of our technology implementation and business model;
- our ability to scale in a cost-effective manner;
- developments and projections relating to our competitors and industry;
- the impact of the Russia-Ukraine conflict, geopolitical tensions involving China, an escalation of conflict in the Middle East, and similar macroeconomic events, including global supply chain challenges, foreign currency fluctuations, instability in the financial markets, elevated inflation and interest rates and monetary policy changes, upon our and our customers’, contractors’, suppliers’ and partners’ respective businesses;
- our expectations regarding our ability to obtain and maintain intellectual property protection and not infringe on the rights of others;
- our future capital requirements and sources and uses of cash;
- our ability to obtain funding for our operations;
- our business, expansion plans and opportunities;
- our relationships with third parties, including our customers, contractors, and suppliers;
- issues related to the shipment, installation, and operation of our products;
- issues related to contract execution, including customer acceptance of our products;
- our ability to recognize the benefits of strategic partnerships;
- the outcome of any known and unknown litigation and regulatory proceedings;
- our ability to successfully deploy the proceeds from the Business Combination (as defined herein);
- expectations regarding the time during which we will be an emerging growth company under the Jumpstart Our Business Startups Act (“JOBS Act”); and
- other risks and uncertainties discussed in “*Part II—Item 1A. Risk Factors*” and elsewhere in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K for the year ended December 31, 2023.

The forward-looking statements contained in this Quarterly Report on Form 10-Q are based on our current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements are made as of the date of this Quarterly Report on Form 10-Q and involve a number of risks, uncertainties (some of which are beyond our control) and other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described in “*Part II—Item 1A. Risk Factors*” and elsewhere in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K for the year ended December 31, 2023. Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary in material respects from those

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projected in these forward-looking statements. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws. These risks and others described in "Part II—Item 1A. Risk Factors" may not be exhaustive.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. We caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and developments in the industry in which we operate may differ materially from those made in or suggested by the forward-looking statements contained in this Quarterly Report on Form 10-Q. In addition, even if our results or operations, financial condition and liquidity, and developments in the industry in which we operate are consistent with the forward-looking statements contained in this Quarterly Report on Form 10-Q, those results or developments may not be indicative of results or developments in subsequent periods.

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

ESS Tech, Inc.
Condensed Consolidated Balance Sheets
(unaudited)
(in thousands, except share data)

	March 31, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents	\$ 36,332	\$ 20,165
Restricted cash, current	906	1,373
Accounts receivable, net	1,039	1,990
Short-term investments	53,220	87,899
Inventory	3,161	3,366
Prepaid expenses and other current assets	3,588	3,305
Total current assets	98,246	118,098
Property and equipment, net	16,928	16,266
Intangible assets, net	4,857	4,923
Operating lease right-of-use assets	1,841	2,167
Restricted cash, non-current	946	945
Other non-current assets	816	833
Total assets	\$ 123,634	\$ 143,232
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 2,910	\$ 2,755
Accrued and other current liabilities	6,552	10,755
Accrued product warranties	3,322	2,129
Operating lease liabilities, current	1,548	1,581
Deferred revenue, current	5,555	2,546
Total current liabilities	19,887	19,766
Operating lease liabilities, non-current	610	957
Deferred revenue, non-current	—	3,835
Deferred revenue, non-current - related parties	14,400	14,400
Common stock warrant liabilities	917	917
Total liabilities	35,814	39,875
Commitments and contingencies (Note 8)		
Stockholders' equity:		
Preferred stock (\$ 0.0001 par value; 200,000,000 shares authorized, none issued and outstanding as of March 31, 2024 and December 31, 2023)	—	—
Common stock (\$ 0.0001 par value; 2,000,000,000 shares authorized, 174,898,086 and 174,211,911 shares issued and outstanding as of March 31, 2024 and December 31, 2023, respectively)	18	18
Additional paid-in capital	802,269	799,496
Accumulated deficit	(714,467)	(696,157)
Total stockholders' equity	87,820	103,357
Total liabilities and stockholders' equity	\$ 123,634	\$ 143,232

See accompanying notes to the condensed consolidated financial statements

ESS Tech, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(unaudited)
(in thousands, except share and per share data)

	Three Months Ended March 31,	
	2024	2023
Revenue:		
Revenue	\$ 2,214	\$ 371
Revenue - related parties	524	1
Total revenue	2,738	372
Cost of revenue	11,126	—
Gross profit (loss)	(8,388)	372
Operating expenses:		
Research and development	3,546	17,732
Sales and marketing	2,034	1,852
General and administrative	5,526	5,287
Total operating expenses	11,106	24,871
Loss from operations	(19,494)	(24,499)
Other income (expenses), net:		
Interest income, net	1,239	1,252
Gain on revaluation of common stock warrant liabilities	—	688
Other income (expense), net	(55)	658
Total other income, net	1,184	2,598
Net loss and comprehensive loss to common stockholders	\$ (18,310)	\$ (21,901)
Net loss per share - basic and diluted	\$ (0.10)	\$ (0.14)
Weighted-average shares used in per share calculation - basic and diluted	174,514,538	154,123,911

See accompanying notes to the condensed consolidated financial statements

ESS Tech, Inc.
Condensed Consolidated Statements of Stockholders' Equity
(unaudited)
(in thousands, except share data)

	Common Stock		Additional Paid-In Capital		Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	In Capital			
Balance as of December 31, 2022	153,821,339	\$ 16	\$ 755,537	\$ (618,579)	\$ 136,974	
Issuance of common stock under stock-based compensation plans, net of stock withheld for taxes	523,591	—	104	—	—	104
Stock-based compensation expense	—	—	2,059	—	—	2,059
Net loss	—	—	—	(21,901)	(21,901)	
Balance as of March 31, 2023	154,344,930	\$ 16	\$ 757,700	\$ (640,480)	\$ 117,236	
Balance as of December 31, 2023	174,211,911	\$ 18	\$ 799,496	\$ (696,157)	\$ 103,357	
Issuance of common stock under stock-based compensation plans, net of stock withheld for taxes	686,175	—	(81)	—	—	(81)
Stock-based compensation expense	—	—	2,854	—	—	2,854
Net loss	—	—	—	(18,310)	(18,310)	
Balance as of March 31, 2024	174,898,086	\$ 18	\$ 802,269	\$ (714,467)	\$ 87,820	

See accompanying notes to the condensed consolidated financial statements

ESS Tech, Inc.
Condensed Consolidated Statements of Cash Flows
 (unaudited)
 (in thousands)

	Three Months Ended March 31,	
	2024	2023
Cash flows from operating activities:		
Net loss	\$ (18,310)	\$ (21,901)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,219	1,077
Non-cash interest income	(995)	(762)
Non-cash lease expense	326	299
Stock-based compensation expense	2,854	2,059
Inventory write-down and losses on noncancellable purchase commitments	(1,979)	—
Change in fair value of common stock warrant liabilities	—	(688)
Other non-cash (income) expenses, net	29	(48)
Changes in operating assets and liabilities:		
Accounts receivable, net	1,309	4,330
Inventory	1,145	—
Prepaid expenses and other current assets	(266)	1,731
Accounts payable	153	(529)
Accrued and other current liabilities	(4,024)	(4,657)
Accrued product warranties	1,193	1,231
Deferred revenue	(1,184)	(306)
Operating lease liabilities	(380)	(346)
Net cash used in operating activities	(18,910)	(18,510)
Cash flows from investing activities:		
Purchases of property and equipment	(953)	(2,610)
Maturities and purchases of short-term investments, net	35,645	74,668
Net cash provided by investing activities	34,692	72,058
Cash flows from financing activities:		
Payments on notes payable	—	(400)
Proceeds from stock options exercised	—	104
Repurchase of shares from employees for income tax withholding purposes	(81)	—
Other, net	—	(7)
Net cash used in financing activities	(81)	(303)
Net change in cash, cash equivalents and restricted cash	15,701	53,245
Cash, cash equivalents and restricted cash, beginning of period	22,483	36,655
Cash, cash equivalents and restricted cash, end of period	\$ 38,184	\$ 89,900

See accompanying notes to the condensed consolidated financial statements

ESS Tech, Inc.
Condensed Consolidated Statements of Cash Flows (continued)
(unaudited)
(in thousands)

	Three Months Ended March 31,	
	2024	2023
Supplemental disclosures of cash flow information:		
Cash paid for operating leases included in cash used in operating activities	\$ 449	\$ 413
Non-cash investing and financing transactions:		
Purchase of property and equipment included in accounts payable and accrued and other current liabilities	517	623
Transfers between inventory and property and equipment, net	1,051	—
 Cash and cash equivalents	 \$ 36,332	 \$ 87,811
Restricted cash, current	906	1,413
Restricted cash, non-current	946	676
Total cash, cash equivalents and restricted cash shown in the condensed consolidated statements of cash flows	\$ 38,184	\$ 89,900

See accompanying notes to the condensed consolidated financial statements

ESS TECH, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

1. DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Description of Business—ESS Tech, Inc. (“ESS” or the “Company”) is a long-duration energy storage company specializing in iron flow battery technology. ESS develops long-duration iron flow batteries for commercial and utility-scale energy storage applications requiring four or more hours of flexible energy capacity predominantly using earth-abundant materials.

The Company was originally incorporated as a Cayman Islands exempted company on July 21, 2020 as a publicly traded special purpose acquisition company under the name ACON S2 Acquisition Corp. (“STWO”) for the purpose of effecting a business combination. On October 8, 2021 (the “Closing Date”), the Company consummated a business combination (the “Business Combination”) pursuant to the merger agreement, dated May 6, 2021, by and among STWO, SCharge Merger Sub, Inc., a Delaware corporation and wholly owned direct subsidiary of STWO (“Merger Sub”), and ESS Tech, Inc., a Delaware corporation (“Legacy ESS”), wherein Merger Sub merged with and into Legacy ESS, with Legacy ESS surviving as a wholly owned subsidiary of STWO. On the Closing Date, STWO changed its name from “ACON S2 Acquisition Corp.” to “ESS Tech, Inc.”, and its shares of common stock and warrants for shares of common stock commenced trading on the New York Stock Exchange under the ticker symbols “GWH” and “GWH.W,” respectively. On March 31, 2024, Legacy ESS merged with ESS Tech, Inc. leaving ESS Tech, Inc. as the sole remaining legal entity. As of April 1, 2024, the Company does not have any subsidiaries.

Basis of Presentation—The accompanying condensed consolidated financial statements include the accounts of the Company and its wholly owned subsidiary and have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”).

Condensed Consolidated Financial Statements—The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. GAAP for interim financial information and in accordance with the rules and regulations of the U.S. Securities and Exchange Commission (“SEC”) for interim financial reporting. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. The condensed consolidated financial statements reflect all normal and recurring adjustments that are, in the opinion of the Company’s management, necessary in order to make the condensed consolidated financial statements not misleading. Operating results for the three months ended March 31, 2024 are not necessarily indicative of the results that may be expected for the year ending December 31, 2024. These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2023, as filed with the SEC on March 13, 2024.

Reclassifications—Certain immaterial prior year amounts have been reclassified to conform with current year presentation. These reclassifications had no effect on the reported results of operations.

2. SIGNIFICANT ACCOUNTING POLICIES

The Company’s significant accounting policies have not changed from those disclosed in the annual audited consolidated financial statements and accompanying notes of the Annual Report on Form 10-K for the fiscal year ended December 31, 2023. As of July 1, 2023 (the “Transition Date”), the Company transitioned out of the research and development phase and into commercial inventory accounting. As a result of the transition, all inventoriable costs incurred are capitalized, net of any lower of cost or net realizable value (“LCNRV”) charges, which are recognized as cost of revenue. Further, unfulfilled noncancellable purchase commitments are recognized as expense for estimated losses in cost of revenue and warranty and fulfillment costs are recorded as a component of cost of revenue rather than research and development expense beginning on the Transition Date. Refer to the accompanying notes of the Annual Report on Form 10-K for the fiscal year ended December 31, 2023 for further details on the accounting policies resulting from the transition.

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3. INVENTORY

Inventory consists of the following (in thousands):

	March 31, 2024	December 31, 2023
Raw materials	\$ 6,778	\$ 7,740
Work in process	2,284	1,236
Finished goods	3,403	5,685
Inventory, gross	\$ 12,465	\$ 14,661
Net realizable value adjustment	(9,304)	(11,295)
Inventory	<u><u>\$ 3,161</u></u>	<u><u>\$ 3,366</u></u>

The balance of the Company's inventory was written down by \$ 9.3 million and \$ 11.3 million from its cost to its net realizable value as of March 31, 2024 and December 31, 2023, respectively. Additionally, the Company has LCNRV losses related to noncancelable purchase commitments which were \$ 0.7 million and \$ 0.6 million as of March 31, 2024 and December 31, 2023, respectively. These LCNRV losses related to noncancelable purchase commitments are reflected in the materials and related purchases component of accrued and other liabilities on the condensed consolidated balance sheets. For further details, refer to Note 8, *Commitments and Contingencies*.

4. PROPERTY AND EQUIPMENT, NET

Property and equipment, net consists of the following (in thousands):

	March 31, 2024	December 31, 2023
Machinery and equipment	\$ 19,741	\$ 17,669
Furniture and fixtures	231	184
Leasehold improvements	3,236	3,232
Software	183	183
Construction in process	3,972	4,279
Total property and equipment	27,363	25,547
Less accumulated depreciation	(10,435)	(9,281)
Total property and equipment, net	<u><u>\$ 16,928</u></u>	<u><u>\$ 16,266</u></u>

Depreciation and amortization expense related to property and equipment, net was \$ 1.2 million and \$ 1.1 million for the three months ended March 31, 2024 and 2023, respectively.

5. INTANGIBLE ASSETS, NET

In September 2023, the Company acquired patent rights valued at \$ 5.0 million under a Patent License Agreement with UOP LLC ("UOP"), an affiliate of Honeywell International Inc. ("Honeywell"), a related party. These patent rights were recorded at fair value based on the value of the IP Warrants issued, as defined in Note 9, *Common Stock Warrants*, and are amortized over an average useful life of 19 years based on the remaining useful lives of the patents acquired. Amortization expense for the three months ended March 31, 2024 was \$ 67 thousand.

Intangible assets, net consisted of the following (in thousands):

	March 31, 2024			December 31, 2023		
	Cost	Accumulated Amortization	Net Carrying Amount	Cost	Accumulated Amortization	Net Carrying Amount
Patents	\$ 4,990	\$ (134)	\$ 4,857	\$ 4,990	\$ (67)	\$ 4,923

6. ACCRUED AND OTHER CURRENT LIABILITIES

Accrued and other current liabilities consist of the following (in thousands):

	March 31, 2024	December 31, 2023
Payroll and related benefits	\$ 2,676	\$ 5,681
Materials and related purchases	1,910	2,083
Professional and consulting fees	910	802
Amounts due to customers	—	545
Accrued capital purchases	52	327
Noncancellable purchase commitments	650	637
Other	354	680
Total accrued and other current liabilities	\$ 6,552	\$ 10,755

7. ACCRUED PRODUCT WARRANTIES

The following table summarizes product warranty activity (in thousands):

	Three Months Ended March 31,	
	2024	2023
Accrued product warranties - beginning of period	\$ 2,129	\$ 1,643
Accruals for warranties issued	2,583	1,504
Repairs and replacements	(1,083)	(273)
Adjustments to existing accruals	(307)	—
Accrued product warranties - end of period	\$ 3,322	\$ 2,874

8. COMMITMENTS AND CONTINGENCIES***Legal Proceedings***

The Company, from time to time, is a party to various claims, legal actions, and complaints arising in the ordinary course of business. The Company is not aware of any material legal proceedings or other claims, legal actions, or complaints through the date of issuance of these condensed consolidated financial statements.

Letters of Credit

The Company has a standby letter of credit with First Republic Bank for \$ 75 thousand as security for an operating lease of office and manufacturing space in Wilsonville, Oregon secured by a restricted certificate of deposit account totaling \$ 75 thousand. As of March 31, 2024 the letter of credit was recorded as restricted cash, non-current. There were no draws against the letter of credit during the three months ended March 31, 2024 and 2023.

The Company has a standby letter of credit with Bank of America for \$ 600 thousand as security for the performance and payment of the Company's obligations under a customer agreement. The letter of credit is in effect until the date on which the warranty period under the agreement expires, which is anticipated to be more than a year from the balance sheet date. As of March 31, 2024, \$ 600 thousand was pledged as collateral for the letter of credit and recorded as restricted cash, non-current. There were no draws against the letter of credit during the three months ended March 31, 2024 and 2023.

The Company has a standby letter of credit with Bank of America for \$ 200 thousand in support of the Company's customs and duties due on imported materials. The letter of credit is in effect until May 19, 2024. As of March 31, 2024, \$ 200 thousand was pledged as collateral for the letter of credit and recorded as restricted cash, current. There were no draws against the letter of credit during the three months ended March 31, 2024 and 2023.

Purchase Commitments

The Company purchases materials from several suppliers and has entered into agreements with various contract manufacturers, which include cancellable and noncancellable purchase commitments. As of March 31, 2024 and December 31, 2023, total unfulfilled noncancellable purchase commitments were \$ 0.7 million and \$ 0.6 million, respectively. In addition, total unfulfilled cancellable purchase commitments amounted to \$ 7.1 million and \$ 7.7 million as of March 31, 2024, and December 31, 2023, respectively.

Joint Development Agreement

In September 2023, the Company entered into a Joint Development Agreement ("JDA") with UOP, an affiliate of Honeywell, a related party, under which the parties would work collaboratively to engage in certain research and development activities generally related to flow battery technology. Pursuant to the JDA, the Company agreed to reimburse UOP a minimum of \$ 8.0 million for research and development expenses incurred through December 31, 2028. No expenses were incurred under the JDA during the three months ended March 31, 2024.

9. COMMON STOCK WARRANTS

Common stock warrant balances consist of the following:

	March 31, 2024	December 31, 2023
Public Warrants outstanding	11,461,227	11,461,227
SMUD Warrant outstanding	12,500	12,500
Honeywell Warrants outstanding:		
Investment Warrant outstanding	10,631,633	10,631,633
IP Warrant outstanding	6,269,955	6,269,955
Performance Warrants outstanding	775,760	775,760
Total common stock warrants	29,151,075	29,151,075

As part of STWO's initial public offering, 8,333,287 warrants to purchase common stock (the "Public Warrants") were sold. The Public Warrants are listed on the New York Stock Exchange ("NYSE") under the ticker symbol "GWH.W." The Public Warrants entitle the holder thereof to purchase one share of common stock at a price of \$ 11.50 per share, subject to adjustments. The Public Warrants may be exercised only for a whole number of shares of common stock. No fractional shares will be issued upon exercise of the warrants. The Public Warrants expire on October 8, 2026, five years after completion of the Business Combination, or earlier upon redemption or liquidation.

The Company may call the Public Warrants for redemption starting any time, in whole and not in part, at a price of \$ 0.01 per warrant, so long as the Company provides no less than 30 days prior written notice of redemption to each warrant holder, and if, and only if, the reported last sale price of common stock equals or exceeds \$ 18.00 per share for any 20 trading days within a 30 -trading day period ending on the third trading day prior to the date the Company sends the notice of redemption to the warrant holders provided there is an effective registration statement covering the shares of common stock issuable upon exercise of the warrants.

The Company may call the Public Warrants for redemption starting any time, in whole and not in part, at a price of \$ 0.10 per warrant, so long as the Company provides no less than 30 days prior written notice of redemption to each warrant holder; provided that holders will be able to exercise their warrants on a cashless basis prior to redemption and receive a number of shares determined based on the redemption date fair market value of the shares, and if, and only if, the reported last sale price of common stock equals or exceeds \$ 10.00 per share for any 20 trading days within a 30 -trading day period ending on the third trading day prior to the date the Company sends the notice of redemption to the warrant holders provided there is an effective registration statement covering the shares of common stock issuable upon exercise of the warrants.

Simultaneously with STWO's initial public offering, STWO issued in a private placement 4,666,667 warrants to purchase common stock (the "Private Warrants") to STWO's sponsor. In connection with the Business Combination, STWO's sponsor agreed to forfeit 583,333 Private Warrants. Of the remaining 4,083,334 Private Warrants, 3,500,000 were immediately vested and 583,334 warrants (the "Earnout Warrants") were vested upon meeting certain earnout milestone events on November 9, 2021. The Private Warrants, including the Earnout Warrants, automatically converted on a 1:1 basis into Public Warrants upon the transfer of such warrants by the initial holder to a third party during the fourth quarter of 2023.

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The table below shows the common stock warrant activities during the three months ended March 31, 2024:

	December 31, 2023	Issued	Exercised	March 31, 2024
Public Warrants	11,461,227	—	—	11,461,227
SMUD Warrant	12,500	—	—	12,500
Investment Warrant	10,631,633	—	—	10,631,633
IP Warrant	6,269,955	—	—	6,269,955
Performance Warrants	775,760	—	—	775,760
Total common stock warrants	29,151,075	—	—	29,151,075

The table below shows the common stock warrant activities during the three months ended March 31, 2023:

	December 31, 2022	Issued	Exercised	March 31, 2023
Earnout Warrants	583,334	—	—	583,334
Public Warrants	7,377,893	—	—	7,377,893
Private Warrants (excluding Earnout Warrants)	3,500,000	—	—	3,500,000
SMUD Warrant	12,500	—	—	12,500
Total common stock warrants	11,473,727	—	—	11,473,727

The Company's common stock warrants were initially recorded at fair value upon completion of the Business Combination and are adjusted to fair value at each reporting date based on the market price of the Public Warrants, with the change in fair value recorded as a component of other income in the condensed consolidated statements of operations and comprehensive loss. For the three months ending March 31, 2024, the Company's liabilities for Public Warrants remained constant. For the three months ended March 31, 2023, the Company recorded a net decrease to the liabilities for liabilities for Earnout Warrants, Public Warrants and Private Warrants (excluding Earnout Warrants) of \$ 0.7 million.

SMUD Warrant

On September 16, 2022, the Company entered into a warrant agreement with the Sacramento Municipal Utility District ("SMUD"), whereby the Company agreed to issue a warrant for up to 500,000 shares of the Company's common stock at an exercise price of \$ 4.296 per share. The vesting of the shares underlying the warrant will be subject to the achievement of certain commercial milestones through December 31, 2030 pursuant to a related commercial agreement. As of March 31, 2024 and December 31, 2023, 12,500 shares underlying the warrant were vested.

Honeywell Warrants

On September 21, 2023, the Company entered into a Common Stock and Warrant Purchase Agreement (the "Purchase Agreement") with Honeywell ACS Ventures LLC ("Honeywell Ventures"), an affiliate of Honeywell, a related party. Pursuant to the Purchase Agreement, Honeywell invested \$ 27.5 million in the Company and the Company issued 16,491,754 shares of common stock and a warrant to issue up to 10,631,633 shares of common stock (the "Investment Warrant") to Honeywell Ventures. Pursuant to the Purchase Agreement and also as further consideration for the licensing by UOP, an affiliate of Honeywell, of certain intellectual property to the Company, the Company issued a warrant to issue up to 6,269,955 shares of common stock (the "IP Warrant") to UOP. The Investment Warrant has an exercise price of \$ 1.89 , and the IP Warrant has an exercise price of \$ 2.90 . Each warrant will expire on September 21, 2028.

On September 21, 2023, the Company and UOP also entered into a Master Supply Agreement (the "Supply Agreement"), pursuant to which UOP may purchase equipment supplied by the Company. Pursuant to the Supply Agreement, the Company agreed to issue additional warrants to purchase common stock to UOP, consisting of (i) an initial performance warrant to issue up to 775,760 shares of common stock, issued on September 21, 2023 in exchange for a prepayment of equipment by UOP in the amount of \$ 15 million, and (ii) additional performance warrants (not to exceed an aggregate value of \$ 15 million based on target purchase amounts of up to \$ 300 million by 2030) to be issued on an annual basis for the five-year period beginning in 2026, based on UOP's purchase of additional equipment after execution of the Supply Agreement (the "Performance Warrants"). The initial Performance Warrant has an exercise price of \$ 1.45 and the additional Performance Warrants will have an exercise price equal to the volume-weighted average price of the Company's common stock for the last fifteen (15) trading days of the relevant

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calendar year for which such Performance Warrant is being issued. The initial Performance Warrant will expire on September 21, 2028 and each additional Performance Warrant will have a five-year term from its respective date of issuance.

10. STOCK-BASED COMPENSATION

Stock-based compensation expense is allocated on a departmental basis based on the classification of the award holder. The following table presents the amount of stock-based compensation related to stock-based awards issued to employees on the Company's condensed consolidated statements of operations and comprehensive loss (in thousands):

	Three Months Ended March 31,	
	2024	2023
Cost of revenue	\$ 924	\$ —
Research and development	401	993
Sales and marketing	95	150
General and administrative	1,434	916
Total stock-based compensation	\$ 2,854	\$ 2,059

2021 Equity Incentive Plan

In October 2021, the Board of Directors of the Company adopted the ESS Tech, Inc. 2021 Equity Incentive Plan (the "2021 Plan"). The 2021 Plan became effective upon consummation of the Business Combination. Stock awards under the plan may be issued as Incentive Stock Options ("ISO"), Non-statutory Stock Options ("NSO"), Stock Appreciation Rights, and Restricted Stock Awards ("RSU"). Only employees are eligible to receive ISO awards. Employees, directors, and consultants who provide continuous service to the Company are eligible to receive stock awards other than ISOs. The number of shares available for issuance under the 2021 Plan will be increased on the first day of each fiscal year beginning with the 2022 fiscal year and ending with the 2031 fiscal year, in an amount equal to the lesser of (i) 15,260,000 shares, (ii) five percent (5 %) of the outstanding shares on the last day of the immediately preceding fiscal year, or (iii) such number of shares determined by the Company no later than the last day of the immediately preceding fiscal year. As of January 1, 2024, the number of shares available for issuance under the 2021 Plan was increased by 8,700,000 shares in accordance with the plan and as approved by the Board. Under the 2021 Plan, the Company is authorized to issue 26,310,000 shares of common stock as of March 31, 2024.

Option prices for incentive stock options are set at the fair market value of the Company's common stock at the date of grant. The fair market value of RSUs is set at the closing sales price of the Company's common stock at the date of grant. Employee new hire grants generally cliff vest 1/4th at the end of the first year and then vest 1/16th each quarter over the remaining three years . Grants expire 10 years from the date of grant. All other grants vest quarterly over four years .

As of March 31, 2024, there were 6,423,422 shares available for future grant under the 2021 Plan.

Stock Options and Restricted Stock Units

Stock option and RSU activity, prices, and values during the three months ended March 31, 2024 are as follows (in thousands, except for share, per share, and contractual term data):

	Options Outstanding				RSUs		
	Number of shares	Weighted average exercise price	Weighted average remaining contractual term (years)	Aggregate intrinsic values (\$'000s)	Number of plan shares outstanding	Weighted average grant date fair value per Share	
Balances as of December 31, 2023	2,598,382	\$ 1.33	6.25	\$ 1,422	13,162,368	\$ 2.79	
Options and RSUs granted	—	—			9,471,453	0.98	
Options exercised and RSUs released	—	—			(779,696)	2.92	
Options and RSUs forfeited	(9,900)	0.54			(1,450,288)	1.41	
Balances as of March 31, 2024	2,588,482	\$ 1.34	6.03	\$ 648	20,403,837	\$ 2.04	
Options vested and exercisable - December 31, 2023	1,775,256	\$ 1.10	5.62	\$ 1,198			
Options vested and exercisable - March 31, 2024	1,881,196	\$ 1.14	5.40	\$ 584			

No options were granted during the three months ended March 31, 2024 and 2023.

As of March 31, 2024, there was approximately \$ 30.3 million of unamortized stock-based compensation expense related to unvested stock options and RSUs, which is expected to be recognized over a weighted-average period of 3.06 years.

Employee Stock Purchase Plan

In May 2022, the Company commenced its first offering period under the ESS Tech, Inc. Employee Stock Purchase Plan ("ESPP"), which assists employees in acquiring a stock ownership interest in the Company. The ESPP permits eligible employees to purchase common stock at a discount through payroll deductions during specified offering periods. No employee may purchase more than \$ 25,000 worth of stock in any calendar year. The price of shares purchased under the ESPP is equal to 85 % of the fair market value of the common stock on the first or last day of the offering period, whichever is lower. Total ESPP expense for the three months ended March 31, 2024 and 2023 was \$ 84 thousand and \$ 59 thousand, respectively.

11. FAIR VALUE MEASUREMENTS

The following tables present the Company's fair value hierarchy for its financial assets measured at fair value on a recurring basis (in thousands):

	March 31, 2024		
	Cash Equivalents and Restricted Cash	Short-Term Investments	Total Assets at Fair Value
Level 1:			
Money market funds	\$ 10,124	\$ —	\$ 10,124
U.S. Treasury securities	22,532	25,896	48,428
Total Level 1	32,656	25,896	58,552
Level 2:			
Certificate of deposit	77	—	77
U.S. agency securities	—	4,096	4,096
Commercial paper	—	23,228	23,228
Total Level 2	77	27,324	27,401
Total assets measured at fair value	\$ 32,733	\$ 53,220	\$ 85,953

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	December 31, 2023		
	Cash Equivalents and Restricted Cash	Short-Term Investments	Total Assets at Fair Value
Level 1:			
Money market funds	\$ 10,126	\$ —	\$ 10,126
U.S. Treasury securities	—	54,681	54,681
Total Level 1	10,126	54,681	64,807
Level 2:			
Certificate of deposit	77	—	77
U.S. agency securities	—	12,447	12,447
Commercial paper	9,353	20,771	30,124
Total Level 2	9,430	33,218	42,648
Total assets measured at fair value	\$ 19,556	\$ 87,899	\$ 107,455

The following tables present the Company's fair value hierarchy for its financial liabilities measured at fair value on a recurring basis (in thousands):

	March 31, 2024			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Public common stock warrants	917	—	—	917
Total liabilities measured at fair value	\$ 917	\$ —	\$ —	\$ 917

	December 31, 2023			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Public common stock warrants	917	—	—	917
Total liabilities measured at fair value	\$ 917	\$ —	\$ —	\$ 917

There were no transfers among Level 1, Level 2, or Level 3 categories during the periods presented. The carrying amounts of the Company's accounts payable approximate their fair values due to their short maturities.

Level 1 Assets: The Company invests in money market funds and U.S. Treasury securities. These assets are valued using observable inputs that reflect quoted prices for securities with identical characteristics.

Level 2 Assets: The Company invests in a certificate of deposit, U.S. agency securities, and commercial paper. These assets are valued using observable inputs that reflect quoted prices for securities with similar characteristics and other observable inputs (such as interest rates that are observable at commonly quoted intervals).

Level 1 Liabilities: The Company values its public common stock warrants based on the market price of the warrants.

For trading securities held at the reporting date, net losses recorded during the three months ended March 31, 2024 and 2023 were immaterial.

12. INCOME TAXES

The Company did not record an income tax provision for the three months ended March 31, 2024 and 2023, respectively, due to the Company's history of losses, and accordingly, has recorded a valuation allowance against substantially all of the Company's net deferred tax assets. The Company records a valuation allowance when it is more likely than not that some portion, or all, of the Company's deferred tax assets will not be realized.

13. GOVERNMENT GRANTS

Inflation Reduction Act of 2022 ("IRA")

On August 16, 2022, President Biden signed the Inflation Reduction Act of 2022 into law. The IRA has significant economic incentives for both energy storage customers and manufacturers for projects placed in service after December 31, 2022. Starting in 2023, there are Production Tax Credits under Internal Revenue Code 45X ("PTC"), that can be claimed on battery components manufactured in the U.S. and sold to U.S. or foreign customers. The tax

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credits available to manufacturers include a credit for ten percent of the cost incurred to make electrode active materials in addition to credits of \$35 per kWh of capacity of battery cells and \$10 per kWh of capacity of battery modules. The credits are cumulative, meaning that companies will be able to claim each of the available tax credits based on the battery components produced and sold through 2029, after which the PTC will begin to gradually phase down through 2032.

Since the PTC is a refundable credit (i.e., a credit with a direct-pay option available), the PTC is outside the scope of ASC 740, *Income Taxes* ("ASC 740"). Therefore, the Company accounts for the PTC under a government grant model. GAAP does not address the accounting for government grants received by a business entity that are outside the scope of ASC 740. The Company's accounting policy is to analogize to IAS 20, *Accounting for Government Grants and Disclosure of Government Assistance*, under IFRS Accounting Standards. Under IAS 20, once it is reasonably assured that the entity will comply with the conditions of the grant, the grant money should be recognized on a systematic basis over the periods in which the entity recognizes the related expenses or losses for which the grant money is intended to compensate. The Company recognizes grants once it is probable that both of the following conditions will be met: (1) the Company is eligible to receive the grant and (2) the Company is able to comply with the relevant conditions of the grant.

The PTC is recorded as the applicable items are produced and sold. For the three months ended March 31, 2024, the Company recognized PTC of \$ 230 thousand as a reduction of cost of revenue on the condensed consolidated statements of operations and comprehensive loss. As of March 31, 2024, grant receivable related to the PTC in the amount of \$ 1.1 million is recorded in prepaid expenses and other current assets on the condensed consolidated balance sheets.

14. REVENUE

Disaggregated Revenue

The following table presents the Company's revenue, disaggregated by source (in thousands):

	Three Months Ended March 31,	
	2024	2023
Product revenue	\$ 2,632	\$ 366
Service revenue	18	6
Other revenue	88	—
Total revenue	\$ 2,738	\$ 372

The majority of the Company's revenue is derived from product sales of energy storage systems. During 2024 other revenue included engineering services the Company performed in support of a customer project site and customer reimbursements for freight, travel, and other expenses.

Contract Balances

Contract assets relate to unbilled amounts resulting from contract arrangements in which the related revenue recognition performance obligations have been satisfied, however invoicing to the customer has not yet occurred. Deferred revenue (or contract liabilities) relates to consideration received from customers in advance of the Company satisfying the revenue recognition performance obligations under the related contractual arrangements. Contract balances are reported in a net contract asset or deferred revenue liability position on a contract-by-contract basis at the end of each reporting period. Contract assets are included in prepaid expenses and other current assets and deferred revenue is presented separately on the condensed consolidated balance sheets.

The following table provides information about contract assets and deferred revenue from contracts with customers (in thousands):

	March 31, 2024	December 31, 2023
Contract assets	\$ 149	\$ 253
Deferred revenue	19,955	20,781

Contract assets decreased by \$ 104 thousand during the three months ended March 31, 2024 due to invoicing on contracts for which revenue has previously been recognized. Deferred revenue decreased by \$ 0.8 million during the three months ended March 31, 2024 reflecting \$ 0.1 million in customer advance payments offset by the recognition of \$ 0.9 million of revenue that was included in the deferred revenue balance at the beginning of the period.

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Deferred revenue of \$ 5.6 million is expected to be recognized within the next 12 months and non-current deferred revenue of \$ 14.4 million is expected to be recognized thereafter.

15. RELATED PARTY TRANSACTIONS

During the three months ended March 31, 2024, the Company recognized revenue of \$ 0.5 million for sale of energy storage systems and extended warranty services provided to related parties. During the three months ended March 31, 2023, the Company recognized revenue of \$ 1 thousand for extended warranty services provided to related parties.

As of March 31, 2024, the Company had immaterial deferred revenue for extended warranty services to related parties and \$ 55 thousand of accounts receivable for reimbursable expenses from related parties. As of December 31, 2023, the Company had recorded deferred revenue of \$ 1 thousand for extended warranty services provided to related parties.

As of March 31, 2024 and December 31, 2023, the Company recorded a non-refundable deposit for future equipment purchases by Honeywell of \$ 14.4 million within non-current deferred revenue and an asset of \$ 0.7 million for the value of the initial Performance Warrant issued to Honeywell within other non-current assets on the condensed consolidated balance sheets. The value of the initial Performance Warrant will be recognized as an offset to revenue in the period in which revenue is earned.

16. NET LOSS PER SHARE

The following table presents the calculation of basic and diluted net loss per share attributable to common stockholders (in thousands, except share and per share data):

	Three Months Ended March 31,	
	2024	2023
Numerator:		
Net loss attributable to common stockholders	\$ (18,310)	\$ (21,901)
Denominator:		
Weighted-average shares outstanding – basic and diluted	174,514,538	154,123,911
Net loss per share – basic and diluted	\$ (0.10)	\$ (0.14)

Due to the net losses for the three months ended March 31, 2024 and 2023, basic and diluted net loss per common share were the same, as the effect of potentially dilutive securities would have been anti-dilutive.

The following outstanding balances of common share equivalents have been excluded from the calculation of diluted weighted-average common shares outstanding because the effect is anti-dilutive for the periods presented:

	Three Months Ended March 31,	
	2024	2023
Stock options	2,567,642	2,735,795
RSUs	20,403,837	12,075,979
Warrants	29,151,075	11,473,727
Total	52,122,554	26,285,501

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read together with the condensed consolidated financial statements and related notes in this Quarterly Report on Form 10-Q and with our Annual Report on Form 10-K for the year ended December 31, 2023. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such differences include those identified below and those discussed in the section titled "Part II—Item 1A. Risk Factors" of this Quarterly Report on Form 10-Q.

Overview

ESS is a long-duration energy storage company specializing in iron flow battery technology. We design and produce long-duration batteries predominantly using earth-abundant materials that we believe can be cycled over 20,000 times without capacity fade. Because we designed our batteries to operate using an electrolyte of primarily salt, iron and water, they are environmentally sustainable and substantially recyclable.

Our long-duration iron flow batteries are the product of nearly 50 years of scientific advancement. Our founders, Craig Evans and Dr. Julia Song, began advancing this technology in 2011 and formed Legacy ESS. Our team has significantly enhanced the technology, improved the round-trip efficiency and developed an innovative solution to the hydroxide build-up problem that plagued previous researchers developing iron flow batteries. Our proprietary solution to eliminate the hydroxide formation is known as the Proton Pump, which works by utilizing hydrogen generated by side reactions on the negative electrode. The Proton Pump converts the hydrogen back into protons in the positive electrolyte. This process eliminates the hydroxide and stabilizes the electrolytes' pH levels.

Our batteries provide flexibility to grid operators and energy assurance for commercial and industrial customers. Our technology addresses energy delivery, duration and cycle-life in a single battery platform that compares favorably to lithium-ion batteries, the most widely deployed alternative technology. Using our iron flow battery technology, we are developing several products, each of which is able to provide reliable, safe, long-duration energy storage. Our first energy storage product, the Energy Warehouse, is our "behind-the-meter" solution (referring to solutions that are located on the customer's premises, behind the service demarcation with the utility) that offers energy storage ranging from six to twelve-hour duration. Our second, larger scale energy storage product, the Energy Center, is currently being designed for "front-of-the-meter" (referring to solutions that are located outside the customer's premises, typically operated by the utility or by third-party providers who sell energy into the grid, often known as independent power producers) deployments specifically for utility and large commercial and industrial consumers. Our core technology components in the Energy Warehouse and the Energy Center also are under development for integration into third-party systems.

Recent Developments

Transition to Commercial Inventory Accounting

We have historically been in the research and development phase for accounting purposes. On a quarterly basis we had evaluated a combination of evidence including production quality metrics, field functionality to date, revenue trends, and existing contracts with customers. Based on the evaluation performed during the third quarter of 2023, we transitioned out of the research and development phase and into commercial inventory accounting as of July 1, 2023. As a result of the transition, all inventoriable costs incurred are capitalized, net of any LCNRV charges, which are recognized as cost of revenue. Further, unfulfilled noncancelable purchase commitments are recognized as expense for estimated losses in cost of revenue and warranty and fulfillment costs are recorded as a component of cost of revenue rather than research and development expense as of the Transition Date.

Key Factors and Trends Affecting Our Business

We believe that our performance and future success depends on several factors that present significant opportunities for us but also pose risks and challenges, including those discussed below and in the section "Part II—Item 1A. Risk Factors" of this Quarterly Report on Form 10-Q.

We believe we have the opportunity to establish attractive margin unit economics if we are able to continue to reduce production costs and scale our operations. Our future financial performance will depend on our ability to deliver on these economies of scale with lower product costs. We believe our business model is positioned for scalability due to the ability to leverage the same product platform across our customer base. Significant improvements in manufacturing scale are expected to decrease the cost of materials and direct labor. Compared to 2023, we expect our indirect cost of goods and operating expenses to increase as we ramp up our manufacturing and sales activities. We further expect an increase in expenses related to the implementation of cost reduction projects and initiatives in our supply chain, manufacturing

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engineering and research and development functions. Achievement of margin targets and cash flow generation is dependent on finalizing development and manufacturing of Energy Centers.

Our near-term and medium-term revenue is expected to be generated from our Energy Centers, second-generation Energy Warehouses, and core technology component productization. We believe our unique technology provides a compelling value proposition and an opportunity for favorable margins and unit economics in the energy storage industry in the future.

Impact of Macroeconomic Developments

We are closely monitoring macroeconomic developments, including global supply chain challenges, foreign currency fluctuations, elevated inflation and interest rates and monetary policy changes, as well as global events, such as the Russia-Ukraine conflict, the conflict in the Middle East, and other areas of geopolitical tension around the world, and how they may adversely impact our and our customers', contractors', suppliers' and partners' respective businesses. In particular, weak economic conditions or significant uncertainty regarding the stability of financial markets related to stock market volatility, inflation, recession or governmental fiscal, monetary and tax policies, among others, could adversely impact our and our customers' business, financial condition and operating results. In addition, general and ongoing tightening in the credit market, lower levels of liquidity, increases in rates of default and bankruptcy, and significant volatility in equity and fixed-income markets could all negatively impact our customers, contractors, suppliers and partners. As a result of these macroeconomic forces, during the first quarter of 2024 we have experienced supply constraints, increased shipping delays for certain customer contracts, and delays in timing of payments from some of our customers. We believe some or all of these negative trends may continue during the remainder of 2024.

To the extent that challenging macroeconomic conditions persist, we may experience an extension and worsening of these effects as well as additional adverse effects on our business, financial condition, or results of operations in future periods. These effects could include, among others, slower purchasing decisions by existing and potential new customers, additional delays in timing of payments under our existing customer contracts, further reduction or delays in purchasing decisions by our customers, potential losses of customers as a result of economic distress or bankruptcy, and increased costs for raw materials and freight resulting from continued inflationary cost pressures.

For further discussion of the challenges and risks we confront related to macroeconomic conditions and geopolitical tension around the world, please refer to "Part II—Item 1A. Risk Factors" of this Quarterly Report on Form 10-Q.

Inflation Reduction Act of 2022

On August 16, 2022, President Biden signed into law the Inflation Reduction Act (the "IRA"), which extends the availability of investment tax credits ("ITCs") and production tax credits and makes significant changes to the tax credit regime that applies to solar and energy storage products. As a result of changes made by the IRA, the ITC for solar generation projects is extended until at least 2033 and has been expanded to include stand-alone battery storage projects. This expansion provides significant certainty on the tax incentives that will be available to stand-alone battery storage projects in the future. We believe the IRA will increase demand for our services due to the extensions and expansions of various tax credits that are critical for our customers' economic returns, while also providing more certainty in and visibility into the supply chain for materials and components for energy storage systems. We are continuing to evaluate the overall impact and applicability of the IRA as regulations are issued, and the passage of comparable legislation in other jurisdictions, to our results of operations going forward.

As discussed in Note 13, *Government Grants*, to our condensed consolidated financial statements, starting in 2023, there are PTCs that can be claimed on battery components manufactured in the U.S. and sold to U.S. or foreign customers. The tax credits available to manufacturers include a credit for ten percent of the cost incurred to make electrode active materials in addition to credits of \$35 per kWh of capacity of battery cells and \$10 per kWh of capacity of battery modules. The credits are cumulative, meaning that companies will be able to claim each of the available tax credits based on the battery components produced and sold through 2029, after which the PTC will begin to gradually phase down through 2032. We expect these credits will have positive impact on our gross margins in the future.

Components of Results of Operations

Revenue and Cost of revenue

We earn revenue from the sale of our energy storage products and from service contracts. Revenue from service contracts includes engineering design and extended warranty and maintenance services for our energy storage products. We invoice our customers based upon contractual terms, and accordingly, we have deferred revenues and contract assets depending upon whether we can invoice in advance of satisfying the performance obligations under the respective customer contract or in arrears, respectively.

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As discussed above, commencing with the third quarter of 2023 we reached commercial viability and transitioned out of the research and development phase and into commercial inventory accounting. Following the Transition Date, cost of revenue is primarily driven by direct material, labor, freight and overhead expenses. Cost of revenue also includes LCNRV charges, warranty costs, losses on unfulfilled noncancellable purchase commitments, obsolescence charges, and fulfillment costs. Cost of revenue does not include inventory previously expensed during the research and development phase prior to the Transition Date. We expect revenue and cost of revenue to increase as we scale the business and deliver our energy storage products to customers.

Operating expenses

Research and development

Following the Transition Date, research and development expenses consist of materials, supplies, personnel-related expenses, allocated facilities costs, consulting services and other direct expenses. Personnel-related expenses consist of salaries, bonuses, benefits and stock-based compensation. Prior to the Transition Date, research and development expenses also included direct product development material costs, including freight charges, and warranty-related costs. Our research and development costs have decreased following the transition to commercial inventory accounting in the third quarter of 2023; however, we continue to perform research and development activities to further expand our product roadmap.

Sales and marketing

Sales and marketing expenses consist primarily of salaries, bonuses, benefits and stock-based compensation for marketing and sales personnel and related support teams. To a lesser extent, sales and marketing expenses also include professional services costs, travel costs, and trade show sponsorships. We expect that our sales and marketing expenses will increase over time as we continue to hire additional personnel to scale our business.

General and administrative

General and administrative expenses consist of personnel-related expenses for our corporate, executive, finance, legal, and other administrative functions, as well as expenses for outside professional services and insurance costs. Personnel-related expenses consist of salaries, bonuses, benefits and stock-based compensation. To a lesser extent, general and administrative expenses include depreciation and other allocated costs and supplies. We expect some of our general and administrative expenses to increase as we expand our operations and manufacturing capacity to support the growth of our business, and as a result of operating as a public company, including compliance with the rules and regulations of the SEC, legal, audit, additional insurance expenses, investor relations activities, and other administrative and professional services.

Other income (expenses), net

Interest income, net

Interest income, net consists primarily of earned income on our cash equivalents, restricted cash, and short-term investments. These amounts will vary based on our cash, cash equivalents, restricted cash and short-term investment balances, and on market rates. Interest income is partially offset by interest expense on notes payable.

Gain on revaluation of common stock warrant liabilities

Gain on revaluation of common stock warrant liabilities consists of periodic fair value adjustments related to our common stock warrants.

Other income (expense), net

Other income (expense), net consists primarily of various gains and losses associated with our short-term investments and other income and expense items.

Results of Operations

In this section, we discuss the results of our operations for the three months ended March 31, 2024 compared to the three months ended March 31, 2023.

Comparison of Three Months Ended March 31, 2024 to Three Months Ended March 31, 2023

The following table sets forth ESS' operating results for the periods indicated:

(\$ in thousands)	Three Months Ended March 31,		\$ Change	% Change
	2024	2023		
Revenue	\$ 2,738	\$ 372	\$ 2,366	636%
Cost of revenue	11,126	—	11,126	100
Gross profit (loss)	(8,388)	372	(8,760)	N/M
Operating expenses:				
Research and development	3,546	17,732	(14,186)	(80)
Sales and marketing	2,034	1,852	182	10
General and administrative	5,526	5,287	239	5
Total operating expenses	11,106	24,871	(13,765)	(55)
Loss from operations	(19,494)	(24,499)	5,005	(20)
Other income (expenses), net:				
Interest income, net	1,239	1,252	(13)	(1)
Gain on revaluation of common stock warrant liabilities	—	688	(688)	(100)
Other income (expense), net	(55)	658	(713)	(108)
Total other income, net	1,184	2,598	(1,414)	(54)
Net loss and comprehensive loss to common stockholders	\$ (18,310)	\$ (21,901)	\$ 3,591	(16)%

N/M = Not meaningful

Revenue

Revenue for the three months ended March 31, 2024 was \$2.7 million compared to \$0.4 million for the three months ended March 31, 2023 as we delivered and recognized revenue for a higher volume of Energy Warehouses and other related equipment delivered in the first quarter of 2024 compared to 2023.

Cost of revenue

Cost of revenue for the three months ended March 31, 2024 was \$11.1 million. During the third quarter of 2023 we reached commercial viability and transitioned out of the research and development phase and into commercial inventory accounting. As such, we began recording cost of revenue as of the Transition Date. Cost of revenue for units associated with the revenue recognized prior to the Transition Date is zero as these costs were recognized as research and development expenses in the respective periods incurred. As the production costs for our units significantly exceed their selling price, after the transition to commercial inventory accounting, we began recognizing LCNRV charges. LCNRV write-downs and losses on purchase commitments are recorded as cost of revenue.

Operating expenses

Research and development

Research and development expenses decreased by \$14.2 million or 80% from \$17.7 million for the three months ended March 31, 2023 to \$3.5 million for the three months ended March 31, 2024. The decrease resulted from the transition out of research and development accounting in the third quarter of 2023 into commercial inventory accounting as of the Transition Date, offset by increased material expenses and payroll and benefit expense, including stock-based compensation.

Sales and marketing

Sales and marketing expenses increased by \$0.2 million or 10% from \$1.9 million for the three months ended March 31, 2023 to \$2.0 million for the three months ended March 31, 2024. The increase is driven by increased personnel-related expenses.

General and administrative

General and administrative expenses increased by \$0.2 million or 5% from \$5.3 million for the three months ended March 31, 2023 to \$5.5 million for the three months ended March 31, 2024. The increase is due primarily to lower than

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normal board member and executive stock-based compensation expense in 2023. Wages and employee related stock-based compensation have otherwise remained consistent year-over-year.

Other income (expenses), net

Interest income, net

Interest income, net was \$1.2 million for the three months ended March 31, 2024 compared to \$1.3 million for the three months ended March 31, 2023. The decrease resulted from a decrease in interest income during the three months ended March 31, 2024 driven by interest earned on our short-term investment portfolio offset by a decrease in expense resulting from the repayment of our notes payable during 2023.

Gain on revaluation of common stock warrant liabilities

There was no gain or loss recorded on common stock warrant liabilities in the three months ended March 31, 2024 as the liability remained constant over that period. A gain of \$0.7 million was recorded for the three months ended March 31, 2023. The changes in fair value of warrant liabilities are driven by changes in the market price of our public warrants over the respective periods.

Other income (expense), net

Other income (expense), net for the three months ended March 31, 2024 was \$55 thousand of expense and \$0.7 million of income for the three months ended March 31, 2023. The change is a result of funding received from federal agencies for our research and development activities in 2023 that did not recur in 2024, as well the recognition of unrealized losses rather than unrealized gains reported on trading securities.

Liquidity and Capital Resources

Since our inception, we have financed our operations primarily through the issuance and sale of equity and debt securities and loan agreements. We have incurred significant losses and have negative cash flows from operations. As of March 31, 2024, we had an accumulated deficit of \$714.5 million. Management expects to continue to incur additional substantial losses in the foreseeable future as a result of our cost of revenue, research and development and other operational activities. As of March 31, 2024, we had unrestricted cash and cash equivalents of \$36.3 million and short-term investments of \$53.2 million, which are available to fund future operations. We believe that our unrestricted cash and cash equivalents and short-term investments as of March 31, 2024 will enable us to maintain our operations and satisfy our financial obligations for a period of at least 12 months following the filing date of our condensed consolidated financial statements. Beyond 12 months, we may need additional cash resources to the extent our current resources are insufficient to satisfy our cash requirements. Therefore, we may seek additional equity or debt financing. If such financing is not available or if the financing terms are less desirable than we expect, 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.

We have a standby letter of credit with First Republic Bank for \$75 thousand as security for an operating lease of office and manufacturing space in Wilsonville, Oregon secured by a restricted certificate of deposit account totaling \$75 thousand. There were no draws against the letter of credit during the three months ended March 31, 2024 and 2023.

We have a standby letter of credit with Bank of America for \$600 thousand as security for the performance and payment of the Company's obligations under a customer agreement. The letter of credit is in effect until the date on which the warranty period under the agreement expires, which is anticipated to be more than a year from the balance sheet date. As of March 31, 2024, \$600 thousand was pledged as collateral for the letter of credit and recorded as restricted cash, non-current. There were no draws against the letter of credit during the three months ended March 31, 2024 and 2023.

We have a standby letter of credit with Bank of America for \$200 thousand in support of our customs and duties due on imported materials. The letter of credit is in effect until May 19, 2024. As of March 31, 2024, \$200 thousand was pledged as collateral for the letter of credit and recorded as restricted cash, current. There were no draws against the letter of credit during the three months ended March 31, 2024 and 2023.

On September 21, 2023, we entered into a Common Stock and Warrant Purchase Agreement with Honeywell Ventures pursuant to which, Honeywell Ventures invested \$27.5 million in the Company and the Company issued 16,491,754 shares of common stock and the Investment Warrant exercisable for up to 10,631,633 shares of Common Stock.

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The following table summarizes cash flows from operating, investing and financing activities for the periods presented (in thousands):

	Three Months Ended March 31,	
	2024	2023
Net cash used in operating activities	\$ (18,910)	\$ (18,510)
Net cash provided by investing activities	34,692	72,058
Net cash used in financing activities	(81)	(303)

Cash flows from operating activities:

Cash flows used in operating activities to date have primarily consisted of costs related to research and development of our energy storage systems, building awareness of our products' capabilities and other general and administrative activities. Beginning in the third quarter of 2023, following the transition to commercial inventory accounting, cash flows used in operating activities also consisted of inventory purchases and cost of revenue.

Net cash used in operating activities was \$18.9 million for the three months ended March 31, 2024, which is comprised of net loss of \$18.3 million, noncash interest income of \$1.0 million, inventory write-downs and losses on noncancelable purchase commitments of \$2.0 million, partially offset by stock-based compensation of \$2.9 million and depreciation and amortization expense of \$1.2 million. Net changes in operating assets and liabilities used \$2.1 million of cash driven by cash collections on accounts receivable and an increase in accrued product warranties, partially offset by decreases in accrued and other current liabilities, deferred revenue, accounts payable, operating lease liabilities, and an increase in prepaid and other current assets.

Net cash used in operating activities was \$18.5 million for the three months ended March 31, 2023, which is comprised of net loss of \$21.9 million, noncash interest income of \$0.8 million, and noncash changes in the fair value of common stock warrant liabilities of \$0.7 million, partially offset by stock-based compensation of \$2.1 million and depreciation expense of \$1.1 million. Net changes in operating assets and liabilities provided \$1.5 million of cash driven by cash collections on accounts receivable, a decrease in prepaid expenses and other current assets and an increase in accrued product warranties, partially offset by decreases in accrued and other current liabilities, accounts payable, operating lease liabilities, and deferred revenue.

Cash flows from investing activities:

Cash flows from investing activities have been comprised primarily of purchases and sales of short-term investments and purchases of property and equipment.

Net cash provided by investing activities was \$34.7 million for the three months ended March 31, 2024, which relates to maturities of short-term investments partially offset by purchases of property and equipment.

Net cash used in investing activities was \$72.1 million for the three months ended March 31, 2023, which relates to maturities of short-term investments partially offset by purchases of property and equipment. Purchases of property and equipment primarily relate to our investment in automating production.

Cash flows from financing activities:

Cash flows from financing activities to date have consisted of the Business Combination and the issuance of debt and equity securities and loan agreements.

Net cash used in financing activities was \$0.1 million for the three months ended March 31, 2024, which consisted of repurchases for shares from employees for income tax withholding purposes.

Net cash used in financing activities was \$0.3 million for the three months ended March 31, 2023, which is comprised of principal payments on notes payable, partially offset by proceeds from stock options exercised.

Further commercialization, development, and expansion of our business will require a significant amount of cash for expenditures. Our ability to successfully manage this growth will depend on many factors, including our working capital needs, the availability of equity or debt financing and, over time, our ability to generate cash flows from operations.

Contractual Obligations and Commitments

Our contractual obligations and other commitments as of March 31, 2024 consist of lease commitments and three standby letters of credit. The letters of credit serve as security for certain operating leases for office and manufacturing space, for our performance and payment obligations under a customer agreement, and in support of our customs and duties due on imported materials. The letter of credit related to operating leases is fully secured by restricted certificate of deposit

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accounts. The letters of credit related to a customer contract and to support customs and duties due on imported materials are secured by a total of \$800 thousand pledged as collateral. There were no draws against the letters of credit during the three months ended March 31, 2024 and 2023. Additionally, we are committed to non-cancellable purchase commitments of \$0.7 million as of March 31, 2024 and to reimburse UOP a minimum of \$8.0 million for research and development expenses incurred through December 31, 2028 under the JDA (as defined herein).

Off-Balance Sheet Arrangements

We are not a party to any off-balance sheet arrangements, including guarantee contracts, retained or contingent interests, or unconsolidated variable interest entities that either have, or are reasonably likely to have, a current or future material effect on our financial statements.

Critical Accounting Policies and Estimates

There have been no material changes to our critical accounting policies from those described in the Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

Emerging Growth Company Status

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act and have elected to take advantage of the benefits of the extended transition period for new or revised financial accounting standards. We expect to continue to take advantage of the benefits of the extended transition period for as long as we remain an emerging growth company, although we may decide to early adopt new or revised accounting standards to the extent permitted by such standards. This may make it difficult or impossible to compare our financial results with the financial results of another public company that is either not an emerging growth company or is an emerging growth company that has chosen not to take advantage of the extended transition period exemptions because of the potential differences in accounting standards used.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

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

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We have established disclosure controls and procedures that are designed to ensure that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms and that such information is accumulated and communicated to management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as required under Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on that evaluation, our principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures were effective as of March 31, 2024.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting during the fiscal quarter ended March 31, 2024 that materially affected, or which are reasonably likely to materially affect, our internal control over financial reporting.

Part II – Other Information

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. We are not currently a party to any material legal proceedings, nor, to our knowledge, is any material legal proceeding threatened against us. In the future, we may become involved in legal proceedings that arise in the ordinary course of business, the outcome of which, if determined adversely to us, could individually or in the aggregate have a material adverse effect on our business, financial condition and results of operations.

ITEM 1A. RISK FACTORS

Investing in our securities involves a high degree of risk. Before making an investment decision, you should consider carefully the risks and uncertainties described below, together with all of the other information in this Quarterly Report on Form 10-Q, including our condensed consolidated financial statements and related notes thereto included in this Quarterly Report on Form 10-Q and in our other filings with the SEC. Our business, operating results, financial condition or prospects could also be harmed by risks and uncertainties not currently known to us or that we currently do not believe are material. If any of the risks actually occur, our business, operating results, financial condition and prospects could be adversely affected. In that event, the market price of our common stock could decline, and you could lose part or all of your investment. References to "we," "our," or "us" generally refer to ESS, unless otherwise specified.

Summary Risk Factors

Our business is subject to numerous risks and uncertainties. The following is a summary of the principal risks we face:

- We face significant barriers in our attempts to produce our energy storage products, certain of our energy storage products are still under development, and we may not be able to successfully develop our energy storage products at commercial scale. If we cannot successfully overcome those barriers, our business will be negatively impacted and could fail;
- We are in the early stage of commercialization. In addition, certain aspects of our technology have not been fully field tested. If we are unable to develop our business and effectively commercialize our energy storage products as anticipated, we may not be able to generate significant revenues or achieve profitability;
- We depend on third-party suppliers for the development and supply of key raw materials and components for our energy storage products. We also depend on vendors for the shipping of our energy storage products. Quality issues or delays in our supply or delivery chain and shipments could harm our ability to manufacture, supply and commercialize our energy storage products;
- We have experienced in the past, and may experience in the future, delays, disruptions, or quality control problems in our manufacturing operations;
- We may be unable to adequately control the costs associated with our operations and the components necessary to build our energy storage products, and if we are unable to reduce our cost structure and effectively scale our operations in the future, our ability to become profitable may be impaired;
- We rely on complex machinery for our operations and the production of our iron flow batteries involves a significant degree of risk and uncertainty in terms of operational performance and costs;
- Our future success depends in part on our ability to increase our production capacity, and we may not be able to do so in a cost-effective manner. If we elect to expand our production capacity by constructing one or more new manufacturing facilities, we may encounter challenges relating to the construction, management and operation of such facilities;
- If required maintenance is performed incorrectly or if maintenance requirements exceed our current expectations, this could adversely affect our reputation, prospects, business, financial condition and results of operations;
- Our relationships with related parties, SBE, an affiliate of SoftBank Group Corp., and Honeywell, are subject to various risks which could adversely affect our business and future prospects;
- We have a history of losses and have to deliver significant business growth to achieve sustained, long-term profitability and long-term commercial success;
- Our warranty insurance provided by Munich Re is important to many potential customers. Should we be unable to maintain our relationship with Munich Re and be unable to find a similar replacement, demand for our products may suffer;

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- Failure to deliver the benefits offered by our technology, or the emergence of improvements to competing technologies, could reduce demand for our energy storage products and harm our business;
- Our plans are dependent on the development of market acceptance of our products;
- Our cost reduction strategy may not succeed or may be significantly delayed, which may result in our inability to achieve profitability;
- As deployment of our energy storage products increases, we will incur corresponding warranty obligations and our warranty obligations may be significant. If our energy storage products do not operate successfully in the field or if we are unable to manage our warranty costs, our business and ability to generate revenue and achieve profitability could fail;
- We may face regulatory challenges to or limitations on our ability to sell our products directly in certain markets. Expanding operations internationally could expose us to additional risks;
- If we fail to protect, or incur significant costs in defending, our intellectual property and other proprietary rights, then our business and results of operations could be materially harmed; and
- As we endeavor to expand our business, we will incur significant costs and expenses, which could outpace our cash reserves. Unfavorable conditions or disruptions in the capital and credit markets may adversely impact business conditions and the availability of credit.

The following risk factors apply to our business and operations. These risk factors are not exhaustive, and investors are encouraged to perform their own investigation with respect to our business, financial condition and prospects. We may face additional risks and uncertainties that are not presently known to us, or that we currently deem immaterial, which may also impair our business. The following discussion should be read in conjunction with the condensed consolidated financial statements and notes to the condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

Risks Related to Our Technology, Products and Manufacturing

We face significant barriers in our attempts to produce our energy storage products, certain of our energy storage products are still under development, and we may not be able to successfully develop our energy storage products at commercial scale. If we cannot successfully overcome those barriers, our business will be negatively impacted and could fail.

Producing long-duration iron flow batteries that meet the requirements for wide adoption by commercial and utility-scale energy storage applications is a difficult undertaking. We are still in the early stage of commercialization and have faced and may yet face significant challenges in completing the development of our various energy storage products and in producing our energy storage products in commercial volumes. Some of the challenges that could prevent the successful scaling of our iron flow battery products include difficulties with (i) increasing manufacturing capacity to produce the volume of cells needed for our energy storage products, (ii) installing and optimizing higher volume manufacturing equipment, (iii) packaging our batteries to ensure adequate cycle life, (iv) cost reduction, (v) qualifying new vendors and subcomponents, (vi) expanding supply chain capacity, (vii) the completion of rigorous and challenging battery safety testing required by our customers or partners, including but not limited to, performance, life and abuse testing and (viii) the development of the final manufacturing processes and specifications.

As of March 31, 2024, we have limited deployment of second-generation energy storage products ("S200 batteries") and there may be significant yield, cost, performance and manufacturing process challenges to be solved as we ramp up commercial production and use. Our core technology components in the Energy Warehouse and the Energy Center products are also still under development for integration into third-party systems. We are likely to encounter further engineering challenges as we increase the capacity and efficiency of our batteries. If we are not able to overcome these barriers in developing and producing our iron flow batteries, our business could fail.

We have commissioned a new, more sophisticated, automation line and have started commercial operations; however any technical issues or delays in ramping up its use may impact our production costs and product quality. Even if we complete development and achieve volume production of our iron flow batteries, if the cost, performance characteristics or other specifications of the batteries fall short of our targets, our sales, product pricing and margins would likely be adversely affected.

We are in the early stage of commercialization. In addition, certain aspects of our technology have not been fully field tested. If we are unable to develop our business and effectively commercialize our energy storage products as anticipated, we may not be able to generate significant revenues or achieve profitability.

The growth and development of our operations will depend on the successful commercialization and market acceptance of our energy storage products and our ability to manufacture products at scale while timely meeting customers' demands.

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There is no certainty that, once shipped, our products will operate over the long term as expected, and we may not be able to generate sufficient customer confidence in our latest designs and ongoing product improvements or to perform under our contracts with customers. There are inherent uncertainties in our ability to predict future demand for our energy storage products and, as a consequence, we may have inadequate production capacity to meet demand, or alternatively, have excess available capacity. Our inability to predict the extent of customer adoption of our proprietary technologies in the already-established traditional energy storage market makes it difficult to evaluate our future prospects.

As of March 31, 2024, we have limited products fully deployed. We began shipping our second-generation Energy Warehouse products in the third quarter of 2021 and in 2022 we received final customer acceptance for the initial units shipped, at which point we recognized revenue. Our Energy Center product is in the early stages of design and production, and productized versions of our core component technology is under development. We have experienced various quality and performance issues with units that have been installed and although we have worked to repair or replace any known issues, our inability to address these or potential new issues effectively may have cost and warranty implications and may affect the acceptance of our products in the market. In addition, although we believe our iron flow battery technology is field tested and ready for sale, there are no assurances that our proprietary technologies, such as our Proton Pump, will operate as expected and with consistency over time. We have also experienced grid compatibility and other site integration issues that are not within our control, which has required and will continue to require an adjustment of our power electronics on a site-by-site basis. If our batteries are damaged during shipment, we may be required to repair or replace such units. Certain operational characteristics have never been witnessed in the field and as we deploy our products, we may discover further aspects of our technology that require improvement. Any of these issues could delay existing contracts and new sales, result in order cancellations, result in significant warranty obligations, and negatively impact the market's acceptance of our technology. If we experience significant delays, order cancellations or warranty claims, or if we fail to develop and install our energy storage products in accordance with contract specifications, then our operating results and financial condition could be adversely affected. In addition, there is no assurance that if we alter or change our energy storage products in the future, that the demand for these new products will develop, which could adversely affect our business and revenues. If our energy storage products are not deemed desirable and suitable for purchase and we are unable to establish a customer base, we may not be able to generate significant revenues or attain profitability.

We depend on third-party suppliers for the development and supply of key raw materials and components for our energy storage products. We also depend on vendors for the shipping of our energy storage products. Quality issues or delays in our supply or delivery chain and shipments could harm our ability to manufacture, supply and commercialize our energy storage products.

We depend on third-party suppliers for the development and supply of key raw materials and components for our energy storage products, including power module components (e.g., bipolar plates, frames, end plates and separators), shipping containers, chemicals and electronic components. We will need to maintain and significantly grow our access to key raw materials and control our related costs. We use various raw materials and components to construct our energy storage products, including polypropylene, iron and potassium chloride, that are critical to our manufacturing process. We also rely on third-party suppliers for injected molded parts and power electronics which undergo a qualification process that can take months.

The cost of components for our iron flow batteries, whether manufactured by our suppliers or by us, depends in part upon the prices and availability of raw materials. In recent periods, we have seen an increase in costs for a wide range of materials and components and such increases may continue, particularly if the high rates of inflation since 2022 persist. Additionally, supply chain disruptions and access to materials have impacted and continue to impact our vendors and suppliers' ability to deliver materials and components to us in a timely manner. We have experienced significant disruptions to key supply chains, shipping times, shipping availability, manufacturing times, and increases in associated costs, both with respect to the sourcing of supplies and the delivery of our products. We have experienced and may continue to experience supply chain issues, delays to deliveries, vendor quality issues, as well as increases in our supply costs of many of our key components, including polypropylene, resin, power electronics, circuit board components and shipping containers. Such issues have also affected the ramping up of our automated production line. If we experience similar issues in the future, including any delays of deliveries of additional manufacturing automation equipment that we require, they may further delay our ability to produce our products and to recognize additional revenue, particularly for our larger scale Energy Center products (see also "Part I. Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations—Components of Results of Operations—Revenue").

We expect prices for materials to fluctuate over time. Available supply for materials may also be unstable, depending on market conditions and global demand for these materials, including as a result of increased global production of batteries and energy storage products. For example, our Proton Pump is manufactured with certain raw materials, which not only include precious and non-precious metals but also carbon, graphite and thermoplastics, the prices of which have historically fluctuated on a cyclical basis and depend on a variety of factors over which we have no control. We have also experienced

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increased prices and/or inconsistent quality and supply of other electrical components and power module components including frames, end plates and separators. Any reduced availability of these materials may impact our access to cells and any further increases in their prices may reduce our profitability if we cannot recoup the increased costs through increased prices for our products. In addition, we utilize shipping containers to house our iron flow batteries within our Energy Warehouse and Energy Center products. Shipping delays caused by various economic, weather and COVID-19 pandemic effects created a shortage in shipping containers and other supply chain delays in the past and may again in the future. We have limited visibility into these supply chain disruptions and increased shipping container costs. Given that our Energy Warehouse product relies on the availability of shipping containers, such shortages may reduce our profitability if we are not able to pass the increased costs to our customers. Moreover, any such attempts to increase product prices may be difficult to achieve and even if achieved, may harm our brand, prospects and operating results.

In addition, the conflicts in Ukraine and the Middle East have led to disruption, instability and volatility in the global markets and certain industries and may also lead to further disruptions, particularly if the conflicts were to escalate further, that could negatively impact our operations and our supply chain. The U.S. government and other governments have already imposed severe sanctions and export controls against Russia and Russian interests and may yet impose additional sanctions and controls. The impact of these measures, as well as potential responses to them by Russia, is currently unknown and they could adversely affect our business, supply chain, partners or customers.

We depend on third-party vendors for the shipping of our energy storage products. We have in the past faced and may yet again face disruptions in the logistics sector making it more challenging to find trucks to ship our products. The shipping of our products to customers internationally in a timely, cost-effective, and secure manner that does not damage our products has proved and may again prove to be challenging. The failure to deliver our products in a timely fashion or within budget may also harm our brand, prospects and operating results.

We do not know whether we will be able to maintain long-term supply relationships with our critical suppliers, or, if required, secure new long-term supply relationships on terms that will allow us to achieve our objectives.

We continually evaluate and qualify new suppliers. However, there are a limited number of suppliers for some of the key components of our products and we have, to date, fully qualified only a very limited number of such suppliers. Therefore, we have limited flexibility in changing suppliers. In addition, we have had issues with inconsistent quality and supply of certain key power module components. We do not know whether we will be able to maintain long-term supply relationships with our critical suppliers, or, if required, secure new long-term supply relationships on terms that will allow us to achieve our objectives. A supplier's failure to develop and supply components in a timely manner, to supply components that meet our quality, quantity, cost requirements or our technical specifications, to support our warranty claims, or our inability to obtain alternative sources of these components on a timely basis or on terms acceptable to us, could each harm our ability to manufacture and commercialize our energy storage products. In addition, to the extent the processes that our suppliers use to manufacture components are proprietary, we may be unable to obtain comparable components from alternative suppliers, all of which could harm our business, financial condition and results of operations.

In the long term, we intend to supplement certain components from our suppliers by manufacturing them ourselves, which we believe will be more efficient and manufacturable at greater volumes and cost-effective than currently available components. However, our efforts to develop and manufacture such components have required and may require significant investments, and there can be no assurance that we will be able to accomplish this in the timeframes that we have planned or at all. If we are unable to do so, we may have to curtail our product production or procure additional raw materials and components from suppliers at potentially greater costs, either of which may harm our business and operating results.

We have experienced in the past, and may experience in the future, delays, disruptions, or quality control problems in our manufacturing operations.

Our manufacturing and testing processes require significant technological and production process expertise and modification to support our projected business objectives. We have already experienced various issues related to the scaling up of the manufacturing process and while we seek to prevent the reoccurrence of such issues, there can be no assurance that such issues will not reoccur in the future. In addition, any change in our processes could cause one or more production errors, requiring a temporary suspension or delay in our production line until the errors can be researched, identified, and properly addressed and rectified. This may occur particularly as we introduce new products, modify our engineering and production techniques, and/or expand our capacity. In addition, our failure to maintain appropriate quality assurance processes could result in increased product failures, loss of customers, increased warranty reserves, increased production, and logistical costs and delays. Any of these developments could lead to current and potential customers cancelling or postponing their purchases of our products, which could have a material adverse effect on our business, financial condition and results of operations.

We may be unable to adequately control the costs associated with our operations and the components necessary to build our energy storage products, and if we are unable to reduce our cost structure and effectively scale our operations in the future, our ability to become profitable may be impaired.

Our ability to become profitable in the future will not only depend on our ability to successfully market our products but also to control our manufacturing costs. If we are unsuccessful in our cost-reduction plans or if we experience design or manufacturing defects or other failures as a result of these design changes, we could incur significant manufacturing and re-engineering costs. In addition, we will require significant capital to further develop and grow our business and expect to incur significant expenses, including those relating to research and development, raw material procurement, leases, sales and distribution as we build our brand and market our products, and general and administrative costs as we scale our operations. If we are unable to cost-efficiently design, manufacture, market, sell and distribute our energy storage products, our margins, profitability and prospects would be materially and adversely affected.

In addition, our Proton Pump is manufactured with certain raw materials, such as platinum, the prices of which have historically fluctuated on a cyclical basis and depend on a variety of factors over which we have no control. Substantial increases in the prices of raw materials would increase our operating costs and could adversely affect our profitability. The price of oil likewise fluctuates on a cyclical basis and any increase in price may affect the cost of manufacturing, distributing and transporting our products. If we are unable to pass any such increased costs to our customers, this could have a material adverse effect on our business, financial condition and results of operations.

In order to achieve our business plan and reach profitability, we must continue to increase the number of units sold and reduce the manufacturing and development costs for our products as at current volumes, production costs for our units significantly exceed their selling price. Additionally, certain of our existing customer contracts were entered into based on projections regarding cost reductions that assume continued advances in our manufacturing and services processes that we may be unable to realize. The cost of components and raw materials, for example, has been increasing and could continue to increase in the future, offsetting any successes in reducing our manufacturing costs. Any such increases could slow our growth and cause our financial results and operational metrics to suffer. In addition, we may face increases in our other expenses including increases in wages or other labor costs as well as installation, marketing, sales or related costs. In order to expand into new markets (especially markets in which the price of electricity from the grid is lower), we will need to continue to reduce our costs. Increases in any of these costs or our failure to achieve projected cost reductions could adversely affect our results of operations and financial condition and harm our business and prospects. If we are unable to reduce our cost structure in the future, we may not be able to achieve profitability, which could have a material adverse effect on our business and our prospects.

Further, we have not yet produced our products at volume and our expected cost advantage for the production of these products at scale, compared to conventional lithium-ion cells, will require us to achieve rates of throughput, use of electricity and consumables, yield, and rates of automation demonstrated for mature battery, battery material, and manufacturing processes, that we have not yet achieved. If we are unable to achieve these targeted rates, our business will be adversely impacted.

We rely on complex machinery for our operations and the production of our iron flow batteries involves a significant degree of risk and uncertainty in terms of operational performance and costs.

We rely heavily on complex machinery for our operations and manufacturing and this equipment has not yet been used before for the large-scale manufacturing of iron flow battery products. The work required to integrate this equipment into the production of our iron flow battery product is time intensive and requires us to work closely with the equipment provider to ensure that it works properly for our unique iron flow battery technology. This integration work will involve a significant degree of uncertainty and risk and may result in a delay in the scaling up of production or result in additional cost to our iron flow batteries.

Our manufacturing facility utilizes large-scale machinery, particularly for the automated production line. Such machinery is likely to suffer unexpected malfunctions from time to time and will require repairs and spare parts to resume operations, which may not be available when needed. Unexpected malfunctions of our production equipment may significantly affect the intended operational efficiency or yield. Some examples would be inadequate bonding of the battery cells resulting in overboard or internal leakage, damage to the separator, or cracked bipolar or monopolar plates. In addition, because this equipment has never been used to build iron flow battery products, the operational performance and costs associated with this equipment can be difficult to predict and may be influenced by factors outside of our control, such as, but not limited to, failures by suppliers to deliver necessary components of our energy storage products in a timely manner and at prices and volumes acceptable to us, environmental hazards and remediation, difficulty or delays in obtaining governmental permits, damages or defects in systems, industrial accidents, fires, seismic activity and other natural disasters.

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Operational problems with our manufacturing equipment could result in the personal injury to or death of workers, the loss of production equipment, damage to manufacturing facilities, monetary losses, delays and unanticipated fluctuations in production. In addition, operational problems may result in environmental damage, administrative fines, increased insurance costs and potential legal liabilities. All of these operational problems could have a material adverse effect on our business, cash flows, financial condition or results of operations.

Our future success depends in part on our ability to increase our production capacity, and we may not be able to do so in a cost-effective manner. If we elect to expand our production capacity by constructing one or more new manufacturing facilities, we may encounter challenges relating to the construction, management and operation of such facilities.

In order to grow our business, we will need to increase our production capacity. For example, our current manufacturing capacity may not be sufficient to meet our planned production targets and we are currently seeking to expand our capacity. Our ability to plan, construct and equip additional manufacturing facilities is subject to significant risks and uncertainties, including but not limited to the following:

- The expansion or construction of any manufacturing facilities will be subject to the risks inherent in the development and construction of new facilities, including risks of delays and cost overruns as a result of factors outside our control, which may include delays in government approvals, burdensome permitting conditions, and delays in the delivery or installation of manufacturing equipment and subsystems that we manufacture or obtain from suppliers, similar to or more severe than what we have experienced recently.
- In order for us to expand internationally, we anticipate entering into strategic partnerships, joint ventures and licensing agreements that allow us to add manufacturing capability outside of the United States. Adding manufacturing capacity in any international location will subject us to new laws and regulations including those pertaining to labor and employment, environmental and export/import. In addition, any such expansion brings with it the risk of managing larger scale foreign operations.
- We may be unable to achieve the production throughput necessary to achieve our target annualized production run rate at our current and future manufacturing facilities.
- Manufacturing equipment may take longer and cost more to engineer and build than expected and may not operate as required to meet our production plans.
- We may depend on third-party relationships in the development and operation of additional production capacity, which may subject us to the risk that such third parties do not fulfill their obligations to us under our arrangements with them.
- We may be unable to attract or retain qualified personnel.

If we are unable to expand our manufacturing facilities, we may be unable to further scale our business, which would negatively affect our results of operations and financial condition. We cannot provide any assurances that we would be able to successfully establish or operate an additional manufacturing facility in a timely or profitable manner, or at all, or within any expected budget for such a project. The construction of any such facility would require significant capital expenditure and result in significantly increased fixed costs. If we are unable to transition manufacturing operations to any such new facility in a cost-efficient and timely manner, then we may experience disruptions in operations, which could negatively impact our business and financial results. Further, if the demand for our products decreases or if we do not produce the expected output after any such new facility is operational, we may not be able to spread a significant amount of our fixed costs over the production volume, thereby increasing our per product fixed cost, which would have a negative impact on our business, financial condition and results of operations.

In addition, if any of our partners suffer from capacity constraints, deployment delays, work stoppages or any other reduction in output, we may be unable to meet our delivery schedule, which could result in lost revenue, damages, and deployment delays that could harm our business and customer relationships. If the demand for our iron flow batteries or our production output decreases or does not rise as expected, we may not be able to spread a significant amount of our fixed costs over the production volume, resulting in a greater than expected per unit fixed cost, which would have a negative impact on our financial condition and our results of operations.

Our ability to expand our manufacturing capacity would also greatly depend on our ability to hire, train and retain an adequate number of manufacturing employees, in particular employees with the appropriate level of knowledge, background and skills. Should we be unable to hire, train, or retain such employees, our business and financial results could be negatively impacted.

We have in the past and may be compelled in the future to undertake product recalls or take other actions, which could adversely affect our business, prospects, operating results, reputation and financial condition.

We have in the past and may be compelled in the future to undertake product recalls. For example, in the past, we had to recall our Gen I battery modules due to vendors not properly manufacturing the parts to our specifications and we have also had to replace, and may again be required to replace, certain components of our Gen I battery modules delivered to customers to date. Any quality issues can result in single module failures or can result in a cascade of numerous failures. Failures in the field can result in a single module replacement or may result in a total recall depending on the severity or contamination to the remainder of the system.

Any product recall in the future may result in adverse publicity, damage our reputation and adversely affect our business, financial condition and results of operations. In the future, we may, voluntarily or involuntarily, initiate a recall if any of our products or components prove to be defective or noncompliant with applicable safety standards. Such recalls, whether caused by systems or components engineered or manufactured by us or our suppliers, would involve significant expense, damages and diversion of management's attention and other resources, which could adversely affect our brand image in our target market and our business, financial condition and results of operations.

If required maintenance is performed incorrectly or if maintenance requirements exceed our current expectations, this could adversely affect our reputation, prospects, business, financial condition and results of operations.

Our energy storage products require periodic maintenance, such as the cleaning or replacement of air filters, inspection and re-torquing of electrical or mechanical fasteners, and the replenishment of hydrogen. These maintenance items are typically scheduled on a quarterly basis but may vary depending on how the customer uses the product. We currently rely on our customers that do not have service agreements with us or that perform maintenance that is not covered by such agreements to follow our product operations and maintenance manuals. If our customers or third parties retained by our customers fail to maintain or perform any required maintenance incorrectly, this may damage or adversely affect the performance of our energy storage products, which could adversely affect our reputation, prospects, business, financial condition and results of operations. Furthermore, there is risk of harm to persons or property if individuals performing maintenance do not follow applicable maintenance or safety protocols. Any such injury would likely lead to adverse publicity and potentially a safety recall. Any such adverse publicity could adversely affect our reputation, prospects, business, financial condition and results of operations.

In addition, for customers that have purchased maintenance services from us, unforeseen issues may arise that may require maintenance beyond what we currently expect. We have no experience providing maintenance on a large scale and since our existing and potential customers are geographically dispersed, if any recurring or significant one-off maintenance is required, this could increase our costs.

Our relationships with related parties, SBE, an affiliate of SoftBank Group Corp., and Honeywell are subject to various risks which could adversely affect our business and future prospects. There are no assurances that we will be able to commercialize iron flow batteries from our joint development relationship with such parties. In addition, neither SBE nor Honeywell has any obligation to order any energy storage products from us under the agreements with such business partners, including at any price point.

In April 2021, we signed a framework agreement with SBE to supply our energy storage products to SBE in support of its market activities. Under this agreement, we have made various commitments to meet SBE's potential need for our energy storage products and are obligated to reserve a certain percentage of our manufacturing capacity to meet SBE's future needs, subject to periodic reviews of its firm and anticipated orders, which may negate those capacity reservations if no firm demand is realized. However, SBE is under no obligation to place any firm orders with us at any price point, and any future orders may be subject to future pricing or other commercial or technical negotiations, which we may not be able to satisfy, resulting in a diminished potential value of this relationship to us. To date, no orders have been placed under the framework agreement.

On September 21, 2023, we signed a Supply Agreement with UOP, an affiliate of Honeywell International Inc. ("Honeywell"), pursuant to which UOP may purchase equipment supplied by us, and we agreed to issue additional warrants to purchase common stock to UOP, consisting of (i) an initial Performance Warrant to issue up to 775,760 shares of common stock, issued on September 21, 2023 in exchange for a prepayment of equipment by UOP in the amount of \$15 million, and (ii) additional Performance Warrants (not to exceed an aggregate value of \$15 million based on target purchase amounts of up to \$300 million by 2030) to be issued on an annual basis for the five-year period beginning in 2026, based on UOP's purchase of additional equipment after execution of the Supply Agreement. On September 21, 2023, we and UOP also entered into a Joint Development Agreement, pursuant to which we and UOP have agreed to work together to collaborate and engage in certain research and development activities generally related to flow battery technology, and a Patent License Agreement, pursuant to which UOP will license certain patent rights to us. However,

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Honeywell is under no obligation to place any additional firm orders with us at any price point, and any future orders may be subject to future pricing or other commercial or technical negotiations, which we may not be able to satisfy, resulting in a diminished potential value of this relationship to us. In addition, we and Honeywell may not be able to agree on activities and endeavors to pursue under the Joint Development Agreement, activities under the Joint Development may not be successful, or the Patent License Agreement may have limited value to us.

SBE, Honeywell, and any other business partners in the future, may have economic, business or legal interests or goals that are inconsistent with our goals. Any disagreements with our current or other future business partners may impede our ability to maximize the benefits of these partnerships and slow the commercialization of our iron-flow batteries. Future commercial or strategic counterparties may require us, among other things, to pay certain costs or to make certain capital investments or to seek their consent to take certain actions. In addition, if our business partners are unable or unwilling to meet sourcing, development, or other obligations under our partnership arrangements, we may be required to fulfill those obligations alone. These factors could result in a material adverse effect on our business and financial results.

The execution of our strategy to expand into new markets through strategic partnerships, joint ventures and licensing arrangements is in a very early stage and is also subject to various risks which could adversely affect our business and future prospects.

We may enter into strategic partnerships, joint ventures and licensing arrangements to expand our business and enter into new markets. However, there is no assurance that we will be able to consummate any such arrangements as contemplated to commercialize our energy storage products. There is also no assurance that we will be able to realize the benefits of any such arrangements even if we do enter into such strategic partnerships, joint ventures and licensing arrangements and there is always a risk that either party may be unable to comply with its delivery, payment, or other obligations under any such arrangement. The occurrence of any such risks may result in diminished potential value of these types of relationships to us. For example, we entered into a strategic partnership with Energy Storage Industries Asia Pacific ("ESI") in August 2022 and into a framework agreement with Sacramento Municipal Utility District ("SMUD") in September 2022. Under the terms of our agreement with ESI, we commenced delivery of Energy Warehouse systems to ESI in 2022 and early 2023 and expect to continue deliveries in 2024 to fulfill their orders. ESI is expected to construct a manufacturing facility in Queensland, Australia, equipped to conduct final assembly of our systems from 2025 onward; however, ESI may be delayed or unable to complete construction of the manufacturing facility or may cancel or decline to place future orders of our product, whether due to funding constraints or other reasons, which may require ESS to find alternative arrangements to addressing the market, such as supplying products directly or identifying alternative in-country facilities. We made the first delivery of our systems to SMUD during the second quarter of 2023, but SMUD is under no obligation to place additional orders with us.

Any future strategic partnerships, joint ventures or licensing arrangements may require us, among other things, to pay certain costs, make certain capital investments or to seek the partner's consent to take certain actions. In addition, if a partner is unable or unwilling to meet its economic or other obligations under the respective arrangements, we may be required to either fulfill those obligations alone to ensure the ongoing success of, or to dissolve and liquidate, the partnership, joint venture or licensing arrangement. These factors could result in a material adverse effect on our business, prospects and financial results.

Risks Related to Our Business and Industry

Our expectations for future operating and financial results and market growth rely in large part upon assumptions and analyses developed by us. If these assumptions or analyses prove to be incorrect, our actual operating results may be materially different from our anticipated results.

We operate in rapidly changing and competitive markets and our expectations for future performance are subject to the risks and assumptions made by management with respect to our industry. Operating results are difficult to predict because they generally depend on our assessment of the timing of adoption of our technology and energy storage products, which is uncertain. Expectations for future performance are also subject to significant economic, competitive, industry and other uncertainties and contingencies, all of which are difficult or impossible to predict and many of which are beyond our control, and subsequent developments may affect such expectations. As discussed elsewhere in this Quarterly Report on Form 10-Q, any future sales and related future cash flows may not be realized in full or at all. Furthermore, our planned expansion into new revenue streams such as franchising opportunities for our energy storage products may never be realized or achieve commercial success, whether because of lack of market adoption of our energy storage products, competition or otherwise. Important factors that may affect the actual results and cause our operating and financial results and market growth expectations to not be achieved include risks and uncertainties relating to our business, industry performance, the regulatory environment, general business and economic conditions and other factors described under the section entitled "Cautionary Note Regarding Forward-Looking Statements" in this Quarterly Report on Form 10-Q.

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In addition, expectations for future performance also reflect assumptions that are subject to change and do not reflect revised prospects for our business, changes in general business or economic conditions or any other transaction or event that has occurred or that may occur and that was not previously anticipated. In addition, long-term expectations by their nature become less predictive with each successive year. There can be no assurance that our future financial condition or results of operations will be consistent with our expectations or with the expectations of investors or securities research analysts, which may cause the market price of our common stock to decline. If actual results differ materially from our expectations, we may be required to make adjustments in our business operations that may have a material adverse effect on our financial condition and results of operations.

We have a history of losses and have to deliver significant business growth to achieve sustained, long-term profitability and long-term commercial success.

We have had net losses on a U.S. GAAP basis in each fiscal year since our inception. For the three months ended March 31, 2024 and March 31, 2023, we had \$18.3 million and \$21.9 million in net losses, respectively, and as of March 31, 2024 we had \$714.5 million in accumulated deficit. In order to achieve profitability as well as long-term commercial success, we must continue to execute our plan to expand our business, which will require us to deliver on our existing global sales pipeline in a timely manner, increase our production capacity, reduce our manufacturing and warranty costs, competitively price and grow demand for our products, and seize new market opportunities by leveraging our proprietary technology and our manufacturing processes for novel solutions and new products. Failure to do one or more of these things could prevent us from achieving sustained, long-term profitability.

We expect, based on our sales pipeline, to grow revenues. However, our revenue may not grow as expected for a number of reasons, many of which are outside of our control, including a decline in global demand for iron flow battery storage products, increased competition, or our failure to continue to capitalize on growth opportunities. If we are not able to generate and grow revenue and raise the capital necessary to support our operations, we may be unable to continue as a going concern.

There is no assurance nonbinding pre-orders or framework agreements will be converted into binding orders or that orders will be completed.

Our business model is focused on building relationships with large customers. To date, we have engaged in limited marketing activities and we have only a limited number of contracts with customers. Certain of our energy storage products are still subject to further design evolution and until the time that the design and development of our energy storage products stabilizes, and until we are able to scale up our marketing function to support sales, there will be uncertainty as to customer demand for our energy storage products. Demand for our energy storage products by independent energy developers may depend upon a bankability determination by institutional sources of project finance capital and that determination may be difficult to obtain. The potentially long wait from the time an order is made until the time our energy storage products are delivered, and any delays beyond expected wait times, could also impact user decisions on whether to ultimately make a purchase. There is no assurance that nonbinding pre-orders or framework agreements will be converted into binding orders or sales. Even if we are able to obtain binding orders, customers may limit their volume of purchases initially as they assess our products and whether to make a broader transition to our energy storage products. This may be a long process and will depend on the safety, reliability, efficiency and quality of our energy storage products, as well as the support and service that we offer. It will also depend on factors outside of our control, such as general market conditions and site capacity, that could impact customer buying decisions. As a result, there is significant uncertainty regarding demand for our energy storage products and the pace and levels of growth that we will be able to achieve.

In addition, some of the Energy Warehouse units we have shipped to date have not met the specifications set forth in the purchase contracts for such units, resulting in additional installation time and costs in order to receive customer acceptance of such units. If we are unable to meet contractual performance specifications of our units, customers may bring claims against us or choose to cancel or postpone orders, which would adversely affect our business, financial condition and results of operations.

Our warranty insurance provided by Munich Re is important to many potential customers. Should we be unable to maintain our relationship with Munich Re and be unable to find a similar replacement, demand for our products may suffer.

Our business is substantially dependent on our relationship with Munich Re. Our warranty insurance provided by Munich Re is important to many potential customers, and such warranty insurance is a bespoke product not widely offered by multiple insurers. There is no assurance that we will be able to maintain our relationship with Munich Re. If Munich Re terminates or significantly alters its relationship with us in a manner that is adverse to the Company, our business would be materially adversely affected. Similarly, if we are unable to maintain our relationship with Munich Re, or if our

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arrangement with Munich Re is modified so that the economic terms become less favorable to us, we may be unable to find a similar replacement warranty insurance and our business would be materially adversely affected.

Failure to deliver the benefits offered by our technology, or the emergence of improvements to competing technologies, could reduce demand for our energy storage products and harm our business.

We believe that, compared to lithium-ion batteries, our energy storage solutions offer significant benefits, including using widely available, low-cost materials with no rare mineral components, being substantially recyclable at end-of-life, having an approximately 25-year product design life, and having a wide thermal operating range that reduces the need for fire suppression and heating (except where otherwise required by applicable law), ventilation and air conditioning equipment, which would otherwise be required for use with lithium-ion batteries.

However, if our manufacturing costs increase, or if our or our customers' expectations regarding the operation, performance, maintenance and disposal of our energy storage products are not realized, then we could have difficulty marketing our energy storage products as a superior alternative to already-established technologies. This would also impact the market reputation and adoptability of our energy storage products.

We also currently market our energy storage products as having superior design cyclability to other energy storage solutions on the market. However, in general, flow batteries have suffered challenges running multiple cycles over their lifetime without experiencing degradation in storage capacity and, in particular, earlier iterations of our iron flow batteries, specifically our first-generation units, have failed at cycling reliably in the past. All of our first-generation units (except for one) have been returned to us and so the continuing risk of product failure on our first-generation units is limited. However, there is no assurance that our second-generation units will not fail or have issues cycling in the future if our technology does not operate as expected. If our technology is inadequate or our energy storage solutions fail to operate as expected or designed, our warranty costs may be significant and current and potential customers may choose to cancel or postpone orders or seek alternative solutions for their energy storage needs, which would adversely affect our business, financial condition and results of operations.

In addition, developments of existing and new technologies could improve the cost and usability profile of such alternative technologies, reducing any relative benefits currently offered by our energy storage products, which would negatively impact the likelihood of our energy storage products gaining market acceptance.

Our plans are dependent on the development of market acceptance of our products.

Our plans are dependent upon market acceptance of our products. Iron flow batteries represent an emerging market, and we cannot be sure that potential customers will accept iron flow batteries as a replacement for traditional power sources. In particular, traditional lithium-ion batteries, which are already produced on a large global scale and have widespread market acceptance, offer higher power density and round-trip efficiency than our iron flow batteries. If customers were to place greater value on power density and round-trip efficiency over what we believe to be the numerous other advantages of our technology, then we could have difficulty positioning our iron flow batteries as a viable alternative to traditional lithium-ion batteries and our business would suffer.

As is typical in a rapidly evolving industry, demand and market acceptance for recently introduced products and services are subject to a high level of uncertainty and risk. It is difficult to predict with certainty the size of the energy storage market and its growth rate. The development of a market for our products may be affected by many factors that are out of our control, including:

- the cost competitiveness of our products including availability and output expectations and total cost of ownership;
- the future costs associated with renewable energies;
- perceived complexity and novelty of our technology and customer reluctance to try a new product;
- the market for energy storage solutions and government policies that affect those markets;
- government incentives, mandates or other programs favoring zero carbon energy sources;
- local permitting and environmental requirements;
- customer preference for lithium-ion based technologies, including but not limited to the power density offered by lithium-ion batteries; and
- the emergence of newer, more competitive technologies and products.

If a sufficient market fails to develop or develops more slowly than we anticipate, we may be unable to recover the losses we will have incurred in the development of our products, and we may never achieve profitability.

Our future growth and success depend on our ability to sell effectively to large customers.

Many of our potential customers are electric utilities and C&I businesses that tend to be large enterprises. Therefore, our future success will depend on our ability to effectively sell and deliver our products to such large customers. Sales to these end-customers involve risks that may not be present (or that are present to a lesser extent) with sales to smaller customers. These risks include, but are not limited to, (i) increased purchasing power and leverage held by large customers in negotiating contractual arrangements with us and (ii) longer sales cycles and the associated risk that substantial time and resources may be spent on a potential end customer that elects not to purchase our solutions.

Large organizations often undertake a significant evaluation process that results in a lengthy sales cycle. In addition, product purchases by large organizations are frequently subject to budget constraints, multiple approvals and unanticipated administrative, processing and other delays. Finally, large organizations typically have longer implementation cycles, require greater product functionality and scalability, require a broader range of services, demand that vendors take on a larger share of risks, and expect greater payment flexibility. All of these factors can add further risk to business conducted with these potential customers.

We operate in highly competitive energy industries and there is increasing competition. Many of our competitors and potential competitors have substantially greater financial, marketing, personnel and other resources than we do and if we do not compete effectively, our competitive positioning and our operating results will be harmed.

The energy storage markets continue to evolve and are highly competitive. Many of our current and potential competitors are large entities at a more advanced stage in development and commercialization than we are and, in some cases, have substantially greater financial, marketing, personnel and other resources, to increase their market share. Our key competitors include different energy storage technologies such as lithium-ion batteries, lithium metal batteries, vanadium or zinc bromine batteries, sodium sulfur batteries, compressed air, hydrogen, fuel cell and pumped-storage hydropower. If our competitors continue to penetrate the energy storage market, our prospects for gaining market share will be diminished.

We expect competition in energy storage technology to intensify due to a regulatory push for lower-carbon energy sources, including intermittent sources such as wind and solar, continuing globalization, and consolidation in the energy industry. Developments in alternative technologies or improvements in energy storage technology made by competitors may materially adversely affect the sales, pricing and gross margins of our products.

Some of our current and potential competitors have longer operating histories and greater financial, technical, marketing and other resources than we do. These factors may allow our competitors to respond more quickly or efficiently than we can to new or emerging technologies. These competitors may engage in more extensive research and development efforts, undertake more far-reaching marketing campaigns and adopt more aggressive pricing policies, which may allow them to more effectively compete for new energy storage projects and customers.

Our project awards and sales pipeline may not convert to contracts or may be delayed, which may have a material adverse effect on our revenue and cash flows.

We expect a significant portion of the business that we will seek in the foreseeable future will be awarded through competitive bidding against other energy storage technologies and other forms of power generation. The competitive bidding process involves substantial costs and a number of risks, including the significant cost and managerial time to prepare bids and proposals for contracts that may not be awarded to us and our failure to accurately estimate the resources and costs that will be required to fulfill any contract we win. In addition, following a contract award, we may encounter significant expense, delay or contract modifications or award revocation as a result of our competitors protesting or challenging contracts awarded to us in competitive bidding. Our failure to compete effectively in this procurement environment could adversely affect our revenue and/or profitability.

Some of the project awards we receive and orders we accept from customers require certain conditions or contingencies (such as permitting, interconnection, financing or regulatory approval) to be satisfied, some of which are outside of our control. Certain awards are cancellable or revocable at any time prior to contract execution. The time periods from receipt of an award to execution of a contract, or receipt of a contract to installation may vary widely and are determined by a number of factors, including the terms of the award, governmental policies or regulations that go into effect after the award, the terms of the customer contract and the customer's site requirements. These same or similar conditions and contingencies may be required by financiers in order to draw on financing to complete a project. If these conditions or contingencies are not satisfied, or changes in laws affecting project awards occur, or awards are revoked or cancelled, project awards may not convert to contracts, and installations may be delayed or canceled. In addition, contracted customers may have specific site requirements and interface technology or experience delays in preparing their site for equipment installation, which has caused, and in the future may continue to cause, delays with respect to delivery and installation and potentially our ability to recognize revenue. This could have an adverse impact on our revenue and cash flow and our ability to complete construction of a project.

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We also bear the risk of non-payment or late payments by our customers. In the near term, we will depend on a relatively small number of customers for a significant portion of our revenue. If these customers fail to pay us, cash flow from operations are impacted and our operating results and financial condition could be harmed. If a contract is cancelled due to the customer's inability to pay, the redeployment of our product(s) could be expensive, and it may take time to find a replacement customer to whom our product(s) could be redeployed in a cost-effective manner.

Our contracted sales are subject to the risk of termination by the contracting party.

The majority of our commercial contracts contain provisions which allow the customer to terminate an agreement if certain conditions are not met, including the failure to meet performance specifications or for other defaults, or for extended force majeure. Our customers are also subject to force majeure events and may issue such notices to us. In addition, certain of our contracts can be terminated by the customer simply for convenience. Our older contracts in particular may contain terms or performance obligations with which we are not able to comply, in addition to reflecting site and solution needs that are not optimal for our technology. We have experienced in the past, and may experience in the future, order cancellations or contract terminations, which could have an adverse impact on our revenues, longer term potential and market reputation, which would have an even greater impact on our ability to achieve future sales.

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

We are a company with a limited operating history. Having only recently transitioned from research and development activities to commencing commercial production and sales, 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 expectations of our demand to our current and future suppliers prior to the scheduled delivery of products to potential customers. Currently, there is limited historical basis for making judgments on the demand for our products and services or our ability to develop, manufacture, and deliver iron flow batteries, or our profitability in the future. If we overestimate our requirements, our suppliers may have excess inventory, which indirectly would increase our costs. If we underestimate our manufacturing requirements, our suppliers may have inadequate inventory or capacity, which could interrupt manufacturing of our products and result in delays in shipments and revenues. In addition, lead times for materials and components that our suppliers order may vary significantly and depend on factors such as the specific supplier, contract terms and demand for each component at a given time. If we fail to order sufficient quantities of product components in a timely manner, the delivery of batteries to our potential customers could be delayed, which would harm our business, financial condition and results of operations.

If we fail to manage our growth effectively, we may be unable to execute our business plan, maintain high levels of customer service, or adequately address competitive challenges.

We have experienced growth in customer contracts in recent periods and intend to continue to expand our business significantly within existing and new markets. This growth has placed, and any future growth may place, a significant strain on management, operational, and financial infrastructure. In particular, we will be required to expand, train, and manage our growing employee base and scale and otherwise improve our information technology ("IT") infrastructure in tandem with that headcount growth. Management will also be required to maintain and expand our relationships with customers, suppliers, and other third parties and attract new customers and suppliers, as well as manage multiple geographic locations.

Our current and planned operations, personnel, customer support, IT, information systems, and other systems and procedures might be inadequate to support future growth and may require us to make additional unanticipated investment in our infrastructure. Our success and ability to scale our business will depend, in part, on our ability to manage these changes in a cost-effective and efficient manner. If we cannot manage our growth, then we may be unable to take advantage of market opportunities, execute our business strategies, or respond to competitive pressures. This could also result in declines in quality or customer satisfaction, increased costs, difficulties in introducing new offerings, or other operational difficulties. Any failure to effectively manage growth could adversely impact our business and reputation.

We have signed product sales contracts and have entered into service agreements with customers. If we do not meet the obligations under these agreements or if our estimates of the projected useful life of our energy storage products are inaccurate, our business and financial results could be adversely affected.

We have entered into service agreements with certain customers for our energy storage products with terms of up to 25 years. Under the provisions of these contracts, we will provide services to maintain, monitor, and repair our energy storage products to meet minimum operating levels. While we have conducted tests to determine the overall life of our energy storage products, we have not run certain of our energy storage products over their projected useful life or in all potential conditions prior to large scale commercialization. As a result, we cannot be sure that these energy storage products will last

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to their expected useful life or perform as anticipated in all conditions, which could result in warranty claims, performance penalties, maintenance, on-going servicing and battery module replacement costs and/or a negative perception of our energy storage products.

Further, the occurrence of chronic defects or other chronic performance problems with respect to our deployed energy storage products could result in loss of customers, legal claims, including warranty and service agreement claims, or diversion of our resources, including through increased service and warranty expenses or financial concessions, and increased insurance costs. The costs incurred in correcting any material defects in our deployed energy storage products may be substantial and could adversely affect our business, financial condition, and results of operations.

Our customers also depend on our support organization to resolve performance issues relating to our energy storage products. Any failure to maintain high-quality support services, or a market perception that we do not maintain high-quality and highly responsive customer support, could adversely affect our reputation, our ability to sell our energy storage products to existing and prospective customers, and our business, financial condition and results of operations.

Our ability to proceed with projects under development and complete construction of projects on schedule and within budget are subject to contractual, technology, operating and commodity risks as well as market conditions that may affect our operating results.

Our ability to proceed with projects under development and complete construction of projects on schedule and within budget may be adversely affected by escalating costs and lead times for materials and components, tariffs, labor and regulatory compliance, inability to obtain necessary permits, interconnections or other approvals on acceptable terms or on schedule and by other factors. If any development project or construction is not completed, is delayed or is subject to cost overruns, we could become obligated to make delay or termination payments or become obligated for other damages under contracts, experience diminished returns or write off all or a portion of our capitalized costs in the project. Each of these events could have an adverse effect on our business, financial condition and results of operations. We currently face and will continue to face significant competition, including from products using other energy sources that may be lower priced or have preferred environmental characteristics.

We compete on the basis of our energy storage products' reliability, efficiency, environmental sustainability and cost. Technological advances in alternative energy products, improvements in the electric grid or other sources of power generation, or new battery technologies or market entrants may negatively affect the development or sale of some or all of our energy storage products or make our energy storage products less economically attractive, non-competitive or obsolete prior to or after commercialization. Significant decreases in the price of alternative technologies, or significant increases in the price of the materials we use to build our energy storage products could have a material adverse effect on our business because other generation sources could be more economically attractive to consumers than our energy storage products.

We invest significantly in research and development, and to the extent our research and development investments are not directed efficiently or do not result in material enhancements to our products and technologies, our business and results of operations would be harmed.

A key element of our strategy is to invest significantly in our research and development efforts to enhance the features, functionality, performance and ease of use of our products and technologies to address additional applications that will broaden the appeal of our products and technologies and facilitate their broad use. Research and development projects can be technically challenging and expensive. As a result of the nature of research and development cycles, there will be delays between the time we incur expenses associated with research and development activities and the time we are able to offer compelling enhancements to our products and technologies and generate revenue, if any, from those activities. If we expend a significant amount of resources on research and development efforts that do not lead to the successful introduction of new products, functionality or improvements that are competitive in our current or future markets, our business and results of operations will suffer.

The loss of one or more members of our senior management team and other key personnel or our failure to attract and retain qualified personnel may adversely affect our business and our ability to achieve our anticipated level of growth.

We depend on the continued services of our senior management team and other key personnel, each of whom would be difficult to replace. The loss of any such personnel, or the inability to effectively transition to their successors, could have a material adverse effect on our business and our ability to implement our business strategy. All of our employees, including our senior management, are free to terminate their employment relationships with us at any time. Any changes to our senior management team, including hires or departures, could cause disruption to our business and have a negative impact on operating performance, while these operational areas are in transition.

Additionally, our ability to attract qualified personnel, including senior management and key technical personnel, is critical to the execution of our growth strategy. Competition in the labor market, including for qualified senior management personnel and highly skilled individuals with technical expertise, is intense. We face and are likely to continue to face

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challenges identifying, hiring, and retaining qualified personnel in all areas of our business, and we can provide no assurance that we will find suitable successors as transitions occur. In addition, integrating new employees into our team, and key personnel in particular, could prove disruptive to our operations, require substantial resources and management attention, and ultimately prove unsuccessful. Our failure to attract and retain qualified personnel in all areas of our business, including senior management and other key technical personnel, could limit or delay our strategic efforts, which could have a material adverse effect on our business, financial condition and results of operations.

Our results of operations may fluctuate from quarter to quarter, which could make our future performance difficult to predict and could cause our results of operations for a particular period to fall below expectations, resulting in a decline in the price of our common stock.

Our products take months to manufacture and prepare for delivery and any revenue in future periods may fluctuate based on underlying customer arrangements. Further, we expect our arrangements may have multiple deliverables and performance obligations and the amount and timing of recognizing revenue for those different performance obligations may vary which could cause our revenue to fluctuate. Our revenues also depend on a number of other factors, some of which are beyond our control, including the impact of supply chain issues (see also “—Risks Related to Our Technology, Products and Manufacturing—*We depend on third-party suppliers for the development and supply of key raw materials and components for our energy storage products. We also depend on vendors for the shipping of our energy storage products. Quality issues or delays in our supply or delivery chain and shipments could harm our ability to manufacture, supply and commercialize our energy storage products.*”). As a result, our quarterly results of operations are difficult to predict and may fluctuate significantly in the future.

We currently are and in the foreseeable future will be significantly dependent on a limited number of products.

We currently are and in the foreseeable future will continue to be significantly dependent on revenue generated from our Energy Warehouse and Energy Center products and the servicing thereof while our core component technology productization is under development. Given that for the foreseeable future our business will depend on a limited number of products to the extent our products are not well-received by the market, our sales volume, business, financial condition and results of operations would be materially and adversely affected.

Our cost reduction strategy may not succeed or may be significantly delayed, which may result in our inability to achieve profitability.

Our ability to successfully implement our overall business strategy relies on our ability to reduce development and manufacturing costs in the future. Our cost reduction strategy is based on the assumption that increases in production will result in economies of scale. In addition, our cost reduction strategy relies on advancements in our manufacturing process, global competitive sourcing, engineering design, reducing the cost of capital and technology improvements (including stack life and projected power output). Its successful implementation also depends on a number of factors, some of which are beyond our control, including the impact of inflation and the timely delivery of key supplies at reasonable prices. For example, our current supply imbalance may result in additional costs that exceed our current expectations. There is no assurance that our cost reduction strategy will be successful and failure to achieve our cost reduction targets could have a material adverse effect on our business, financial condition and results of operations.

Our planned expansion into new geographic markets or new product lines or services could subject us to additional business, financial, and competitive risks.

We have entered into contracts and other agreements to sell our products in a number of different geographic markets, including the United States, Europe (European Union (“EU”) and non-EU), Africa, and Australia. We have in the past, and may in the future, evaluate opportunities to expand into new geographic markets and introduce new product offerings and services that are a natural extension of our existing business. We also may from time to time engage in acquisitions of businesses or product lines with the potential to strengthen our market position, enable us to enter attractive markets, expand our technological capabilities, or provide synergy opportunities.

Our success operating in these new geographic or product markets, or in operating any acquired business, will depend on a number of factors, including our ability to develop solutions to address the requirements of the electric utility industry and other applicable regulatory bodies, renewable energy project developers and owners, and C&I end users, our timely qualification and certification of new products, our ability to manage increased manufacturing capacity and production, and our ability to identify and integrate any acquired businesses.

Further, any additional markets that we may enter could have different characteristics from the markets in which we currently sell products, and our success will depend on our ability to adapt properly to these differences. These differences may include regulatory requirements, including tax laws, trade laws, foreign direct investment review regimes, labor regulations, tariffs, export quotas, customs duties, or other trade restrictions, limited or unfavorable intellectual property

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protection, international, political or economic conditions, restrictions on the repatriation of earnings, longer sales cycles, warranty expectations, product return policies and cost, and performance and compatibility requirements. In addition, expanding into new geographic markets will increase our exposure to presently existing and new risks, such as fluctuations in the value of foreign currencies and difficulties and increased expenses in complying with United States and foreign laws, regulations and trade standards, including the Foreign Corrupt Practices Act of 1977, as amended (the "FCPA").

Failure to develop and introduce new products successfully into the market, to successfully integrate acquired businesses or to otherwise manage the risks and challenges associated with our potential expansion into new product and geographic markets, could adversely affect our revenues and our ability to sustain profitability.

Our business and operations may be adversely affected by outbreaks of contagious diseases and other adverse public health developments.

Any outbreaks of contagious diseases and other adverse public health developments in countries where we and our suppliers operate, could have a material and adverse effect on our business, financial condition and results of operations. The worldwide COVID-19 pandemic resulted in, and any future pandemic or adverse public health development may again result in, disruptions to or restrictions on our workforce and facilities or those of our customers, suppliers, or other vendors in our supply chain.

The extent to which such a pandemic would impact our business and our financial results would depend on a variety of factors, which are highly uncertain and cannot be predicted. Such factors may include the geographic spread of the pandemic, the severity of the disease, the duration of the outbreak, the speed at which vaccines or other effective treatment methods are developed, the actions that may be taken by various governmental authorities in response to the outbreak, such as mandatory quarantine or "shelter-in-place" orders and business closures, and the impact on the U.S. or global economy. These and other factors could have a material adverse effect on our business, results of operations and financial position.

We have identified material weaknesses in our internal control over financial reporting in the past, and may identify additional material weaknesses in the future that may cause us to fail to meet our reporting obligations or result in material misstatements of our financial statements. If we fail to remediate any material weaknesses or if we otherwise fail to establish and maintain effective control over financial reporting, our ability to accurately and timely report our financial results could be adversely affected.

As a public company, we are required to comply with the SEC's rules implementing Sections 302 and 404 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), which requires management to certify financial and other information in our quarterly and annual reports and to provide an annual management report on the effectiveness of controls over financial reporting (see "Part I—Item 4. Controls and Procedures"). When evaluating our internal control over financial reporting, we may identify material weaknesses that we may not be able to remediate in time to meet the applicable deadline for compliance with the requirements of Section 404. If we are unable to identify and remediate material weaknesses, it could result in material misstatements to our annual or interim financial statements that might not be prevented or detected on a timely basis or result in delayed filings of required periodic reports. If we are unable to assert that our internal control over financial reporting is effective, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could be adversely affected and we could become subject to litigation or investigations by the NYSE, the SEC, or other regulatory authorities, which could require additional financial and management resources.

We have in the past identified and remediated material weaknesses in our internal control over financial reporting. Although we review and evaluate our internal control systems on a regular basis, we cannot provide any assurances that the measures that we have taken will be sufficient to prevent future material weaknesses and control deficiencies from occurring. We also cannot assure you that we have identified all of our existing material weaknesses. If further remediation measures are required, they may be time consuming, costly, and might place significant demands on our financial and operational resources.

As deployment of our energy storage products increases, we will undertake corresponding warranty obligations and our warranty obligations may be significant. If our energy storage products do not operate successfully in the field or if we are unable to manage our warranty costs, our business and ability to generate revenue and achieve profitability could fail.

We have experienced quality issues in the field and our products may contain undetected errors or defects, especially when first introduced or when new generations of products are released. Errors, defects, or poor performance can arise due to design flaws, defects in raw materials or components or manufacturing difficulties, which can affect the quality of our products. Any actual or perceived errors, defects, or poor performance in our products could result in repair costs or the replacement or recall of our products, shipment delays, rejection of our products, damage to our reputation, lost revenue,

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diversion of our personnel from our operational efforts, and increases in customer service and support costs, all of which could have a material adverse effect on our business, financial condition, and results of operations.

Furthermore, defective components may give rise to warranty, indemnity, or product liability claims against us that exceed any revenue or profit we receive from the affected products. Our product generally comes with an initial one-year manufacturing warranty. We also offer customers an extended performance warranty at an additional cost to the customer. For extended warranties, this may require system augmentation or replacements, which would be provided at no additional charge beyond the price of the extended warranty paid by such customer.

While we have accrued reserves for warranty claims, our estimated warranty costs for previously sold products may change to the extent future products are not compatible with earlier generation products under warranty. Our warranty accruals are based on various assumptions, which are based on a short operating history. As a result, these assumptions could prove to be materially different from the actual performance of our systems, causing us to incur substantial unanticipated expenses to repair or replace defective products in the future or to compensate customers for defective products. Our failure to accurately predict future claims could result in unexpected volatility in, and have a material adverse effect on, our financial condition.

Defects or performance problems in our products could result in loss of customers, reputational damage, and decreased revenue, and we may face warranty, indemnity, and product liability claims that may arise from defective products.

We may become subject to product liability claims, even those without merit due to product tampering or operation and maintenance in violation of operating manuals, which could harm our business, financial condition and results of operations. We face inherent risk of exposure to claims in the event our batteries do not perform as expected or malfunction resulting in personal injury or death. Our risks in this area are particularly pronounced given our products have not yet been commercially tested at scale or mass produced. Although we seek to limit our liability, a product liability claim brought against us, even if unsuccessful, would likely be time consuming, costly to defend, and may hurt our reputation in the marketplace. A successful product liability claim against us could require us to pay a substantial monetary award. Moreover, a product liability claim could generate substantial negative publicity about our products and business and inhibit or prevent commercialization of other future battery candidates, which would have a material adverse effect on our brand, business, prospects and operating results. Any insurance coverage might not be sufficient to cover all potential product liability claims. Any lawsuit seeking significant monetary damages either in excess of our coverage, or outside of our coverage, may have a material adverse effect on our reputation, business and financial condition. We may not be able to secure additional product liability insurance coverage on commercially acceptable terms or at reasonable costs when needed, particularly if we do face liability for our products and are forced to make a claim under our policy.

In addition, as we grow our manufacturing volume, the chance of manufacturing defects could increase. We may be unable to correct manufacturing defects or other failures of our components and the products in which they are incorporated in a manner satisfactory to our customers, which could adversely affect customer satisfaction, market acceptance and our business reputation.

Third parties might attempt to gain unauthorized access to our network or seek to compromise our products and services.

Our business is dependent on the security and efficacy of our networks and computer and data management systems. For example, our Energy Warehouse products are connected to and controlled and monitored by our centralized remote monitoring service, and we rely on our internal computer networks for many of the systems we use to operate our business generally. From time to time, we may face attempts by others to gain unauthorized access through the Internet or otherwise or to introduce malicious software to our IT systems. We or our products may be a target of computer hackers, organizations or malicious attackers who attempt to:

- gain access to our network or products or networks of our customers;
- steal proprietary information related to our business, products, employees, and customers; or
- interrupt our systems or those of our customers.

From time to time, we encounter attempts at gaining unauthorized access to our network and we routinely run security checks. While we seek to detect and investigate unauthorized attempts and attacks against our network and products of which we become aware, and to prevent their recurrence where practicable through changes to our internal processes and tools and/or changes to our products, we remain potentially vulnerable to additional known or unknown threats. In addition to intentional security breaches, the integrity and confidentiality of company and customer data and our intellectual property may be compromised as a result of human error, product defects, or technological failures. Different geographic markets may have different regulations regarding data protection, raising potential compliance risks. We utilize third-party contractors to perform certain functions for us, and they face security risks similar to us. Further, retaliatory acts by Russia

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in response to Western sanctions could include cyber attacks that could disrupt the economy more generally or that could also impact our operations directly or indirectly.

Any failure or perceived failure by us or our service providers to prevent information security breaches or other incidents or system disruptions, or any compromise of security that results in or is perceived or reported to result in unauthorized access to, or loss, theft, alteration, release or transfer of, our information, or any personal information, confidential information, or other data could result in loss or theft of proprietary or sensitive data and intellectual property, could harm our reputation and competitive position and could expose us to legal claims, regulatory investigations and proceedings, and fines, penalties, and other liability. Any such actual or perceived security breach, incident or system disruption could also divert the efforts of our personnel, and could require us to incur significant costs and operational consequences in connection with investigating, remediating, eliminating and putting in place additional tools, devices, policies, and other measures designed to prevent actual or perceived security breaches and other incidents and system disruptions, and in, for example, rebuilding internal systems, reduced inventory value, providing modifications to our products and services, defending against claims and litigation, responding to regulatory inquiries or actions, paying damages, or taking other remedial steps with respect to third parties. Moreover, we could be required or otherwise find it appropriate to expend significant capital and other resources to respond to, notify third parties of, and otherwise address the incident or breach and its root cause, and to notify individuals, regulatory authorities and others of security breaches involving certain types of data.

Further, we cannot assure that any limitations of liability provisions in our current or future contracts that may be applicable would be enforceable or adequate or would otherwise protect us from any liabilities or damages with respect to any particular claim relating to a security breach or other security-related matter. We also cannot be sure that our existing insurance coverage will continue to be available on acceptable terms or will be available in sufficient amounts to cover claims related to a security breach or incident, or that the insurer will not deny coverage as to any future claim. The successful assertion of claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, including our financial condition, operating results, and reputation.

The failure or breach of our IT systems could affect our sales and operations.

The availability and effectiveness of our energy storage products and our ability to conduct our business and operations, depend on the continued operation of IT and communications systems, some of which we have yet to develop or otherwise obtain the ability to use. Systems used in our business will be vulnerable to damage or interruption. Such systems could also be subject to break-ins, sabotage and intentional acts of vandalism, as well as disruptions and security incidents as a result of non-technical issues, including intentional or inadvertent acts or omissions by employees, service providers, or others. We expect to face significant challenges with respect to information security and maintaining the security and integrity of our systems and other systems used in our business, as well as with respect to the data stored on or processed by these systems. We also anticipate storing and otherwise processing confidential business information of ourselves and third parties, as well as personal information and other data. Advances in technology, an increased level of sophistication and expertise of hackers, and new discoveries in the field of cryptography can result in a compromise or breach of the systems used in our business or of security measures used in our business to protect confidential information, personal information, and other data. We may be a target for attacks by state-sponsored actors and others designed to disrupt our operations or to attempt to gain access to our systems or to data that is processed or maintained in our business.

We use outsourced service providers to help provide certain services. For example, we utilize email and collaboration tools, and other third-party services and service providers that store or otherwise process information, including personal information and confidential business information, on our behalf. Any such outsourced service providers face similar security and system disruption risks as us. We are at risk for interruptions, outages and breaches of our and our outsourced vendors' and service providers' operational systems and security systems, our products' and services' integrated software and technology, and customer data that we or our third-party service providers process. These may be caused by, among other causes, physical theft, viruses or other malicious code, denial or degradation of service attacks, ransomware, social engineering schemes, and insider theft or misuse. While we take steps to review security protections of services provided to us, there can be no guarantee that a failure or breach of such systems will not occur or be perceived to occur. If such failures were to occur, we may not be able to sufficiently recover to avoid the loss of data or any adverse impact on our operations that are dependent on such IT systems. This could result in lost sales as we may not be able to meet the demands for our product, and other harm to our business and results of operations. Further, some of the systems used in our business will not be fully redundant, and our disaster recovery planning cannot account for all eventualities. Any security breaches or incidents or other damage to or disruptions to any data centers or other systems used in our business could result in lengthy interruptions in our service and may adversely affect our business, prospects, financial condition and operating results.

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Furthermore, because our IT systems are essential for the exchange of information both internally and in communicating with third parties, including our suppliers and manufacturers, security breaches or incidents could lead to unauthorized acquisition or unauthorized release of sensitive, confidential or personal data or information, improper use of our systems, or unauthorized access, use, disclosure, modification or destruction of information or defective products. Our IT systems also help us produce financial information. We have not, to date, been materially impacted by a cybersecurity incident or cybersecurity risk. However, any disruption, security breach, or other incident could impact our ability to produce timely and accurate financial information needed for compliance, audit, and reporting purposes. If any such security breaches or incidents were to continue, our operations and ability to communicate both internally and with third parties may be negatively impacted.

Significant capital and other resources may be required in efforts to protect against security breaches, incidents, and system disruptions, or to alleviate problems caused by actual or suspected security breaches and other incidents and system disruptions. The resources required may increase over time as the methods used by hackers and others engaged in online criminal activities and otherwise seeking to obtain unauthorized access to systems or data, and to disrupt systems, are increasingly sophisticated and constantly evolving. In addition, laws, regulations, government guidance, and industry standards and practices in the United States and elsewhere are rapidly evolving to combat these threats. We may face increased compliance burdens regarding such requirements with regulators and customers regarding our products and services and also incur additional costs for oversight and monitoring of our supply chain. We also cannot be certain that these systems, networks, and other infrastructure or technology upon which we rely, including those of our third-party suppliers or service providers, will be effectively implemented, maintained or expanded as planned, or will be free from bugs, defects, errors, vulnerabilities, viruses, or malicious code. We may be required to expend significant resources to make corrections or to remediate issues that are identified or to find alternative sources. Any of these circumstances potentially could have a negative impact on our business, prospects, financial condition and operating results.

We may not be able to identify or complete transactions with attractive acquisition candidates. Future acquisitions may result in significant transaction expenses and we may incur significant costs.

We may from time to time selectively pursue on an opportunistic basis acquisitions of additional businesses that complement our existing business and footprint. The success of any such growth strategy would depend, in part, on selecting strategic acquisition candidates at attractive prices and effectively integrating their businesses into our own, including with respect to financial reporting and regulatory matters. There can be no assurance that we will be able to identify attractive acquisition candidates or complete the acquisition of any identified candidates at favorable prices and upon advantageous terms and conditions, including financing alternatives. In addition, general economic conditions or unfavorable capital and credit markets could affect the timing and extent to which we can successfully acquire new businesses, which could limit our revenues and profitability.

Our facilities or operations could be damaged or adversely affected as a result of natural disasters and other catastrophic events.

Our facilities or operations could be adversely affected by events outside of our control, such as natural disasters, wars, health epidemics and other calamities. We cannot assure you that any backup systems will be adequate to protect our facilities or operations from the effects of fire, floods, typhoons, earthquakes, power loss, telecommunications failures, break-ins, war, riots, terrorist attacks or similar events. Any of the foregoing events may give rise to interruptions, breakdowns, system failures, technology platform failures or internet failures, which could cause the loss or corruption of data or malfunctions of software or hardware as well as adversely affect our ability to provide services.

We may not have sufficient insurance coverage to cover business continuity.

A sustained or repeated interruption in the manufacturing of our products due to labor shortage, fire, flood, war, pandemic, natural disasters, regulatory requirements, and similar unforeseen events beyond our control may interfere with our ability to manufacture our products and fulfil customers' demands in a timely manner, and make it difficult, or in certain cases, impossible for us to continue our business for a substantial period of time. Failure to manufacture our products and meet customer demands would impair our ability to generate revenues which would adversely affect our financial results. We currently do not have a formal disaster recovery or business continuity plan in place and any disaster recovery and business continuity plans that we may put in place may prove inadequate in the event of a serious disaster or similar event. As part of our risk management, we maintain insurance coverage for our business. However, we cannot assure you that the amount of insurance will be sufficient to satisfy any damages or losses we may incur. If our insurance coverage is not sufficient, we may incur substantial expenses, which, could have a material adverse effect on our business.

Changes in the global trade environment, including the imposition of import tariffs, could adversely affect the amount or timing of our revenues, results of operations or cash flows.

Our current supply chain includes Chinese sources for various parts. Escalating trade tensions, particularly between the United States and China have led to increased tariffs and trade restrictions, including tariffs applicable to certain electronic materials and components of our products.

Tariffs and the possibility of additional tariffs in the future have created uncertainty, particularly if we are not able to second source parts from alternative vendors. There can be no guaranty that these developments will not negatively impact the price of the positive electrode used in our products. Additionally, existing or future tariffs may negatively affect key customers and suppliers, and other supply chain partners. Such outcomes could adversely affect the amount or timing of our revenues, results of operations or cash flows, and continuing uncertainty could cause sales volatility, price fluctuations or supply shortages or cause our customers to advance or delay their purchase of our products.

We are in the process of qualifying alternative sources but anticipate it will take time before alternate sources are qualified for every component. In addition, such sources may charge a higher cost than our current suppliers, which would negatively impact our results of operations. There is no guaranty that we will be able to identify alternate suppliers that meet our quality, volume and price requirements. Failure to meet these requirements could result in supply disruptions and increased costs. It is difficult to predict what further trade-related actions governments may take, which may include additional or increased tariffs and trade restrictions, and we may be unable to react to such actions quickly and effectively, which could result in supply shortages and increased costs.

We could be subject to foreign exchange risk.

Our international sales are typically denominated in U.S. dollars. As a result, we will not have significant direct exposure to currency valuation exchange rate fluctuations. However, because our products are sold internationally, our products may be at a price disadvantage as compared with other non-U.S. suppliers if the U.S. dollar appreciates relative to other major foreign currencies. This could lead to our having to lower prices or our struggling to compete for international customers. Consequently, currency fluctuations, in particular, a strengthening of the U.S. dollar, could adversely affect the competitiveness of our products in international markets.

We may be required to take write-downs or write-offs, restructuring and impairment or other charges that could have a significant negative effect on our financial condition, results of operations and stock price, which could cause you to lose some or all of your investment.

Unexpected risks may arise that cause us to write-down or write-off assets, restructure our operations, or incur impairment or other charges that could result in losses. Even though these charges may be non-cash items and not have an immediate impact on our liquidity, the fact that we report charges of this nature could contribute to negative market perceptions about us or our securities. In addition, charges of this nature may cause us to violate net worth or other covenants to which we may be subject. Accordingly, our stockholders could suffer a reduction in the value of their shares.

Our results of operations could vary as a result of changes to our accounting policies or the methods, estimates and judgments we use in applying our accounting policies.

The estimates and judgments we use in applying our accounting policies have a significant impact on our results of operations. Such methods, estimates and judgments are, by their nature, subject to substantial risks, uncertainties and assumptions, and factors may arise over time that could lead us to reevaluate our methods, estimates and judgments.

Management regularly evaluates its estimates such as for service agreements, loss accruals, warranty, performance guarantees, liquidated damages and inventory valuation allowances. Changes in those estimates and judgments could significantly affect our financial condition and results of operations. We will also adopt changes required by the Financial Accounting Standards Board and the SEC.

The requirements of being a public company may strain our resources and divert management's attention.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, as well as rules adopted, and to be adopted, by the SEC and the NYSE. Compliance with such public company requirements is costly, time-consuming and complex. We expect management and other personnel to continue to devote a substantial amount of time and resources to these compliance initiatives. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements as they continue to evolve over time. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or as executive officers.

In addition, we may not have adequate personnel with the appropriate level of knowledge, experience and training in the accounting policies, practices or internal controls over financial reporting required of public companies in the United

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States. The development and implementation of the standards and controls necessary for us to achieve the level of accounting standards required of a public company in the United States may require costs greater than expected. It is possible that we will be required to further expand our employee base and hire additional employees to support our operations as a public company, which will increase our operating costs in future periods.

Moreover, our efforts to comply with new and changing laws and regulations related to public disclosure and corporate governance have resulted in increased general and administrative expenses and a diversion of management time and attention. Because these laws, regulations and standards are subject to varying interpretations, their application in practice may evolve over time as new guidance becomes available. This evolution may result in continuing uncertainty regarding compliance matters and additional costs necessitated by ongoing revisions to our disclosure and governance practices. If we fail to address and comply with these regulations and any subsequent changes, we may be subject to penalties and our business may be harmed.

We may engage in transactions with related parties and such transactions present possible conflicts of interest that could have an adverse effect on us.

We may enter into transactions with related parties. Related-party transactions create the possibility of conflicts of interest with regard to management, including that:

- we may enter into contracts between us, on the one hand, and related parties, on the other, that are not as a result of arm's-length transactions;
- our executive officers and directors that hold positions of responsibility with related parties may be aware of certain business opportunities that are appropriate for presentation to us as well as to such other related parties and may present such business opportunities to such other parties; and
- our executive officers and directors that hold positions of responsibility with related parties may have significant duties with, and spend significant time serving, other entities and may have conflicts of interest in allocating time.

Such conflicts could cause such executive officer or director to seek to advance his or her economic interests or the economic interests of certain related parties above ours. Further, the appearance of conflicts of interest created by related-party transactions could impair the confidence of our investors. Our audit committee and our board of directors regularly reviews these transactions. Notwithstanding this, it is possible that a conflict of interest could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Regulatory, Environmental and Legal Issues

We may face regulatory challenges to or limitations on our ability to sell our products directly in certain markets. Expanding operations internationally could expose us to additional risks.

While we intend to continue to sell our products across the United States both directly and through third parties, our ability to continue such sales may be affected by future limitations, either directly to the ability to sell energy storage or by broader regulation related to the sales and operation of distributed energy resources, which could have an impact on our ability to sell our products to the market.

Although we currently primarily operate in the United States, we continue to expand our business internationally. Any expansion internationally could subject our business to risks associated with international operations, including legal and regulatory requirements, political uncertainty and social, environmental and economic conditions in numerous jurisdictions, over which we have little control and which are inherently unpredictable. Our operations in such jurisdictions, particularly as a company based in the United States, create risks relating to conforming our products to regulatory and safety requirements and charging and other electric infrastructures; organizing local operating entities; establishing, staffing and managing foreign business locations; attracting local customers; navigating foreign government taxes, regulations and permit requirements; enforceability of our contractual rights; trade restrictions, foreign direct investment review regimes, customs regulations, tariffs and price or exchange controls; and preferences in foreign nations for domestically manufactured products. Such conditions may increase our costs and tax liabilities, impact our ability to sell our products and require significant management attention, and may harm our business if we are unable to manage them effectively.

In addition, there may be laws in international jurisdictions we have not yet entered or laws we are unaware of in jurisdictions we have entered that may restrict our sales or other business practices. Even for those jurisdictions we have analyzed, the laws in this area can be complex, difficult to interpret and may change over time. Continued regulatory limitations and other obstacles interfering with our ability to sell our energy storage products may harm our business, financial condition and results of operations. Additionally, any regulation that affects the sale or operations of distributed energy resources could diminish the real or perceived value of our energy storage solutions in those markets. As a result of these risks, any potential future international expansion efforts that we may undertake may not be successful.

Our customers may be required to obtain environmental, health and safety or other certifications in order to install our products. If our customers are unable to obtain the necessary certifications, we will not be able to install our products, which would negatively impact our revenues.

While our engineering team has worked closely with the CSA Group, Intertek, UL and Technischer Überwachungsverein certification agencies to obtain certifications of our flow battery products under all applicable safety standards, there is no guarantee that such certifications will continue to be obtained. From our prior certifications, we have expanded our flow battery product certification to the European Conformity marking in the European Union and intend to expand to other international standards such as the International Electrotechnical Commission ("IEC"). Failure to comply with IEC standards may have impact on our revenues, as compliance is required by some of our customers.

We are subject to multiple U.S. federal, state, local and other applicable regulations. Changes in applicable law, regulations or requirements, or our material failure to comply with any of them, can increase our costs and have other negative impacts on our business.

Applicable laws and requirements address multiple aspects of our operations, such as worker safety, consumer rights, privacy, cybersecurity, employee benefits and more, and can often have different requirements in different jurisdictions. Changes in these requirements, or any material failure to comply with them, could increase our costs, affect our reputation, result in claims, litigation, and regulatory investigations or other proceedings, which may result in fines, penalties, and other liabilities, and which may limit our business, drain management's time and attention or otherwise, and generally impact our operations in adverse ways.

We are subject to requirements relating to environmental and safety regulations and environmental remediation matters which could adversely affect our business, results of operation and reputation.

We are subject to numerous federal, state and local environmental laws and regulations governing, among other things, solid and hazardous waste storage, treatment and disposal, and remediation of releases of hazardous materials. There are significant capital, operating and other costs associated with compliance with these environmental laws and regulations. Environmental laws and regulations may become more stringent in the future, which could increase costs of compliance or require us to manufacture with alternative technologies and materials.

Federal, state and local authorities also regulate a variety of matters, including, but not limited to, health, safety and permitting in addition to the environmental matters discussed above. New legislation and regulations may require us to make material changes to our operations, resulting in significant increases to the cost of production.

Our manufacturing process involves hazards such as but not limited to hazardous materials, machines with moving parts, and high voltage and/or high current electrical systems typical of large manufacturing equipment and related safety incidents. There may be environmental or safety incidents that damage machinery or product, slow or stop production, or harm employees. Consequences may include litigation, regulation, fines, increased insurance premiums, mandates to temporarily halt production, workers' compensation claims, or other actions that impact our brand, finances, or ability to operate.

We may be exposed to delays, limitations and risks related to the environmental permits and other operating permits required to operate our products.

Operation of our manufacturing facilities requires land use and environmental permits and other operating permits from federal, state and local government entities. New permits may be required to carry out and perform our current plans and operations at our existing facility, and we may require additional environmental, wastewater and land use permits for the commercial operation of any future manufacturing facilities. Delays, denials or restrictions on any of the applications for or assignment of the permits to operate our manufacturing facilities could adversely affect our ability to execute on our business plans and objectives.

We may collect and process certain information about our customers and about individuals and will be subject to various laws and regulations relating to privacy, data protection and cybersecurity.

We may collect and process certain battery data required for performance monitoring, safety and serviceability. This information is transmitted to our control center and stored. Such data currently is limited to battery operational and safety parameters. Additionally, we collect and otherwise process other data relating to individuals, including business partners, prospects, employees, vendors, and contractors. Our handling of data relating to individuals is subject to a variety of laws and regulations relating to privacy, data protection and cybersecurity, and we may become subject to additional obligations, including contractual obligations, relating to our maintenance and other processing of this data, and new or modified laws or regulations. Laws, regulations, and other actual and potential obligations relating to privacy, data protection, and cybersecurity are evolving rapidly, and we expect to potentially be subject to new laws and regulations, or new interpretations of laws and regulations, in the future in various jurisdictions. These laws, regulations, and other obligations,

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and changes in their interpretation, could require us to modify our operations and practices, restrict our activities, and increase our costs. Further, these laws, regulations, and other obligations are complex and compliance with them can be difficult. It is possible that these laws, regulations, and other obligations may be inconsistent with one another or be interpreted or asserted to be inconsistent with our business or practices. We anticipate needing to dedicate substantial resources in order to comply with laws, regulations, and other obligations relating to privacy and cybersecurity. Any actual or alleged failure by us to comply with our privacy policy or any federal, state or international privacy, data protection or cybersecurity laws or regulations or other obligations could result in claims and litigation against us, regulatory investigations and other proceedings, legal liability, fines, damages and other costs. Any actual or alleged failure by any of our vendors or business partners to comply with contractual or legal obligations regarding the protection of information about our customers could carry similar consequences. Should we become subject to additional laws, regulations, or other obligations relating to privacy, data protection or cybersecurity, we may need to undertake compliance efforts that could carry a large cost and could entail substantial time and other resources.

Further, although we take steps to protect the security of our customers' personal information and other personal information within our control, we may face actual or perceived security breaches, incidents, or other misuses of this information, and many jurisdictions have enacted laws requiring companies to notify individuals, regulatory authorities and others of security breaches involving certain types of data. We may be required to expend significant resources to comply with security breach and incident notification requirements if a third party accesses or acquires such personal information without authorization, if we otherwise experience a security breach or incident or loss or damage of personal information, or if this is perceived to have occurred. Any actual or perceived breach of our network or systems, or those of our vendors or service providers, could result in claims, litigation, and proceedings against us by governmental entities or others, have negative effects on our business and future prospects, including possible fines, penalties and damages, and could result in reduced demand for our energy storage products and harm to our reputation and brand, resulting in negative impacts to our business, prospects, and financial results.

We could be subject to penalties and other adverse consequences for any violations of the FCPA, and other foreign anti-bribery and anti-corruption laws.

We are subject to the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the United Kingdom Bribery Act 2010, and possibly other anti-bribery and anti-corruption laws in countries outside of the United States in which we conduct our activities. We may have business dealings with customers in certain countries that are high risk for corruption. Anti-corruption and anti-bribery laws have been enforced aggressively in recent years and are interpreted broadly to generally prohibit companies and their employees, agents, representatives, business partners, and third-party intermediaries from authorizing, offering, or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector.

We sometimes leverage third parties to sell our products and conduct our business abroad. We, our employees, agents, representatives, business partners or third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities and may be held liable for the corrupt or other illegal activities of these employees, agents, representatives, business partners or third-party intermediaries even if we do not explicitly authorize such activities. We cannot assure you that all of our employees and agents will not take actions in violation of applicable law, for which we may be ultimately held responsible. We currently have contracts and may potentially operate in parts of the world that have experienced higher levels of governmental corruption and as we increase our international sales and business, our risks under these laws may increase. In addition, due to the level of regulation in our industry and related energy industries, our entry into certain jurisdictions may require substantial government contact where norms can differ from U.S. standards.

These laws also require that we keep accurate books and records and maintain internal controls and compliance procedures designed to prevent any such actions. While we have policies and procedures to address and to mandate compliance with such laws, we cannot assure you that none of our employees, agents, representatives, business partners or third-party intermediaries will take actions in violation of our policies and applicable law, for which we may be ultimately held responsible.

In the event that we believe, have reason to believe, or are notified that our employees, agents, representatives, business partners, or third-party intermediaries have or may have violated applicable laws, including anti-bribery and anti-corruption laws, we may be required to investigate or have outside counsel investigate the relevant facts and circumstances, and detecting, investigating and resolving actual or alleged violations can be expensive and require significant time and attention from senior management. Any allegation or violation of U.S. federal and state and non-U.S. laws, regulations and policies regarding anti-bribery and anti-corruption could result in substantial fines, sanctions, civil and/or criminal penalties, whistleblower complaints, sanctions, settlements, prosecution, enforcement actions, damages, adverse media coverage, investigations, loss of export privileges, suspension or debarment from government contracts, or other

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curtailment of operations in the United States or other applicable jurisdictions. In addition, actual or alleged violations could damage our reputation and ability to do business. Any of the foregoing could materially adversely affect our reputation, business, financial condition, prospects and results of operations.

We are subject to governmental export and import controls and economic sanctions programs that could impair our ability to compete in international markets or subject us to liability if we violate these controls.

Our products and services are, or may in the future be, subject to U.S. export control laws and regulations including the Export Administration Regulations ("EAR") and trade and economic sanctions maintained by the Office of Foreign Assets Control ("OFAC") and to similar laws and regulations in all other jurisdictions in which we operate. As such, an export license may be required to export, re-export or transfer our products and services to certain countries or end-users or for certain end-uses. If we were to fail to comply with such export control laws and regulations or trade and economic sanctions, we could be subject to both civil and criminal penalties, including substantial fines, possible incarceration for employees and managers for willful violations, and the possible loss of our export and/or import privileges. Compliance with the EAR, OFAC sanctions, and other applicable regulatory requirements regarding the import and export of our products or the performance of services, may create delays in the introduction of our products and services in non-U.S. markets, prevent our customers with non-U.S. operations from deploying these products and services throughout their global systems or, in some cases, prevent the export of the products and services to some countries or users altogether. We may enter into agreements with customers and counterparties located in countries subject to list-based OFAC sanctions.

Obtaining the necessary export license for a particular sale or offering may not be possible, may be time-consuming, and may result in the delay or loss of sales opportunities. Further, U.S. export control laws and trade and economic sanctions as well as similar laws and regulations in other jurisdictions prohibit the export of products and services to certain U.S. embargoed or sanctioned countries, governments, and persons, as well as for prohibited end-uses. Even though we have taken precautions to ensure that we and our partners comply with all relevant import and export control laws and regulations and sanctions, monitoring and ensuring compliance with these complex laws and regulations is particularly challenging, and any failure by us or our partners to comply with such laws and regulations could have negative consequences for us, including reputational harm, government investigations and penalties.

Any change in domestic or international export or import laws or regulations, economic sanctions, or related legislation, shift in the enforcement or scope of existing export, import, or sanctions laws or regulations, or change in the countries, governments, persons, or technologies targeted by such export, import, or sanctions laws or regulations, could result in decreased use of our products and/or services by, or in our decreased ability to export or sell our products and/or services to, end-customers with international operations.

We may be exposed to various risks related to legal proceedings or claims that could adversely affect our operating results. The nature of our business exposes us to various liability claims, which may exceed the level of our insurance coverage resulting in our not being fully protected.

We have been and may continue to be party to lawsuits in the normal course of our business. Litigation can be expensive, lengthy and disruptive to normal business operations even if the grounds are meritless. Moreover, the results of complex legal proceedings are difficult to predict. Responding to lawsuits brought against us, or legal actions that we may initiate, can be expensive and time-consuming. Unfavorable outcomes from these claims and/or lawsuits could adversely affect our business, financial condition or results of operations, and we could incur substantial monetary liability and/or be required to change our business practices.

Our business may expose us to claims for personal injury, death or property damage resulting from the use of our products or from employee related matters. Additionally, we could be subject to potential litigation associated with compliance with various laws and governmental regulations at the federal, state or local levels, such as those relating to the protection of persons with disabilities, employment, health, safety, security and other regulations under which we operate.

We carry comprehensive insurance, subject to deductibles, at levels we believe are sufficient to cover existing and future claims made during the respective policy periods. However, we may be exposed to multiple claims, and, as a result, could incur significant out-of-pocket costs before reaching the deductible amount, which could adversely affect our financial condition and results of operations. In addition, the cost of such insurance policies may increase significantly upon renewal of those policies as a result of general rate increases for the type of insurance we carry as well as our historical experience and experience in our industry. Although we have not experienced any material losses that were not covered by insurance, our existing or future claims may exceed the coverage level of our insurance, and such insurance may not continue to be available on economically reasonable terms, or at all. If we are required to pay significantly higher premiums for insurance, are not able to maintain insurance coverage at affordable rates or must pay amounts in excess of claims covered by our insurance, then we could experience higher costs that could adversely affect our financial condition and results of operations.

We are subject to certain restrictions and obligations on our business as a result of grants and/or loans received under certain governmental programs and we may be subject to similar or other restrictions to the extent we utilize governmental grants in the future.

Some of our research has been funded by grants from U.S. government agencies. In conjunction with the Advanced Research Projects Agency-Energy grant we received from the Department of Energy, we granted to the United States a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States inventions related to iron flow technology made within the scope of the grant. When new technologies are developed with U.S. government funding, the government obtains certain rights in any resulting patents and technical data, generally including, at a minimum, a nonexclusive license authorizing the government to use the invention or technical data for noncommercial purposes. U.S. government funding must be disclosed in any resulting patent applications, and our rights in such inventions will normally be subject to government license rights, periodic progress reporting, foreign manufacturing restrictions and march-in rights. Therefore, if we failed to disclose to the Department of Energy an invention made with grant funds that we disclosed to patent counsel or for publication, or if we elect not to retain title to the invention, the United States may request that title to the subject invention be transferred to it.

March-in rights refer to the right of the U.S. government, under certain limited circumstances, to require us to grant a license to technology developed under a government grant to a responsible applicant or, if we refuse, to grant such a license itself. March-in rights can be triggered if the government determines that we have failed to work sufficiently towards achieving practical application of a technology or if action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to U.S. industry. If we breach the terms of our grants, the government may gain rights to the intellectual property developed in our related research. The government's rights in our intellectual property may lessen its commercial value, which could adversely affect our performance.

To the extent we utilize governmental grants in the future, the governmental entities involved may retain certain rights in technology that we develop using such grant money. These rights could restrict our ability to fully capitalize upon the value of this research by reducing total revenues that might otherwise be available since such governmental rights may give the government the right to practice the invention without payment of royalties if we do not comply with applicable requirements. Such grants and other forms of government incentives may also subject us to additional disclosure or reporting requirements.

The reduction, elimination or expiration of government tax credits, subsidies and economic incentives related to renewable energy solutions could reduce demand for our technology and harm our business.

The U.S. federal government and some state and local governments provide incentives to end users and potential purchasers of our energy storage products in the form of rebates, tax credits and other financial incentives, such as system performance payments and payments for renewable energy credits associated with renewable energy generation. We will rely on these governmental rebates, tax credits and other financial incentives to significantly lower the effective price of the energy storage products to our customers in the United States. However, these incentives may expire on a particular date, end when the allocated funding is exhausted, or be reduced or terminated as a matter of regulatory or legislative policy.

Our energy storage products have qualified for tax exemptions, incentives or other customer incentives in many states including California. Some states have utility procurement programs and/or renewable portfolio standards for which our technology is eligible. There is no guarantee that these policies will continue to exist in their current form, or at all. Such state programs may face increased opposition on the U.S. federal, state and local levels in the future. Changes in federal or state programs could reduce demand for our energy storage products, impair sales financing and adversely impact our business results.

On August 16, 2022, President Biden signed into law the Inflation Reduction Act of 2022, which extends the availability of ITCs and production tax credits ("PTCs") and makes significant changes to the tax credit regime that applies to solar and energy storage products. As a result of changes made by the IRA, the ITC for solar generation projects is extended until at least 2033, and has been expanded to include stand-alone battery storage projects. This expansion provides significant certainty on the tax incentives that will be available to stand-alone battery storage projects in the future. We believe the IRA will increase demand for our products and services due to the extensions and expansions of various tax credits that are critical for our customers' economic returns, while also providing more certainty in and visibility into the supply chain for materials and components for energy storage systems. However, the full impact of the IRA cannot be known, and many of the IRA's provisions, including with respect to battery storage projects and domestic content requirements, are not self-executing and require further guidance from the Internal Revenue Services ("IRS") and Treasury Department ("Treasury"), which have and will continue to be issued and interpreted in the coming months and years. Further, although these provisions generally subsidize battery storage both in front of and behind the meter, they may benefit other companies in unexpected ways and thus weaken our competitive position. For example, the IRA may enable companies producing shorter duration lithium ion batteries to compete with us through added volume of cells at lower cost.

Changes in tax laws or in their implementation or interpretation may adversely affect our business and financial condition.

We are or may become subject to income- and non-income-based taxes in the United States under federal, state and local jurisdictions and in certain foreign jurisdictions in which we operate. Tax laws, regulations and administrative practices in these jurisdictions may be subject to significant change, with or without advance notice. For example, beginning in January 2022, the Tax Cuts and Jobs Act of 2017 eliminated the right to deduct research and development expenditures for tax purposes in the period such expenses were incurred and instead requires all U.S. and foreign research and development expenditures to be amortized over five and fifteen tax years, respectively, and as a result, we recognized a deferred tax asset for the future tax benefit of the amortization deductions of these capitalized research and development expenditures.

Also, the IRA introduced a new non-deductible excise tax of 1% on certain share repurchases by corporations. This 1% excise tax will generally apply to any repurchase of stock (including transactions deemed to be repurchases for U.S. income tax purposes) we undertake, which will generally increase the costs to us of any share repurchases.

Changes in tax laws, as well as other factors, could cause us to experience fluctuations in our tax obligations and effective tax rates and otherwise adversely affect our tax positions and/or our tax liabilities. Such changes may adversely affect our effective tax rates, cash flows and general business condition.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2023, we had U.S. federal and state net operating loss carryforwards of \$166.3 million and \$202.4 million, respectively. U.S. federal net operating loss carryforwards ("NOLs") generated after December 31, 2017 do not expire, but for taxable years beginning after December 31, 2020, the deductibility of such U.S. federal NOLs is limited to 80% of our current year taxable income. Our remaining U.S. federal NOLs will expire beginning in 2032. Our state NOLs may also be subject to certain limitations. It is possible that we will not generate taxable income in time to use our NOLs before their expiration (if applicable) or at all.

Under Sections 382 and 383 of the Internal Revenue Code (the "Code"), if a corporation undergoes an "ownership change" (generally defined as a greater than 50 percentage points change (by value) in the ownership of its equity by certain stockholders over a rolling three-year period), the corporation's ability to use its pre-change NOLs and certain other pre-change tax attributes to offset its post-change income and taxes may be limited. Similar provisions of state tax law may also apply to limit our use of accumulated state tax attributes. We may have experienced such ownership changes in the past, and we may experience ownership changes in the future as a result of shifts in our stock ownership, some of which are outside our control. Accordingly, our ability to utilize our NOLs and certain other tax attributes could be limited by an "ownership change" as described above, which could result in increased tax liability to the Company.

We are an emerging growth company and a smaller reporting company within the meaning of the Securities Act, and if we take advantage of certain exemptions from disclosure requirements available to "emerging growth companies" or "smaller reporting companies," this could make our securities less attractive to investors and may make it more difficult to compare our performance with other public companies.

We are an "emerging growth company" within the meaning of the Securities Act, as modified by the JOBS Act, and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As a result, our stockholders may not have access to certain information they may deem important. We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year in which the market value of our common stock that are held by non-affiliates exceeds \$700,000,000 as of June 30 of that fiscal year, (ii) the last day of the fiscal year in which we have total annual gross revenue of \$1.235 billion or more during such fiscal year (as indexed for inflation), (iii) the date on which we have issued more than \$1.0 billion in non-convertible debt in the prior three-year period or (iv) December 31, 2025. In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the exemption from complying with new or revised accounting standards provided in Section 7(a)(2)(B) of the Securities Act as long as we are an emerging growth company. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected not to opt out of such extended transition period and, therefore, we may not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. This may make comparison of our financial statements with another public company which is neither an emerging growth company nor an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used. We cannot predict whether investors will find our

securities less attractive because we expect to rely on these exemptions. If some investors find our common stock less attractive as a result of our reliance on these exemptions, the trading price of our common stock may be lower than it otherwise would be, there may be a less active trading market for our common stock and the trading price of our common stock may be more volatile.

Additionally, we are currently a “smaller reporting company” as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company only until the last day of the fiscal year in which (i) the market value of the common stock held by non-affiliates exceeds \$250,000,000 as of the prior June 30, or (ii) our annual revenues exceeded \$100,000,000 during such completed fiscal year and the market value of the common stock held by non-affiliates exceeds \$700,000,000 as of the prior June 30. To the extent we take advantage of such reduced disclosure obligations, it may also make comparison of our financial statements with other public companies difficult or impossible.

Risks Related to Our Intellectual Property

If we fail to protect, or incur significant costs in defending, our intellectual property and other proprietary rights, then our business and results of operations could be materially harmed.

Our success depends to a significant degree on our ability to protect our intellectual property and other proprietary rights. We rely on a combination of patent, trademark, copyright, trade secret, and unfair competition laws, as well as confidentiality and other contractual provisions with our customers, suppliers, employees, and others, to establish and protect our intellectual property and other proprietary rights. Our ability to enforce these rights is subject to general litigation risks, as well as uncertainty as to the enforceability of our intellectual property rights in various countries. When we seek to enforce our rights, we may be subject to claims that our intellectual property rights are invalid or not enforceable. Our assertion of intellectual property rights may result in another party seeking to assert claims against us, which could harm our business. Our inability to enforce intellectual property rights under any of these circumstances would likely harm our competitive position and business.

We have applied for patents in multiple jurisdictions, including the United States, Europe, Australia, Japan and China, and under the Patent Cooperation Treaty, some of which have been issued. We cannot guarantee that any of our pending applications will be approved or that our existing and future intellectual property rights will be sufficiently broad to protect our proprietary technology, and any failure to obtain such approvals or finding that our intellectual property rights are invalid or unenforceable could force us to, among other things, rebrand or re-design our affected products. In countries where we have not applied for patent protection or where effective intellectual property protection is not available to the same extent as in the United States, we may be at greater risk that our proprietary rights will be misappropriated, infringed, or otherwise violated or may be unprotectable. Government actions may also undermine our intellectual property rights.

Our intellectual property may be stolen or infringed. In the event of such theft or infringement, we may be required to initiate lawsuits to protect our significant investment in our intellectual property. So far, we have been neither the subject of any lawsuits challenging the ownership or validity of our intellectual property, nor have we been required to initiate any lawsuits to protect our intellectual property. However, any such lawsuits may consume management and financial resources for long periods of time and may not result in outcomes that are favorable or readily enforceable, which may adversely affect our business, financial condition or results of operations.

Third parties may assert that we are infringing upon their intellectual property rights, which could divert management's attention, cause us to incur significant costs, and prevent us from selling or using the technology to which such rights relate.

Our competitors and other third parties hold numerous patents related to technology used in our industry. From time to time, we may also be subject to claims of intellectual property right infringement and related litigation, and, if we gain greater recognition in the market, we will face a higher risk of being the subject of claims that we have violated others' intellectual property rights. While we believe that our products and technology do not infringe in any material respect upon any valid intellectual property rights of third parties, we cannot be certain that we would be successful in defending against any such claims. If we do not successfully defend or settle an intellectual property claim, we could be liable for significant monetary damages and could be prohibited from continuing to use certain technology, business methods, content, or brands. To avoid a prohibition, we could seek a license from the applicable third party, which could require us to pay significant royalties, increasing our operating expenses. If a license is not available at all or not available on reasonable terms, then we may be required to develop or license a non-infringing alternative, either of which could require significant effort and expense. If we cannot license or develop a non-infringing alternative, we would be forced to revise, limit or stop sales of our offerings and may be unable to effectively compete and subject to termination and indemnification obligations under our contracts. Any of these results would adversely affect our business, financial condition and results of operations.

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

Our patent applications may not result in issued patents, which may have a material adverse effect on our ability to prevent others from commercially exploiting products similar to ours. The status of patents involves complex legal and factual questions and the breadth of claims allowed is uncertain. As a result, we cannot be certain that the patent applications that we file will result in patents being issued, or that our patents and any patents that may be issued to us will afford protection against competitors with similar technology. Numerous patents and pending patent applications owned by others exist in the fields in which we have developed and are developing our technology. In addition, there are numerous academic papers and other publications in our field of technology. As a result, our existing or pending patents may be subject to challenge on the basis of prior art. Furthermore, patent applications filed in foreign countries are subject to laws, rules and procedures that differ from those of the United States, and thus we cannot be certain that foreign patent applications related to issued U.S. patents will be issued.

Even if our patent applications succeed and we are issued patents in accordance with them, we are still uncertain whether these patents will be contested, circumvented, invalidated or limited in scope in the future. The rights granted under any issued patents may not provide us with meaningful protection or competitive advantages, and some foreign countries provide significantly less effective patent enforcement than in the United States. In addition, the claims under any patents that issue from our patent applications may not be broad enough to prevent others from developing technologies that are similar or that achieve results similar to ours. The intellectual property rights of others could also bar us from licensing and exploiting any patents that issue from our pending applications. In addition, patents issued to us may be infringed or designed around by others and others may obtain patents that we need to license or design around, either of which would increase costs and may adversely affect our business, financial condition and results of operations.

Risks Related to Raising Capital

As we endeavor to expand our business, we will incur significant costs and expenses, which could outpace our cash reserves. Unfavorable conditions or disruptions in the capital and credit markets may adversely impact business conditions and the availability of credit.

We expect to incur additional costs and expenses in the future related to the continued development and expansion of our business, including in connection with expanding our manufacturing capabilities to significantly increase production capacity, developing our products, maintaining and enhancing our research and development operations, expanding our sales, marketing, and business development activities in the United States and internationally, and growing our project management, field services and overall operational capabilities for delivering projects. We do not know whether our revenues will grow rapidly enough to absorb these costs or the extent of these expenses or their impact on our results of operations.

Disruptions in the global capital and credit markets as a result of an economic downturn, economic uncertainty, changing or increased regulation, or failures of significant financial institutions, as well as any negative perceptions about our long-term business prospects or the renewable energy sector as a whole, even if exaggerated or unfounded, could adversely affect our customers' ability to access capital and could adversely affect our access to liquidity needed for business in the future. Our business could be harmed if we are unable to obtain additional capital as required, resulting in a decrease in our revenues and profitability.

We expect to raise additional capital in the future, and it may not be available on acceptable terms, if at all.

As discussed in "Part I—Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources", we expect to access the debt and equity capital markets in the future. However, these sources of financing may not be available on acceptable terms, or at all. Our ability to obtain additional financing will be subject to a number of factors, including market conditions, our operating performance, the price of our common stock, investor sentiment generally or about the renewable energy sector specifically and our ability to incur additional debt in compliance with agreements governing our then-outstanding debt. These factors may make the timing, amount, terms or conditions of additional financings unattractive to us. If we raise additional funds by issuing equity, equity-linked or debt securities, those securities may have rights, preferences or privileges senior to the rights of our currently issued and outstanding equity or debt, and our existing stockholders may experience dilution. If we are unable to generate sufficient funds from operations or raise additional capital, our successful operation and growth could be impeded.

Risks Related to Our Common Stock and Warrants

The price of our common stock may be volatile.

The price of our common stock may fluctuate due to a variety of factors, including:

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- changes in the industries in which we and our customers operate;
- variations in our operating performance and the performance of our competitors in general;
- actual or anticipated fluctuations in our quarterly or annual operating results;
- the public's reaction to our press releases, our other public announcements and our filings with the SEC;
- our failure or the failure of our competitors to meet analysts' projections or guidance that we or our competitors may give to the market;
- additions and departures of key personnel;
- changes in laws and regulations affecting our business;
- commencement of, or involvement in, litigation involving us;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- publication of research reports by securities analysts about us or our competitors or our industry;
- sales of shares of our common stock by our existing stockholders;
- short selling activities;
- the volume of shares of our common stock available for public sale; and
- general economic and political conditions such as recessions, interest rates, fuel prices, inflation, instability in the banking sector and financial markets, foreign currency fluctuations, international tariffs, social, political and economic risks, hostilities or the perception that hostilities may be imminent, terrorism, military conflict and acts of war, including an escalation of the situation in Ukraine or the Middle East and the related responses, including sanctions or other restrictive actions, by the United States and/or other countries.

These market and industry factors may materially reduce the market price of our common stock regardless of our operating performance.

In addition, we have been and in the future may again be the subject of a report issued by activist short sellers. Any such report, even if it contains false and misleading statements about the Company, may cause our stock price to experience volatility.

A sale of a significant portion of our total outstanding shares into the market may cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock.

We have filed registration statements with the SEC to register shares of our common stock for certain stockholders who have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We have also filed registration statements with the SEC to register shares reserved for future issuance under our equity compensation plans. Registration of these shares under the Securities Act results in the shares becoming freely tradable in the public market, subject to the restrictions of Rule 144 in the case of our affiliates.

Any sales of securities by these stockholders could have a material adverse effect on the market price for our common stock. Sales of our common stock pursuant to the exercise of registration rights may make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate. These sales also could cause the trading price of our common stock to fall and make it more difficult for you to sell shares of our common stock at a time and price that you deem appropriate.

The issuance by us of additional shares of common stock or equity-linked securities may cause existing stockholders to experience dilution and could adversely affect our stock price.

From time to time in the future, we may issue additional shares of our common stock or equity-linked securities to raise additional capital or pursuant to a variety of transactions, including issuances in connection with financings, acquisitions, investments, our equity compensation plans or otherwise. Any such issuances of additional common stock or equity-linked securities may cause stockholders to experience significant dilution of their ownership interests and could adversely affect prevailing market prices of our common stock.

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We have warrants outstanding that are exercisable for our common stock, which, if exercised, would increase the number of shares eligible for future resale in the public market and result in dilution to our stockholders.

As of March 31, 2024, we had outstanding Public Warrants to purchase an aggregate of 11,461,227 shares of our common stock. The exercise price of each of the Public Warrants is \$11.50 per share.

In addition, on September 16, 2022, we entered into a warrant agreement with SMUD, whereby we agreed to issue a warrant for up to 500,000 shares of our common stock at an exercise price of \$4.296 per share. The vesting of the shares underlying the warrant will be subject to the achievement of certain commercial milestones through December 31, 2030 pursuant to a related commercial agreement.

On September 21, 2023, we issued to Honeywell Ventures the Investment Warrant exercisable for up to 10,631,633 shares of common stock, and to UOP the IP Warrant exercisable for up to 6,269,955 shares of common stock, and the initial Performance Warrant exercisable for up to 775,760 shares of common stock. The Investment Warrant has an exercise price of \$1.89, the IP Warrant has an exercise price of \$2.90 and the initial Performance Warrant has an exercise price of \$1.45. We may issue additional Performance Warrants to UOP (not to exceed an aggregate value of \$15 million based on target purchase amounts of up to \$300 million by 2030) on an annual basis for the five-year period beginning in 2026, based on UOP's purchase of additional equipment pursuant to the Supply Agreement. The additional Performance Warrants will have an exercise price equal to the volume-weighted average price of the Company's common stock for the last fifteen (15) trading days of the relevant calendar year for which such additional Performance Warrant is being issued.

To the extent such warrants are exercised, additional shares of our common stock will be issued, which will result in dilution to the holders of our common stock and increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market or the fact that such warrants may be exercised could adversely affect the prevailing market prices of our common stock. For further information, see Note 9, *Common Stock Warrants*, to our condensed consolidated financial statements in this Quarterly Report on Form 10-Q.

The Public Warrants may be amended in a manner adverse to a holder if holders of 65% of the then outstanding Public Warrants approve of such amendment.

Our warrants were issued in registered form under a warrant agreement between Continental Stock Transfer & Trust Company, as warrant agent, and STWO. The warrant agreement provides that the terms of the warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision or correct any mistake, but requires the approval by the holders of 65% of the then-outstanding Public Warrants to make any change that adversely affects the interests of the registered holders of Public Warrants. Accordingly, we may amend the terms of the Public Warrants in a manner adverse to a holder if holders of 65% of the then-outstanding Public Warrants approve of such amendment. Although our ability to amend the terms of the Public Warrants with the consent of 65% of the then-outstanding Public Warrants is unlimited, examples of such amendments could be amendments to, among other things, increase the exercise price of the warrants, convert the warrants into cash, shorten the exercise period or decrease the number of shares of our common stock purchasable upon exercise of a warrant.

We may redeem your unexpired warrants prior to their exercise at a time that is disadvantageous to you, thereby making your warrants worthless.

We have the ability to redeem the outstanding Public Warrants at any time after they become exercisable and prior to their expiration, at a price of \$0.01 per warrant, provided that the closing price of our common stock equals or exceeds \$18.00 per share (as adjusted for share subdivisions, share dividends, rights issuances, subdivisions, reorganizations, recapitalizations and the like) for any 20 trading days within a 30 trading-day period ending on the third trading day prior to proper notice of such redemption and provided that certain other conditions are met. 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. As a result, we may redeem the warrants as set forth above even if the holders are otherwise unable to exercise the warrants. Redemption of the outstanding warrants could force you to (i) exercise your warrants and pay the exercise price therefor at a time when it may be disadvantageous for you to do so, (ii) sell your warrants at the then-current market price when you might otherwise wish to hold your warrants or (iii) accept the nominal redemption price which, at the time the outstanding warrants are called for redemption, we expect would be substantially less than the market value of your warrants.

In addition, we have the ability to redeem the outstanding Public Warrants at any time after they become exercisable and prior to their expiration, at a price of \$0.10 per warrant upon a minimum of 30 days' prior written notice of redemption provided that the closing price of our common stock equals or exceeds \$10.00 per share (as adjusted for adjustments to the number of shares issuable upon exercise or the exercise price of a warrant) for any 20 trading days within a 30 trading-day period ending on the third trading day prior to proper notice of such redemption and provided that certain other conditions are met, including that holders will be able to exercise their warrants prior to redemption for a number of shares of common

stock determined based on the redemption date and the fair market value of our common stock. The value received upon exercise of the warrants (1) may be less than the value the holders would have received if they had exercised their warrants at a later time where the underlying share price is higher and (2) may not compensate the holders for the value of the warrants, including because the number of ordinary shares received is capped at 0.361 shares of common stock per warrant (subject to adjustment) irrespective of the remaining life of the warrants.

We do not expect to declare any dividends in the foreseeable future.

We do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. Consequently, investors may need to rely on sales of their shares after price appreciation, which may not occur for some time or not at all, as the only way to realize any future gains on their investment.

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

On March 6, 2024, we received a written notice (the "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. Pursuant to Section 802.01C, we have a period of six months following receipt of the Notice to regain compliance with the minimum share price requirement, with the possibility of extension at the discretion of the NYSE. We can regain compliance with the average closing price requirement at any time during the six-month cure period if, on the last trading day of any calendar month during the cure period we have a closing share price of at least \$1.00, and an average closing share price of at least \$1.00 over the 30 trading-day period ending on the last trading day of that month or the last trading day of the cure period. The Notice is a notice of deficiency, not delisting, and does not currently affect the listing or trading of our common stock on the NYSE, which continues to trade under the symbol "GWH." While there can be no assurance that we will be able to regain compliance with the applicable rules during the six-month compliance period, we continue to actively monitor the closing bid price of shares of our common stock and may, if appropriate, consider implementing available options to regain compliance with Section 802.01C, including a potential reverse stock split that would be considered by our next annual shareholder meeting following the six-month compliance period.

If the NYSE 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 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.

Reports published by analysts, including projections in those reports that differ from our actual results, could adversely affect the price and trading volume of our common stock.

Securities research analysts may establish and publish their own periodic projections for us. These projections may vary widely and may not accurately predict the results we actually achieve. Our share price may decline if our actual results do not match the projections of these securities research analysts. Similarly, if one or more of the analysts who write reports on us downgrades our stock or publishes inaccurate or unfavorable research about our business, our share price could decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, our share price or trading volume could decline.

We may be subject to short selling strategies that may drive down the market price of our common stock.

Short selling occurs when an investor borrows a security and sells it on the open market, with the intention of buying identical securities at a later date to return to the lender. A short seller hopes to profit from a decline in the value of the securities between the sale of the borrowed securities and the purchase of the replacement shares. Because it is in the short seller's best interests for the price of the stock to decline, some short sellers publish, or arrange for the publication of, opinions or characterizations regarding the relevant issuer, its business prospects, and similar matters calculated to or which may create negative market momentum. Short sellers can publicly attack a company's reputation and business on a broader scale via online postings. In the past, the publication of such commentary about us by a self-described short seller has precipitated a decline in the market price of our common stock, and future similar efforts by other short sellers may have similar effects. Companies that are subject to unfavorable allegations promoted by short sellers, even if untrue, may have to expend a significant amount of resources to investigate such allegations and defend themselves.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws and Delaware law might discourage, delay or prevent a change in control of the Company or changes in management and, therefore, depress the market price of our common stock.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent a change of control of the Company or changes in our board of directors that our stockholders might consider favorable. These provisions, among other things:

- establish a classified board of directors so that not all members of our board are elected at one time;
- permit only the board of directors to establish the number of directors and fill vacancies on the board;
- provide that directors may only be removed "for cause" and only with the approval of a majority of the voting power of the issued and outstanding capital stock of the Company entitled to vote in the election of directors;
- authorize the issuance of "blank check" preferred stock that our board could use to implement a stockholder rights plan (also known as a "poison pill");
- eliminate the ability of our stockholders to call special meetings of stockholders;
- prohibit stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders;
- prohibit cumulative voting by stockholders at any election of directors;
- authorize our board of directors to amend the bylaws;
- establish advance notice requirements for nominations for election to our board or for proposing matters that can be acted upon by stockholders at annual stockholder meetings; and
- require a super-majority vote of stockholders to amend some of the provisions described above.

In addition, Section 203 of the Delaware General Corporation Law (the "DGCL"), prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.

Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying or preventing a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our common stock.

Our amended and restated bylaws provide that the Court of Chancery of the State of Delaware and the federal district courts of the United States of America will be the exclusive forums 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 or employees.

Our amended and restated bylaws provide that the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another State court in Delaware or the federal district court for the District of Delaware) is the exclusive forum for the following (except for any claim as to which such court determines that there is an indispensable party not subject to the jurisdiction of such court (and the indispensable party does not consent to the personal jurisdiction of such court within 10 days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than such court or for which such court does not have subject matter jurisdiction):

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of fiduciary duty owed by any director, stockholder, officer or other employee of the Company to the Company or to the Company's stockholders;
- any action arising pursuant to any provision of the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws; and
- any action asserting a claim against us that is governed by the internal affairs doctrine.

This provision would not apply to suits brought to enforce a duty or liability created by the Securities Act, the Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction.

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Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated bylaws further provide that, unless the Company consents in writing to the selection of an alternative forum, the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act against any person in connection with any offering of the Company's securities, including any auditor, underwriter, expert, control person, or other defendant. We note that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

These exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees. Any person or entity purchasing, holding or otherwise acquiring any interest in any of our securities shall be deemed to have notice of and consented to these provisions. There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. If a court were to find these types of provisions to be inapplicable or unenforceable, and if a court were to find the exclusive forum provision in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could materially adversely affect our business.

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

Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the DGCL, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- we indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful;
- we may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law;
- we are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification;
- we are not obligated, pursuant to our amended and restated bylaws, to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification;
- the rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons; and
- we may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to directors; officers, employees and agents.

While we maintain a directors' and officers' insurance policy to the fullest extent permitted by the DGCL, such insurance may not be adequate to cover all liabilities that we may incur, which may reduce our available funds to satisfy third-party claims and may materially adversely affect our cash position.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

There were no sales of equity securities during the period covered by this Report that were not registered under the Securities Act and/or were not previously reported in a Current Report on Form 8-K filed by the Company.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

Securities Trading Plans of Directors and Executive Officers

During the three months ended March 31, 2024, no director or officer, as defined in Rule 16a-1(f) under the Securities Exchange Act of 1934, adopted or terminated a "Rule 10b5-1 trading arrangement" or a "non-Rule 10b5-1 trading arrangement," each as defined in Regulation S-K Item 408.

ITEM 6. EXHIBITS

Exhibit	Description	Incorporated by Reference			
		Form	File No.	Exhibit No.	Filing Date
3.1#	Certification of Incorporation of ESS	8-K	001-39525	3.1	October 15, 2021
3.2#	Amended and Restated Bylaws of ESS	10-Q	001-39525	3.2	November 3, 2022
3.3#	Certificate of Amendment to the Certificate of Incorporation	8-K	001-39525	3.1	May 22, 2023
4.1#	Warrant Agreement, dated September 15, 2020, by and between the Company and Continental Stock	S-4	333-257232	4.1	June 21, 2021
4.2#	Assignment, Assumption and Amendment Agreement to the Warrant Agreement, dated October 8, 2021	8-K	001-39525	4.2	October 15, 2021
4.3#	Warrant to Purchase Stock, dated September 16, 2022, by and between the Company and Sacramento Municipal Utility District	10-Q	001-39525	4.3	November 3, 2022
4.4#	Investment Warrant, dated September 21, 2023	10-Q	001-39525	4.4	November 14, 2023
4.5#	IP Warrant, dated September 21, 2023	10-Q	001-39525	4.5	November 14, 2023
4.6#	Performance Warrant, dated September 21, 2023	10-Q	001-39525	4.6	November 14, 2023
4.7#	Registration Rights Agreement, dated September 21, 2023, by and between the Company and Honeywell ACS Ventures LLC	10-Q	001-39525	4.7	November 14, 2023
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 Section 906 of the Sarbanes-Oxley Act of 2002				
32.2*	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				
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.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 included in Exhibit 101)				

Previously filed.

* These exhibits are furnished with this Quarterly Report on Form 10-Q and are not deemed filed with the Securities and Exchange Commission and are not incorporated by reference in any filing of ESS Tech, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language contained in such filings.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Act of 1934, the registrant has duly caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned, thereunto duly authorized.

May 7, 2024

ESS TECH, INC.

By: /s/ Eric P. Dresselhuys

Name: Eric P. Dresselhuys

Title: Chief Executive Officer

CERTIFICATION
PURSUANT TO RULE 13a-14(a) AND 15d-14(a)
UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Eric P. Dresselhuys, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ended March 31, 2024 of ESS Tech, Inc.;
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this Report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this Report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Report based on such evaluation; and
 - d. Disclosed in this Report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

May 7, 2024

By: /s/ Eric P. Dresselhuys
Eric P. Dresselhuys
Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION
PURSUANT TO RULE 13a-14(a) AND 15d-14(a)
UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Anthony Rabb, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ended March 31, 2024 of ESS Tech, Inc.;
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this Report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this Report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Report based on such evaluation; and
 - d. Disclosed in this Report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

May 7, 2024

By: /s/ Anthony Rabb

Anthony Rabb

Chief Financial Officer

(Principal Financial Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of ESS Tech, Inc. (the "Company") on Form 10-Q for the quarter ended March 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Eric P. Dresselhuys, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 7, 2024

By: /s/ Eric P. Dresselhuys
Name: Eric P. Dresselhuys
Title: Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 32.2

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of ESS Tech, Inc. (the "Company") on Form 10-Q for the quarter ended March 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Anthony Rabb, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

May 7, 2024

By: */s/ Anthony Rabb*

Name: Anthony Rabb

Title: Chief Financial Officer

(Principal Financial Officer)