
**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 September 30, 2023

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: 1-34392

PLUG POWER INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

22-3672377
(I.R.S. Employer
Identification Number)

968 ALBANY SHAKER ROAD, LATHAM, NEW YORK 12110
(Address of Principal Executive Offices, including Zip Code)

(518) 782-7700
(Registrant's telephone number, including area code)

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

<u>Title of Each Class</u>	<u>Trading Symbol(s)</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, par value \$.01 per share	PLUG	The NASDAQ Capital Market

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

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

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

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

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

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

The number of shares of common stock, par value of \$0.01 per share, outstanding as of November 3, 2023 was 605,502,333 shares.

INDEX to FORM 10-Q

	<u>Page</u>
 <u>PART I. FINANCIAL INFORMATION</u>	
Item 1 – Interim Condensed Consolidated Financial Statements (Unaudited)	3
Condensed Consolidated Balance Sheets	3
Condensed Consolidated Statements of Operations	4
Condensed Consolidated Statements of Comprehensive Loss	5
Condensed Consolidated Statements of Stockholders' Equity	6
Condensed Consolidated Statements of Cash Flows	7
Notes to Interim Condensed Consolidated Financial Statements	8
Item 2 – Management's Discussion and Analysis of Financial Condition and Results of Operations	41
Item 3 – Quantitative and Qualitative Disclosures About Market Risk	61
Item 4 – Controls and Procedures	62
 <u>PART II. OTHER INFORMATION</u>	
Item 1 – Legal Proceedings	63
Item 1A – Risk Factors	63
Item 2 – Unregistered Sales of Equity Securities and Use of Proceeds	65
Item 3 – Defaults Upon Senior Securities	65
Item 4 – Mine Safety Disclosures	65
Item 5 – Other Information	65
Item 6 – Exhibits	66
Signatures	67

PART 1. FINANCIAL INFORMATION
Item 1 — Interim Financial Statements (Unaudited)

Plug Power Inc. and Subsidiaries
Condensed Consolidated Balance Sheets
(In thousands, except share and per share amounts)
(Unaudited)

	September 30, 2023	December 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 110,809	\$ 690,630
Restricted cash	225,818	158,958
Available-for-sale securities, at fair value (amortized cost of \$388,768 and allowance for credit losses of \$0 at September 30, 2023 and amortized cost of \$1,355,614 and allowance for credit losses of \$0 at December 31, 2022)	388,768	1,332,943
Equity securities	67,823	134,836
Accounts receivable, net of allowance of \$1,339 at September 30, 2023 and \$391 at December 31, 2022	163,187	129,450
Inventory, net	1,024,209	645,636
Contract assets	112,385	62,456
Prepaid expenses and other current assets	146,905	150,389
Total current assets	2,239,904	3,305,298
Restricted cash	825,863	699,756
Property, plant, and equipment, net	1,252,483	719,793
Right of use assets related to finance leases, net	54,819	53,742
Right of use assets related to operating leases, net	404,595	360,287
Equipment related to power purchase agreements and fuel delivered to customers, net	108,717	89,293
Contract assets	29,068	41,831
Goodwill	248,023	248,607
Intangible assets, net	193,177	207,725
Investments in non-consolidated entities and non-marketable equity securities	78,871	31,250
Other assets	16,601	6,694
Total assets	\$ 5,452,121	\$ 5,764,276
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 292,925	\$ 191,895
Accrued expenses	153,635	156,430
Deferred revenue and other contract liabilities	176,614	131,813
Operating lease liabilities	62,110	48,861
Finance lease liabilities	9,094	8,149
Finance obligations	85,372	58,925
Current portion of long-term debt	2,648	5,142
Contingent consideration, loss accrual for service contracts, and other current liabilities	148,187	34,060
Total current liabilities	930,585	635,275
Deferred revenue and other contract liabilities	76,983	98,085
Operating lease liabilities	295,232	271,504
Finance lease liabilities	35,120	37,988
Finance obligations	287,039	270,315
Convertible senior notes, net	194,922	193,919
Long-term debt	1,405	3,925
Contingent consideration, loss accrual for service contracts, and other liabilities	121,549	193,051
Total liabilities	1,942,835	1,704,062
Stockholders' equity:		
Common stock, \$0.01 par value per share; 1,500,000,000 shares authorized; Issued (including shares in treasury): 624,267,053 at September 30, 2023 and 608,421,785 at December 31, 2022	6,243	6,084
Additional paid-in capital	7,456,196	7,297,306
Accumulated other comprehensive loss	(1,621)	(26,004)
Accumulated deficit	(3,847,349)	(3,120,911)
Less common stock in treasury: 18,879,367 at September 30, 2023 and 18,076,127 at December 31, 2022	(104,183)	(96,261)
Total stockholders' equity	3,509,286	4,060,214
Total liabilities and stockholders' equity	\$ 5,452,121	\$ 5,764,276

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

Plug Power Inc. and Subsidiaries
Condensed Consolidated Statements of Operations
(In thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Net revenue:				
Sales of equipment, related infrastructure and other	\$ 145,130	\$ 157,985	\$ 543,510	\$ 383,065
Services performed on fuel cell systems and related infrastructure	9,290	8,406	27,088	25,468
Power purchase agreements	20,068	9,524	44,135	30,730
Fuel delivered to customers and related equipment	19,371	12,389	47,391	40,289
Other	4,852	324	7,055	1,146
Net revenue	198,711	188,628	669,179	480,698
Cost of revenue:				
Sales of equipment, related infrastructure and other	158,989	127,381	504,717	310,362
Services performed on fuel cell systems and related infrastructure	17,916	12,619	53,586	38,106
Provision for loss contracts related to service	41,581	5,727	55,801	8,843
Power purchase agreements	56,981	35,549	157,773	102,194
Fuel delivered to customers and related equipment	59,012	53,129	177,963	134,008
Other	2,197	286	4,843	1,063
Total cost of revenue	336,676	234,691	954,683	594,576
Gross loss	(137,965)	(46,063)	(285,504)	(113,878)
Operating expenses:				
Research and development	27,651	28,105	83,437	72,123
Selling, general and administrative	105,451	85,578	310,621	262,420
Impairment	665	—	11,734	—
Change in fair value of contingent consideration	2,239	—	26,316	(2,605)
Total operating expenses	136,006	113,683	432,108	331,938
Operating loss	(273,971)	(159,746)	(717,612)	(445,816)
Interest income	10,369	13,429	44,392	19,321
Interest expense	(11,802)	(9,020)	(33,717)	(28,871)
Other income/(expense), net	4,987	(5,399)	(4,866)	(9,164)
Realized gain/(loss) on investments, net	—	—	263	(1,315)
Other-than-temporary impairment of available-for-sale securities	(10,831)	—	(10,831)	—
Change in fair value of equity securities	70	(4,221)	8,987	(22,864)
Loss on equity method investments	(7,030)	(4,280)	(19,970)	(10,304)
Loss before income taxes	\$ (288,208)	\$ (169,237)	\$ (733,354)	\$ (499,013)
Income tax (benefit)/expense	(4,729)	1,521	(6,916)	1,530
Net loss	\$ (283,479)	\$ (170,758)	\$ (726,438)	\$ (500,543)
Net loss per share:				
Basic and diluted	\$ (0.47)	\$ (0.30)	(1.22)	\$ (0.87)
Weighted average number of common stock outstanding	599,465,146	578,043,278	593,417,595	578,217,636

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

Plug Power Inc. and Subsidiaries
Condensed Consolidated Statements of Comprehensive Loss
(In thousands)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Net loss	\$ (283,479)	\$ (170,758)	\$ (726,438)	\$ (500,543)
Other comprehensive income/(loss):				
Foreign currency translation gain/(loss)	(3,021)	(1,044)	1,711	(10,092)
Change in net unrealized gain/(loss) on available-for-sale securities	4,333	(4,992)	11,841	(23,401)
Amounts reclassified from accumulated other comprehensive income/(loss):				
Other-than-temporary impairment of available-for-sale securities	10,831	—	10,831	—
Comprehensive loss attributable to the Company, net of tax	<u>\$ (271,336)</u>	<u>\$ (176,794)</u>	<u>\$ (702,055)</u>	<u>\$ (534,036)</u>

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

Plug Power Inc. and Subsidiaries
Condensed Consolidated Statements of Stockholders' Equity
(In thousands, except share amounts)
(Unaudited)

	Common Stock		Additional	Accumulated	Treasury Stock		Accumulated	Total
	Shares	Amount	Paid-in Capital	Other Comprehensive Income (Loss)	Shares	Amount	Deficit	Stockholders' Equity
December 31, 2022	608,421,785	\$ 6,084	\$ 7,297,306	\$ (26,004)	18,076,127	\$ (96,261)	\$ (3,120,911)	\$ 4,060,214
Net loss	—	—	—	—	—	—	(206,561)	(206,561)
Other comprehensive income	—	—	—	6,970	—	—	—	6,970
Stock-based compensation	228,954	2	43,300	—	—	—	—	43,302
Stock option exercises and issuance of common stock upon grant/vesting of restricted stock and restricted stock unit awards	620,250	6	668	—	—	—	—	674
Treasury stock acquired from employees upon exercise of stock options and vesting of restricted stock and restricted stock unit awards	—	—	—	—	169,787	(2,590)	—	(2,590)
Exercise of common stock warrants	2,680,637	28	(28)	—	—	—	—	—
Provision for common stock warrants	—	—	19,641	—	—	—	—	19,641
March 31, 2023	611,951,626	\$ 6,120	\$ 7,360,887	\$ (19,034)	18,245,914	\$ (98,851)	\$ (3,327,472)	\$ 3,921,650
Net loss	—	—	—	—	—	—	(236,398)	(236,398)
Other comprehensive income	—	—	—	5,270	—	—	—	5,270
Stock-based compensation	338,328	3	39,915	—	—	—	—	39,918
Stock option exercises and issuance of common stock upon grant/vesting of restricted stock and restricted stock unit awards	246,717	3	55	—	—	—	—	58
Treasury stock acquired from employees upon exercise of stock options and vesting of restricted stock and restricted stock unit awards	—	—	—	—	39,349	(364)	—	(364)
Exercise of common stock warrants	6,623,794	66	(66)	—	—	—	—	—
Provision for common stock warrants	—	—	951	—	—	—	—	951
Earnouts from acquisitions paid in stock	927,042	9	7,991	—	—	—	—	8,000
June 30, 2023	620,087,507	\$ 6,201	\$ 7,409,733	\$ (13,764)	18,285,263	\$ (99,215)	\$ (3,563,870)	\$ 3,739,085
Net loss	—	—	—	—	—	—	(283,479)	(283,479)
Other comprehensive income	—	—	—	12,143	—	—	—	12,143
Stock-based compensation	361,162	4	45,850	—	—	—	—	45,854
Stock option exercises and issuance of common stock upon grant/vesting of restricted stock and restricted stock unit awards	3,818,384	38	543	—	—	—	—	581
Treasury stock acquired from employees upon exercise of stock options and vesting of restricted stock and restricted stock unit awards	—	—	—	—	594,104	(4,968)	—	(4,968)
Provision for common stock warrants	—	—	70	—	—	—	—	70
September 30, 2023	624,267,053	\$ 6,243	\$ 7,456,196	\$ (1,621)	18,879,367	\$ (104,183)	\$ (3,847,349)	\$ 3,509,286
December 31, 2021	594,729,610	\$ 5,947	\$ 7,070,710	\$ (1,532)	17,074,710	\$ (72,526)	\$ (2,396,903)	\$ 4,605,696
Net loss	—	—	—	—	—	—	(156,489)	(156,489)
Other comprehensive loss	—	—	—	(16,930)	—	—	—	(16,930)
Stock-based compensation	226,221	2	43,384	—	—	—	—	43,386
Stock option exercises and issuance of common stock upon grant/vesting of restricted stock and restricted stock unit awards	253,525	3	288	—	—	—	—	291
Treasury stock acquired from employees upon exercise of stock options and vesting of restricted stock and restricted stock unit awards	—	—	—	—	71,627	(1,465)	—	(1,465)
Provision for common stock warrants	—	—	1,743	—	—	—	—	1,743
March 31, 2022	595,209,356	\$ 5,952	\$ 7,116,125	\$ (18,462)	17,146,337	\$ (73,991)	\$ (2,553,392)	\$ 4,476,232
Net loss	—	—	—	—	—	—	(173,296)	(173,296)
Other comprehensive loss	—	—	—	(10,527)	—	—	—	(10,527)
Stock-based compensation	108,216	2	44,857	—	—	—	—	44,859
Stock option exercises and issuance of common stock upon grant/vesting of restricted stock and restricted stock unit awards	391,967	4	525	—	—	—	—	529
Treasury stock acquired from employees upon exercise of stock options and vesting of restricted stock and restricted stock unit awards	—	—	—	—	63,712	(1,195)	—	(1,195)
Provision for common stock warrants	—	—	1,979	—	—	—	—	1,979
June 30, 2022	595,709,539	\$ 5,958	\$ 7,163,486	\$ (28,989)	17,210,049	\$ (75,186)	\$ (2,726,688)	\$ 4,338,581
Net loss	—	—	—	—	—	—	(170,758)	(170,758)
Other comprehensive loss	—	—	—	(6,036)	—	—	—	(6,036)
Stock-based compensation	113,352	1	46,738	—	—	—	—	46,739
Stock option exercises and issuance of common stock upon grant/vesting of restricted stock and restricted stock unit awards	2,954,577	29	1,286	—	—	—	—	1,315
Treasury stock acquired from employees upon exercise of stock options and vesting of restricted stock and restricted stock unit awards	—	—	—	—	805,832	(20,151)	—	(20,151)
Provision for common stock warrants	—	—	33,886	—	—	—	—	33,886
September 30, 2022	598,777,468	\$ 5,988	\$ 7,245,396	\$ (35,025)	18,015,881	\$ (95,337)	\$ (2,897,446)	\$ 4,223,576

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

[Table of Contents](#)

Plug Power Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Nine Months Ended September 30,	
	2023	2022
Operating activities		
Net loss	\$ (726,438)	\$ (500,543)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation of long-lived assets	37,810	20,201
Amortization of intangible assets	14,158	15,238
Lower of cost or net realizable value inventory adjustment and provision for excess and obsolete inventory	33,889	—
Payments of contingent consideration	(2,895)	—
Stock-based compensation	129,074	134,984
Provision for losses on accounts receivable	948	—
Amortization of debt issuance costs and discount on convertible senior notes	1,699	1,969
Provision for common stock warrants	12,737	12,513
Deferred income tax (benefit)/expense	(621)	699
Impairment	11,734	763
Loss/(benefit) on service contracts	35,893	(21,984)
Fair value adjustment to contingent consideration	26,316	(2,605)
Net realized (gain)/loss on investments	(263)	1,315
Other-than-temporary impairment of available-for-sale securities	10,831	—
(Accretion)/amortization of premium on available-for-sale securities	(5,144)	6,383
Lease origination costs	(7,665)	(5,991)
Loss on disposal of assets	—	268
Change in fair value for equity securities	(8,987)	22,864
Loss on equity method investments	19,970	10,304
Changes in operating assets and liabilities that provide/(use) cash:		
Accounts receivable	(34,685)	(1,980)
Inventory	(411,737)	(245,770)
Contract assets	(39,040)	(7,027)
Prepaid expenses and other assets	(6,423)	(82,657)
Accounts payable, accrued expenses, and other liabilities	21,221	112,952
Deferred revenue and other contract liabilities	23,699	6,055
Net cash used in operating activities	(863,919)	(522,049)
Investing activities		
Purchases of property, plant and equipment	(484,030)	(317,553)
Purchases of equipment related to power purchase agreements and equipment related to fuel delivered to customers	(26,094)	(22,785)
Purchase of available-for-sale securities	—	(295,329)
Proceeds from sales of available-for-sale securities	—	475,676
Proceeds from maturities of available-for-sale securities	961,160	209,379
Purchase of equity securities	—	(4,990)
Proceeds from sales of equity securities	76,263	—
Net cash paid for acquisitions	—	(26,473)
Cash paid for non-consolidated entities and non-marketable equity securities	(66,811)	(38,574)
Net cash provided by/(used in) investing activities	460,488	(20,649)
Financing activities		
Payments of contingent consideration	(10,105)	(2,667)
Payments of tax withholding on behalf of employees for net stock settlement of stock-based compensation	(7,922)	(22,811)
Proceeds from exercise of stock options	1,313	2,135
Principal payments on long-term debt	(5,710)	(62,794)
Proceeds from finance obligations	90,265	83,980
Principal repayments of finance obligations and finance leases	(53,394)	(39,156)
Net cash provided by/(used in) financing activities	14,447	(41,313)
Effect of exchange rate changes on cash	2,130	6,907
Decrease in cash and cash equivalents	(579,821)	(733,516)
Increase in restricted cash	192,967	156,412
Cash, cash equivalents, and restricted cash beginning of period	1,549,344	3,132,194
Cash, cash equivalents, and restricted cash end of period	\$ 1,162,490	\$ 2,555,090
Supplemental disclosure of cash flow information		
Cash paid for interest, net of capitalized interest of \$6.0 million at September 30, 2023 and \$9.8 million at September 30, 2022	\$ 29,207	\$ 24,392
Summary of non-cash activity		
Recognition of right of use asset - finance leases	\$ 5,338	\$ 20,807
Recognition of right of use asset - operating leases	77,500	119,012
Net tangible liabilities assumed in a business combination	—	(5,124)
Intangible assets acquired in a business combination	—	60,522
Net transfers between inventory and long-lived assets	725	1,322
Earmouts from acquisitions paid in stock	8,000	—
Accrued purchase of fixed assets, cash to be paid in subsequent period	131,774	61,814

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

1. Nature of Operations

Plug Power Inc. (the “Company,” “Plug,” “we” or “our”) is facilitating the paradigm shift to an increasingly electrified world by innovating cutting-edge hydrogen and fuel cell solutions. While we continue to develop commercially viable hydrogen and fuel cell product solutions, we have expanded our offerings to support a variety of commercial operations that can be powered with green hydrogen. We provide electrolyzers that allow customers — such as refineries, producers of chemicals, steel, fertilizer and commercial refueling stations — to generate hydrogen on-site. We are focusing our efforts on (a) industrial mobility applications, including electric forklifts and electric industrial vehicles, at multi-shift high volume manufacturing and high throughput distribution sites where we believe our products and services provide a unique combination of productivity, flexibility, and environmental benefits; (b) stationary power systems that will support critical operations, such as data centers, microgrids, and generation facilities, in either a backup power or continuous power role and replace batteries, diesel generators or the grid for telecommunication logistics, transportation, and utility customers; and (c) production of hydrogen. Plug expects to support these products and customers with an ecosystem of vertically integrated products that produce, transport, store and handle, dispense, and use hydrogen for mobility and power applications.

Liquidity, Capital Resources and Going Concern

The Company’s working capital was \$1.3 billion at September 30, 2023, which included unrestricted cash and cash equivalents of \$110.8 million and restricted cash of \$225.8 million. In addition, the Company had available-for-sale securities and equity securities of \$388.8 million and \$67.8 million, respectively, as of September 30, 2023.

Since inception, the Company has financed its operations with proceeds from the sales of equity securities, convertible notes, debt and redeemable convertible preferred stock. As of September 30, 2023, the Company had an accumulated deficit of \$3.8 billion. The Company has continued to experience negative cash flows from operations and net losses. The Company incurred net losses attributable to common stockholders of \$726.4 million for the nine months ended September 30, 2023, and net losses attributable to common stockholders of \$724.0 million, \$460.0 million and \$596.2 million for the years ended December 31, 2022, 2021 and 2020, respectively. The net cash used in operating activities for the nine months ended September 30, 2023, was \$863.9 million and the net cash used in operating activities for the year ended December 31, 2022 and 2021 was \$828.6 million and \$358.2 million, respectively. The Company expects to generate operating losses for the foreseeable future as it continues to devote significant resources to expand its current production and manufacturing capacity, construct hydrogen plants and fund the acquisition of additional inventory to deliver our end-products and related services.

In light of the Company’s projected capital expenditure and operating requirements under its current business plan, the Company is projecting that its existing cash and available for sale and equity securities will not be sufficient to fund its operations through the next twelve months from the date of issuance of this Quarterly Report on Form 10-Q. These conditions and events raise substantial doubt about the Company’s ability to continue as a going concern. In accordance with Accounting Standards Update (“ASU”) No. 2014-15, “Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern (Subtopic 205-40),” management has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company’s ability to continue as a going concern within one year after the date of the condensed consolidated financial statements are issued and has determined that the Company’s ability to continue as a going concern is dependent on its ability to raise additional capital. To alleviate the conditions and events that raise substantial doubt about the Company’s ability to continue as a going concern, management is currently evaluating several different options to enhance the Company’s liquidity position, including the sale of securities, incurrence of debt or other financing alternatives. The Company’s plan includes various financing solutions from third parties with a particular focus on corporate level debt solutions, investment tax credit related project financings and loan guarantee programs, and/or large scale hydrogen generation infrastructure project financing. Those plans are not final and are subject to market and other conditions not within the Company’s control. As such, there can be no assurance that the Company will be successful in obtaining sufficient funding. Accordingly, management has concluded under the accounting standards that these plans do not alleviate substantial doubt about the Company’s ability to continue as a going concern.

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. The financial statements do not include any adjustments related to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of this uncertainty.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The unaudited interim condensed consolidated financial statements include the financial statements of the Company and its wholly-owned subsidiaries. Intercompany balances and transactions have been eliminated in consolidation. In addition, we include our share of the results of our joint venture with Renault SAS (“Renault”) named HyVia SAS, a French société par actions simplifiée (“HyVia”), AccionaPlug S.L. (“AccionaPlug”), and SK Plug Hyverse Co., Ltd. (“SK Plug Hyverse”), using the equity method based on our economic ownership interest and our ability to exercise significant influence over the operating and financial decisions of HyVia, AccionaPlug and SK Plug Hyverse. Additionally, we consolidate the results of our joint venture with Niloco Hydrogen Holdings LLC, a wholly-owned subsidiary of Olin Corporation (“Olin”), named “Hidrogenii”.

Interim Financial Statements

The accompanying unaudited interim condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”). In the opinion of management, all adjustments, which consist solely of normal recurring adjustments, necessary to present fairly, in accordance with U.S. generally accepted accounting principles (“GAAP”), the financial position, results of operations and cash flows for all periods presented, have been made. The results of operations for the interim periods presented are not necessarily indicative of the results that may be expected for the full year.

Certain information and footnote disclosures normally included in annual consolidated financial statements prepared in accordance with GAAP have been condensed or omitted. These unaudited interim condensed consolidated financial statements should be read in conjunction with the Company’s audited consolidated financial statements and notes thereto included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2022 (the “2022 Form 10-K”).

The information presented in the accompanying unaudited interim condensed consolidated balance sheets as of December 31, 2022 has been derived from the Company’s December 31, 2022 audited consolidated financial statements.

The unaudited interim condensed consolidated financial statements contained herein should be read in conjunction with our 2022 Form 10-K.

Recent Accounting Pronouncements

Recently Adopted Accounting Guidance

Other than the adoption of the accounting guidance mentioned in our 2022 Form 10-K, there have been no other significant changes in our reported financial position or results of operations and cash flows resulting from the adoption of new accounting pronouncements.

Recent Accounting Guidance Not Yet Effective

All issued but not yet effective accounting and reporting standards as of September 30, 2023 are either not applicable to the Company or are not expected to have a material impact on the Company.

3. Acquisitions

Alloy Custom Products, LLC and WesMor Cryogenics, LLC

On December 5, 2022, the Company acquired two subsidiaries of Cryogenic Industrial Solutions, LLC, Alloy Custom Products, LLC and WesMor Cryogenics, LLC (collectively, “CIS”). The CIS acquisition is expected to increase the Company’s production capabilities for stainless steel and aluminum cryogenic transport truck-mounted cryogenic pressure vessels, cryogenic transport trailers, and other mobile storage containers.

The fair value of consideration paid by the Company in connection with the CIS acquisition was as follows (in thousands):

Cash	\$ 30,700
Due to Cryogenic Industrial Solutions, LLC	500
Plug Power Inc. common stock	6,107
Total consideration	<u>\$ 37,307</u>

The following table summarizes the preliminary allocation of the purchase price to the estimated fair value of the net assets acquired, excluding goodwill (in thousands):

Cash	\$ 267
Accounts receivable	5,038
Inventory	11,120
Prepaid expenses and other assets	464
Property, plant and equipment	3,887
Right of use asset	1,538
Identifiable intangible assets	13,430
Lease liability	(1,562)
Accounts payable, accrued expenses and other liabilities	(3,826)
Deferred revenue	(6,193)
Total net assets acquired, excluding goodwill	<u>\$ 24,163</u>

The preliminary allocation of the purchase price is considered provisional pending the finalization of the valuation for the assets acquired and liabilities assumed and related tax liabilities, if any, in relation to the CIS acquisition. Therefore, the fair values of the assets acquired and liabilities assumed are subject to change as we obtain additional information for valuation assumptions such as market demand for CIS product lines to support forecasted financial data, which will not exceed 12 months from the date of acquisition. During the three and nine months ended September 30, 2023, the Company paid out \$0 and \$0.5 million due to the sellers of CIS in connection with the acquisition. There have been no measurement period adjustments recorded for the three and nine months ended September 30, 2023.

The fair value of the tradename totaling \$6.2 million was calculated using the relief from royalty approach, which is a variant of the income approach, and was assigned a useful life of fifteen years. The fair value of the customer relationships totaling \$7.1 million was calculated using the multi-period excess earnings method (“MPEEM”) approach, which is a variant of the income approach, and was assigned a useful life of fifteen years. The basic principle of the MPEEM approach is that a single asset, in isolation, is not capable of generating cash flow for an enterprise. Several assets are brought together and exploited to generate cash flow. The fair value of the non-compete agreements was \$0.2 million with a useful life of five years.

[Table of Contents](#)

The goodwill was primarily attributed to the value of synergies created with the Company's current and future offerings and the value of the assembled workforce. Goodwill and intangible assets are not deductible for income tax purposes. Goodwill associated with the CIS acquisition was calculated as follows (in thousands):

Consideration paid	\$ 37,307
Less: net assets acquired	(24,163)
Total goodwill recognized	<u>\$ 13,144</u>

The CIS acquisition contributed \$8.3 million and \$34.4 million to total consolidated revenue for the three and nine months ended September 30, 2023, respectively. The Company determined that the net income for the CIS acquisition for the three and nine months ended September 30, 2023 was immaterial.

Joule Processing, LLC

On January 14, 2022, the Company acquired Joule Processing, LLC ("Joule"), an engineered modular equipment, process design and procurement company founded in 2009.

The fair value of consideration paid by the Company in connection with the Joule acquisition was as follows (in thousands):

Cash	\$ 28,140
Contingent consideration	41,732
Total consideration	<u>\$ 69,872</u>

The contingent consideration represents the estimated fair value associated with earn-out payments of up to \$130.0 million that the sellers are eligible to receive in cash or shares of the Company's common stock (at the Company's election). Of the total earnout consideration, \$90.0 million is related to the achievement of certain financial performance and \$40.0 million is related to the achievement of certain internal operational milestones.

The following table summarizes the final allocation of the purchase price to the estimated fair value of the net assets acquired, excluding goodwill (in thousands):

Current assets	\$ 2,672
Property, plant and equipment	493
Right of use asset	182
Identifiable intangible assets	60,522
Lease liability	(374)
Current liabilities	(2,612)
Contract liability	(3,818)
Total net assets acquired, excluding goodwill	<u>\$ 57,065</u>

The fair value of the developed technology totaling \$59.2 million included in the identifiable intangible assets was calculated using the MPEEM approach. Therefore, to determine cash flow from the developed technology over its useful life of 15 years, one must deduct the related expenses incurred for the exploitation of other assets used for the generation of overall cash flow. The fair value of the tradename totaling \$0.8 million was calculated using the relief from royalty approach, which is a variant of the income approach, and was assigned a useful life of four years. The fair value of the non-compete agreements was \$0.5 million with a useful life of six years.

In connection with the Joule acquisition, the Company recorded on its consolidated balance sheet a liability of \$41.7 million representing the fair value of contingent consideration payable. The fair value of this contingent consideration was \$74.2 million and \$53.2 million as of September 30, 2023 and December 31, 2022, respectively, and as a result, an increase of \$3.0 million and \$21.0 million was recorded in change in fair value of contingent consideration in

[Table of Contents](#)

the unaudited interim condensed consolidated statement of operations for the three and nine months ended September 30, 2023, respectively.

Included in the purchase price consideration are contingent earn-out payments as described above. Due to the nature of the earn-outs, a scenario-based analysis using the probability of achieving the milestone expectations was used to determine the fair value of the contingent consideration. These fair value measurements were based on unobservable inputs and are considered to be level 3 financial instruments.

The goodwill was primarily attributed to the value of synergies created with the Company's current and future offerings and the value of the assembled workforce. Goodwill and intangible assets are not deductible for income tax purposes. Goodwill associated with the Joule acquisition was calculated as follows (in thousands):

Consideration paid	\$ 28,140
Contingent consideration	41,732
Less: net assets acquired	(57,065)
Total goodwill recognized	<u>\$ 12,807</u>

The Joule acquisition contributed \$11.3 million and \$75.3 million to the Company's total consolidated revenue for the three and nine months ended September 30, 2023, respectively, compared to \$0.6 million and \$3.9 million for the three and nine months ended September 30, 2022, respectively. The Company determined that the net loss for the Joule acquisition for the three and nine months ended September 30, 2023 was immaterial.

The CIS and Joule acquisitions were not material to our consolidated results of operations or financial position and, therefore, pro forma financial information is not presented.

4. Extended Maintenance Contracts

On a quarterly basis, we evaluate any potential losses related to our extended maintenance contracts for fuel cell systems, related infrastructure and equipment that have been sold. The following table shows the roll forward of balances in the accrual for loss contracts, including changes due to the provision for loss accrual, releases to service cost of sales, releases due to the provision for warrants, and foreign currency translation adjustment (in thousands):

	Nine Months Ended September 30, 2023	Year Ended December 31, 2022
Beginning balance	\$ 81,066	\$ 89,773
Provision for loss accrual	55,194	23,295
Releases to service cost of sales	(19,908)	(35,446)
Increase to loss accrual related to customer warrants	607	3,506
Foreign currency translation adjustment	(59)	(62)
Ending balance	<u>\$ 116,900</u>	<u>\$ 81,066</u>

The Company increased its provision for loss accrual to \$55.2 million for the nine months ended September 30, 2023 due to continued cost and inflationary increases of labor, parts and related overhead coupled with the timing of the remaining period of service required. As a result, the Company increased its estimated projected costs to service existing fuel cell systems and the related infrastructure.

5. Earnings Per Share

Basic earnings per common stock are computed by dividing net loss attributable to common stockholders by the weighted average number of common stock outstanding during the reporting period. In periods when we have net income, the shares of our common stock subject to the convertible notes outstanding during the period will be included in our diluted earnings per share under the if-converted method. Since the Company is in a net loss position, all common stock

[Table of Contents](#)

equivalents would be considered anti-dilutive and are therefore not included in the determination of diluted earnings per share. Accordingly, basic and diluted loss per share are the same.

The potentially dilutive securities are summarized as follows:

	At September 30,	
	2023	2022
Stock options outstanding (1)	35,463,759	25,549,257
Restricted stock and restricted stock units outstanding (2)	7,261,132	3,737,292
Common stock warrants (3)	78,561,263	96,017,181
Convertible senior notes (4)	39,170,766	39,170,766
Number of dilutive potential shares of common stock	160,456,920	164,474,496

- (1) During the three months ended September 30, 2023 and 2022, the Company granted options for 2,255,096 and 1,838,123 shares of common stock, respectively. During the nine months ended September 30, 2023 and 2022, the Company granted options for 9,131,689 and 2,597,974 shares of common stock, respectively.
- (2) During the three months ended September 30, 2023 and 2022, the Company granted 3,217,700 and 349,661 shares of restricted stock and restricted stock units, respectively. During the nine months ended September 30, 2023 and 2022, the Company granted 3,606,393 and 1,476,152 shares of restricted stock and restricted stock units, respectively.
- (3) In August 2022, the Company issued a warrant to acquire up to 16,000,000 shares of the Company's common stock as part of a transaction agreement with Amazon.com, Inc. ("Amazon"), subject to certain vesting events, as described in Note 12, "Warrant Transaction Agreements." The warrant had not been exercised as of September 30, 2023.

In April 2017, the Company issued a warrant to acquire up to 55,286,696 shares of the Company's common stock as part of a transaction agreement with Amazon, subject to certain vesting events, as described in Note 12, "Warrant Transaction Agreements." The warrant had been exercised with respect to 34,917,912 and 17,461,994 shares of the Company's common stock as of September 30, 2023 and 2022, respectively.

In July 2017, the Company issued a warrant to acquire up to 55,286,696 shares of the Company's common stock as part of a transaction agreement with Walmart, Inc. ("Walmart"), subject to certain vesting events, as described in Note 12, "Warrant Transaction Agreements." The warrant had been exercised with respect to 13,094,217 shares of the Company's common stock as of September 30, 2023 and 2022, respectively.

- (4) In March 2018, the Company issued \$100.0 million in aggregate principal amount of the 5.5% Convertible Senior Notes due 2023 (the "5.5% Convertible Senior Notes"). In May 2020, the Company repurchased \$66.3 million of the 5.5% Convertible Senior Notes and in the fourth quarter of 2020, \$33.5 million of the 5.5% Convertible Senior Notes were converted into approximately 14.6 million shares of common stock. The remaining \$0.2 million aggregate principal amount of the 5.5% Convertible Senior Notes were converted into 69,808 shares of common stock in January 2021. In May 2020, the Company issued \$212.5 million in aggregate principal amount of the 3.75% Convertible Senior Notes due 2025 (the "3.75% Convertible Senior Notes"). There were no conversions of the 3.75% Convertible Senior Notes for the three and nine months ended September 30, 2023 and 2022.

6. Inventory

Inventory as of September 30, 2023 and December 31, 2022 consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Raw materials and supplies - production locations	\$ 617,855	\$ 450,432
Raw materials and supplies - customer locations	17,587	18,860
Work-in-process	233,962	112,231
Finished goods	154,805	64,113
Inventory	<u>\$ 1,024,209</u>	<u>\$ 645,636</u>

Inventory is primarily comprised of raw materials, work-in-process, and finished goods. The increase in inventory is primarily due to a combination of new product offerings and an increase in estimated future revenue. As of September 30, 2023 and December 31, 2022, the reserve for excess and obsolete inventory was \$8.2 million and \$5.4 million, respectively. Additionally, there was a lower of cost or market inventory adjustment of \$20.7 million and \$24.1 million for the three and nine months ended September 30, 2023, respectively. The lower of cost or market adjustment for the three and nine months ended September 30, 2023 was due to losses on new product offerings.

7. Property, Plant and Equipment

Property, plant and equipment at September 30, 2023 and December 31, 2022 consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Land	\$ 5,879	\$ 1,772
Construction in progress	934,020	575,141
Building and leasehold improvements	87,523	21,363
Software, machinery, and equipment	296,146	169,633
Property, plant, and equipment	1,323,568	767,909
Less: accumulated depreciation	(71,085)	(48,116)
Property, plant, and equipment, net	<u>\$ 1,252,483</u>	<u>\$ 719,793</u>

Construction in progress is primarily comprised of construction of four hydrogen production plants. Completed assets are transferred to their respective asset classes, and depreciation begins when an asset is ready for its intended use. Interest on outstanding debt is capitalized during periods of capital asset construction and amortized over the useful lives of the related assets. During the three months ended September 30, 2023 and 2022, the Company capitalized \$2.0 million and \$4.0 million of interest, respectively. During the nine months ended September 30, 2023 and 2022, the Company capitalized \$6.0 million and \$9.8 million of interest, respectively.

Depreciation expense related to property, plant and equipment was \$10.2 million and \$5.4 million for the three months ended September 30, 2023 and 2022, respectively. Depreciation expense related to property, plant and equipment was \$23.0 million and \$13.5 million for the nine months ended September 30, 2023 and 2022, respectively.

8. Intangible Assets and Goodwill

The gross carrying amount and accumulated amortization of the Company's acquired identifiable intangible assets as of September 30, 2023 were as follows (in thousands):

	Weighted Average Amortization Period	Gross Carrying Amount	Accumulated Amortization	Total
Acquired technology	14 years	\$ 104,159	(18,471)	\$ 85,688
Dry stack electrolyzer technology	10 years	29,000	(4,592)	24,408
Customer relationships, trade name and other	13 years	102,193	(19,112)	83,081
		<u>\$ 235,352</u>	<u>\$ (42,175)</u>	<u>\$ 193,177</u>

The gross carrying amount and accumulated amortization of the Company's acquired identifiable intangible assets as of December 31, 2022 were as follows (in thousands):

	Weighted Average Amortization Period	Gross Carrying Amount	Accumulated Amortization	Total
Acquired technology	14 years	\$ 104,221	\$ (12,754)	\$ 91,467
Dry stack electrolyzer technology	10 years	29,000	(2,417)	26,583
Customer relationships, trade name and other	13 years	102,521	(12,846)	89,675
		<u>\$ 235,742</u>	<u>\$ (28,017)</u>	<u>\$ 207,725</u>

The change in the gross carrying amount of the acquired technology and customer relationships, trade name and other from December 31, 2022 to September 30, 2023 was due to changes in foreign currency translation.

Amortization expense for acquired identifiable intangible assets for the three months ended September 30, 2023 and 2022 was \$4.4 million and \$4.9 million, respectively. Amortization expense for acquired identifiable intangible assets for the nine months ended September 30, 2023 and 2022 was \$14.2 million and \$15.2 million, respectively.

The estimated amortization expense for subsequent years is as follows (in thousands):

Remainder of 2023	\$ 4,749
2024	18,929
2025	18,163
2026	16,605
2027	16,597
2028 and thereafter	118,134
Total	<u>\$ 193,177</u>

Goodwill was \$248.0 million and \$248.6 million as of September 30, 2023 and December 31, 2022, respectively, which decreased due to foreign currency translation adjustments for goodwill associated with our international subsidiaries.

The change in the carrying amount of goodwill for the nine months ended September 30, 2023 was as follows (in thousands):

Beginning balance at December 31, 2022	\$ 248,607
Foreign currency translation adjustment	(584)
Ending balance at September 30, 2023	<u>\$ 248,023</u>

The Company completes its annual impairment assessment of goodwill on October 31 of each fiscal year. The Company has concluded that it has one reporting unit. Management continues to closely monitor the results of the Company's business, the performance of the Company's common stock, current liquidity and key assumptions used in its fair value estimate, in addition to operational initiatives and macroeconomic conditions, which may impact the results of

the Company's goodwill impairment assessment. The projected performance of the reporting unit, including the need for additional financing to fund the operations of the Company's business for the next twelve months and the potential for future developments in the global economic environment, introduces a heightened risk for impairment in the Company's goodwill, intangible assets and property, plant and equipment. If the Company cannot improve its current operating levels and meet its operating targets to achieve the growth and margin assumptions and/or if the Company is not able to obtain the additional financing required to fund its business for the next twelve months, some or all of the recorded goodwill, intangible assets and property, plant and equipment as of September 30, 2023 could be subject to impairment. Such potential impairment of goodwill, intangible assets and property, plant and equipment could be material to the Company's condensed consolidated financial statements.

9. Long-Term Debt

In June 2020, the Company acquired debt as part of its acquisition of United Hydrogen Group Inc. During the three and nine months ended September 30, 2023, the Company repaid \$0.3 million and \$5.7 million of principal related to this outstanding debt, respectively. The outstanding carrying value of the debt was \$4.1 million as of September 30, 2023. The remaining outstanding principal on the debt was \$5.8 million and the unamortized debt discount was \$1.7 million, bearing varying interest rates ranging from 5.6% to 8.3%. The debt is scheduled to mature in 2026. As of September 30, 2023, the principal balance is due at each of the following dates as follows (in thousands):

December 31, 2023	\$	300
December 31, 2024		3,357
December 31, 2025		1,200
December 31, 2026		900
Total outstanding principal	\$	<u>5,757</u>

10. Convertible Senior Notes

3.75% Convertible Senior Notes

On May 18, 2020, the Company issued \$200.0 million in aggregate principal amount of 3.75% Convertible Senior Notes due June 1, 2025, in a private placement to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended (the "Securities Act"). On May 29, 2020, the Company issued an additional \$12.5 million in aggregate principal amount of 3.75% Convertible Senior Notes. During the three and nine months ended September 30, 2023, there were no conversions of the 3.75% Convertible Senior Notes.

The 3.75% Convertible Senior Notes consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Principal amounts:		
Principal	\$ 197,278	\$ 197,278
Unamortized debt issuance costs (1)	(2,356)	(3,359)
Net carrying amount	<u>\$ 194,922</u>	<u>\$ 193,919</u>

- (1) Included in the unaudited interim condensed consolidated balance sheets within the Convertible Senior Notes, net and amortized over the remaining life of the notes using the effective interest rate method.

The following table summarizes the total interest expense and effective interest rate related to the 3.75% Convertible Senior Notes for the three months ended September 30, 2023 (in thousands, except for the effective interest rate):

	September 30, 2023	September 30, 2022
Interest expense	\$ 1,849	\$ 1,849
Amortization of debt issuance costs	338	323
Total	2,187	2,172
Effective interest rate	4.5%	4.5%

Based on the closing price of the Company's common stock of \$7.60 on September 30, 2023, the if-converted value of the notes was greater than the principal amount. The estimated fair value of the notes at September 30, 2023 was approximately \$314.7 million. The fair value estimation was primarily based on a quoted price in an active market.

Capped Call

In conjunction with the pricing of the 3.75% Convertible Senior Notes, the Company entered into privately negotiated capped call transactions (the "3.75% Notes Capped Call") with certain counterparties at a price of \$16.2 million. The 3.75% Notes Capped Call covers, subject to anti-dilution adjustments, the aggregate number of shares of the Company's common stock that underlie the initial 3.75% Convertible Senior Notes and is generally expected to reduce potential dilution to the Company's common stock upon any conversion of the 3.75% Convertible Senior Notes and/or offset any cash payments the Company is required to make in excess of the principal amount of the converted notes, as the case may be, with such reduction and/or offset subject to a cap based on the cap price. The cap price of the 3.75% Notes Capped Call is initially \$6.7560 per share, which represents a premium of approximately 60% over the last then-reported sale price of the Company's common stock of \$4.11 per share on the date of the transaction and is subject to certain adjustments under the terms of the 3.75% Notes Capped Call. The 3.75% Notes Capped Call becomes exercisable if the conversion option is exercised.

The net cost incurred in connection with the 3.75% Notes Capped Call was recorded as a reduction to additional paid-in capital in the unaudited interim condensed consolidated balance sheets. The book value of the 3.75% Notes Capped Call is not remeasured.

Common Stock Forward

In March 2018, the Company issued \$100.0 million in aggregate principal amount of the 5.5% Convertible Senior Notes due on March 15, 2023, in a private placement to qualified institutional buyers pursuant to Rule 144A under the Securities Act, which have been fully repaid. In connection with the issuance of the 5.5% Convertible Senior Notes, the Company entered into a forward stock purchase transaction (the "Common Stock Forward"), pursuant to which the Company agreed to purchase 14,397,906 shares of its common stock for settlement on or about March 15, 2023. On May 18, 2020, the Company amended and extended the maturity of the Common Stock Forward to June 1, 2025. The number of shares of common stock that the Company will ultimately repurchase under the Common Stock Forward is subject to customary anti-dilution adjustments. The Common Stock Forward is subject to early settlement or settlement with alternative consideration in the event of certain corporate transactions.

The net cost incurred in connection with the Common Stock Forward of \$27.5 million was recorded as an increase in treasury stock in the unaudited interim condensed consolidated balance sheets. The related shares were accounted for as a repurchase of common stock. The book value of the Common Stock Forward is not remeasured.

There were no shares of common stock that settled in connection with the Common Stock Forward during the three and nine months ended September 30, 2023 or during the three and nine months ended September 30, 2022.

11. Stockholders' Equity

Common Stock and Warrants

On August 24, 2022, a warrant to purchase up to 16,000,000 shares of common stock was issued in connection with a transaction agreement with Amazon, as discussed in Note 12, "Warrant Transaction Agreements." This warrant is measured at fair value at the time of grant or modification and is classified as an equity instrument on the unaudited interim condensed consolidated balance sheets.

Accumulated Other Comprehensive Income/(loss)

Accumulated other comprehensive income/(loss) is comprised of unrealized gains and losses on available-for-sale securities and foreign currency translation gains and losses. Amounts reclassified from accumulated other comprehensive income/(loss) was \$10.8 million and \$0 for the three months ended September 30, 2023 and September 30, 2022, respectively. Amounts reclassified from accumulated other comprehensive income/(loss) was \$10.8 million and \$0 for the nine months ended September 30, 2023 and September 30, 2022, respectively, due to unrealized gains and losses on available-for-sale securities.

Net current-period other comprehensive income for the three months ended September 30, 2023 increased due to unrealized gains on available-for-sale securities of \$4.3 million, partially offset by foreign currency translation losses of \$3.0 million. Net current-period other comprehensive loss for the three months ended September 30, 2022 increased due to unrealized losses on available-for-sale securities of \$5.0 million and foreign currency translation losses of \$1.0 million.

Net current period other comprehensive income for the nine months ended September 30, 2023 increased due to unrealized gains on available-for-sale securities of \$11.8 million and foreign currency translation gains of \$1.7 million. Net current period other comprehensive loss for the nine months ended September 30, 2022 increased due to unrealized losses on available-for-sale securities of \$23.4 million and foreign currency translation losses of \$10.1 million.

12. Warrant Transaction Agreements

Amazon Transaction Agreement in 2022

On August 24, 2022, the Company and Amazon entered into a Transaction Agreement (the "2022 Transaction Agreement"), under which the Company concurrently issued to Amazon.com NV Investment Holdings LLC, a wholly owned subsidiary of Amazon, a warrant (the "Amazon Warrant") to acquire up to 16,000,000 shares (the "Amazon Warrant Shares") of the Company's common stock, subject to certain vesting events described below. The Company and Amazon entered into the 2022 Transaction Agreement in connection with a concurrent commercial arrangement under which Amazon agreed to purchase hydrogen fuel from the Company through August 24, 2029.

1,000,000 of the Amazon Warrant Shares vested immediately upon issuance of the Amazon Warrant. 15,000,000 of the Amazon Warrant Shares will vest in multiple tranches over the 7-year term of the Amazon Warrant based on payments made to the Company directly by Amazon or its affiliates, or indirectly through third parties, with 15,000,000 of the Amazon Warrant Shares fully vesting if Amazon-related payments of \$2.1 billion are made in the aggregate. The exercise price for the first 9,000,000 Amazon Warrant Shares is \$22.9841 per share and the fair value on the grant date was \$20.36. The exercise price for the remaining 7,000,000 Amazon Warrant Shares will be an amount per share equal to 90% of the 30-day volume weighted average share price of the Company's common stock as of the final vesting event that results in full vesting of the first 9,000,000 Amazon Warrant Shares. The Amazon Warrant is exercisable through August 24, 2029.

Upon the consummation of certain change of control transactions (as defined in the applicable warrant) prior to the vesting of at least 60% of the aggregate Amazon Warrant Shares, the Amazon Warrant will automatically vest and become exercisable with respect to an additional number of Amazon Warrant Shares such that 60% of the aggregate Amazon Warrant Shares shall have vested. If a change of control transaction is consummated after the vesting of at least

60% of the aggregate Amazon Warrant Shares, then no acceleration of vesting will occur with respect to any of the unvested Amazon Warrant Shares as a result of the transaction. The exercise price and the Amazon Warrant Shares issuable upon exercise of the Amazon Warrant are subject to customary antidilution adjustments.

On August 24, 2022, 1,000,000 of the Amazon Warrant Shares issued pursuant to the 2022 Transaction Agreement vested. The warrant fair value associated with the vested shares of tranche 1 of \$20.4 million was capitalized to contract assets based on the grant date fair value and is subsequently amortized ratably as a reduction to revenue based on the Company's estimate of revenue over the term of the agreement. As of September 30, 2023 the balance of the contract asset related to tranche 1 was \$19.5 million which is recorded in contract assets in the Company's unaudited interim condensed consolidated balance sheet. During the second quarter of 2023, all 1,000,000 of the Amazon Warrant Shares associated with tranche 2 vested. The warrant fair value associated with the vested shares of tranche 2 was \$20.4 million and was determined on the grant date of August 24, 2022. As of September 30, 2023 the balance of the contract asset related to tranche 2 was \$13.8 million. Tranche 3 will vest over the next \$1.0 billion of collections from Amazon and its affiliates. The grant date fair value of tranche 3 will also be amortized ratably as a reduction to revenue based on the Company's estimate of revenue over the term of the agreement. As of September 30, 2023 the balance of the contract asset related to tranche 3 was \$3.8 million. Because the exercise price has yet to be determined, the fair value of tranche 4 will be remeasured at each reporting period end and amortized ratably as a reduction to revenue based on the Company's estimate of revenue over the term of the agreement. The total amount of provision for common stock warrants recorded as a reduction of revenue for the Amazon Warrant during the three months ended September 30, 2023 and 2022 was \$1.6 million and \$1.8 million, respectively. The total amount of provision for common stock warrants recorded as a reduction of revenue for the Amazon Warrant during the nine months ended September 30, 2023 and 2022 was \$4.3 million and \$1.8 million, respectively.

The assumptions used to calculate the valuations as of August 24, 2022 and September 30, 2023 are as follows:

	Tranches 1-3 August 24, 2022	Tranche 4 September 30, 2023
Risk-free interest rate	3.15%	4.50%
Volatility	75.00%	70.00%
Expected average term	7 years	4 years
Exercise price	\$22.98	\$6.84
Stock price	\$20.36	\$7.60

Amazon Transaction Agreement in 2017

On April 4, 2017, the Company and Amazon entered into a Transaction Agreement (the "2017 Amazon Transaction Agreement"), pursuant to which the Company agreed to issue to Amazon.com NV Investment Holdings LLC, a warrant to acquire up to 55,286,696 Amazon Warrant Shares, subject to certain vesting events described below. The Company and Amazon entered into the 2017 Amazon Transaction Agreement in connection with existing commercial agreements between the Company and Amazon with respect to the deployment of the Company's GenKey fuel cell technology at Amazon distribution centers. The vesting of the Amazon Warrant Shares was conditioned upon payments made by Amazon or its affiliates (directly or indirectly through third parties) pursuant to the existing commercial agreements. At December 31, 2021, all 55,286,696 of the Amazon Warrant Shares had vested.

The warrant had been exercised with respect to 34,917,912 shares and 24,704,450 shares of the Company's common stock as of September 30, 2023 and December 31, 2022, respectively.

Walmart Transaction Agreement

On July 20, 2017, the Company and Walmart entered into a Transaction Agreement (the "Walmart Transaction Agreement"), pursuant to which the Company agreed to issue to Walmart a warrant (the "Walmart Warrant") to acquire up to 55,286,696 shares of the Company's common stock, subject to certain vesting events (the "Walmart Warrant Shares"). The Company and Walmart entered into the Walmart Transaction Agreement in connection with existing commercial agreements between the Company and Walmart with respect to the deployment of the Company's GenKey

[Table of Contents](#)

fuel cell technology across various Walmart distribution centers. The existing commercial agreements contemplate, but do not guarantee, future purchase orders for the Company's fuel cell technology. The vesting of the warrant shares was conditioned upon payments made by Walmart or its affiliates (directly or indirectly through third parties) pursuant to transactions entered into after January 1, 2017 under existing commercial agreements.

The warrant had been exercised with respect to 13,094,217 shares of the Company's common stock as of September 30, 2023 and December 31, 2022.

At September 30, 2023 and December 31, 2022, 27,643,347 of the Walmart Warrant Shares had vested. As of September 30, 2023, the balance of the contract liability related to the Walmart Warrant was \$2.4 million. For the three months ended September 30, 2023, there was a negative provision for common stock warrants recorded as an addition to revenue of \$3.1 million as compared to a provision of \$6.7 million recorded as a reduction to revenue for the three months ended September 30, 2022. The negative provision for the three months ended September 30, 2023 was caused by a decline in the Company's stock price, which is one of the inputs in determining the fair value of the warrants. The total amount of provision for common stock warrants recorded as a reduction of revenue for the Walmart Warrant during the nine months ended September 30, 2023 and 2022 was \$8.4 million and \$10.4 million, respectively. During the three and nine months ended September 30, 2023 and 2022, there were no exercises with respect to the Walmart Warrant.

The assumptions used to calculate the valuations of the final tranche of the Walmart Warrant as of September 30, 2023 are as follows:

	September 30, 2023
Risk-free interest rate	4.61%
Volatility	70.00%
Expected average term	3.5 years
Exercise price	\$6.84
Stock price	\$7.60

13. Revenue

Disaggregation of revenue

The following table provides information about disaggregation of revenue (in thousands):

Major products/services lines

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Sales of fuel cell systems	\$ 37,650	\$ 75,919	\$ 138,682	\$ 146,859
Sales of hydrogen infrastructure	38,225	37,139	145,740	96,641
Sales of electrolyzers	26,628	6,842	73,627	14,576
Sales of engineered equipment	7,212	25,556	23,784	76,080
Services performed on fuel cell systems and related infrastructure	9,290	8,406	27,088	25,468
Power purchase agreements	20,068	9,524	44,135	30,730
Fuel delivered to customers and related equipment	19,371	12,389	47,391	40,289
Sales of cryogenic equipment and other	35,415	12,529	161,677	48,909
Other	4,852	324	7,055	1,146
Net revenue	<u>\$ 198,711</u>	<u>\$ 188,628</u>	<u>\$ 669,179</u>	<u>\$ 480,698</u>

Contract balances

The following table provides information about receivables, contract assets and contract liabilities from contracts with customers (in thousands):

	September 30, 2023	December 31, 2022
Accounts receivable	\$ 163,187	\$ 129,450
Contract assets	141,453	104,287
Deferred revenue and contract liabilities	253,597	229,898

Contract assets primarily relate to contracts for which revenue is recognized on a straight-line basis; however, billings escalate over the life of a contract. Contract assets also include amounts recognized as revenue in advance of billings to customers, which are dependent upon the satisfaction of another performance obligation. These amounts are included in contract assets on the accompanying unaudited interim condensed consolidated balance sheets.

The contract liabilities relate to the advance consideration received from customers for services that will be recognized over time (primarily fuel cell and related infrastructure services) and advance consideration received from customers prior to delivery of products. These amounts are included within deferred revenue and other contract liabilities on the unaudited interim condensed consolidated balance sheets.

Significant changes in the contract assets and the contract liabilities balances during the period are as follows (in thousands):

Contract assets

	September 30, 2023	December 31, 2022
Transferred to receivables from contract assets recognized at the beginning of the period	\$ (72,098)	\$ (33,394)
Change in contract assets related to warrants	10,644	26,455
Impairment	(9,799)	—
Revenue recognized and not billed as of the end of the period	108,419	72,469
Net change in contract assets	<u>\$ 37,166</u>	<u>\$ 65,530</u>

The \$9.8 million impairment of the Company's contract asset balance for the nine months ended September 30, 2023 was due to the termination of a commercial agreement.

Deferred revenue and contract liabilities

	September 30, 2023	December 31, 2022
Increases due to cash received, net of amounts recognized as revenue during the period	\$ 186,470	\$ 200,347
Change in contract liabilities related to warrants	2,719	—
Contract liabilities assumed as part of acquisitions	—	10,011
Revenue recognized that was included in the contract liability balance as of the beginning of the period	(165,490)	(163,550)
Net change in deferred revenue and contract liabilities	<u>\$ 23,699</u>	<u>\$ 46,808</u>

Estimated future revenue

The following table includes estimated revenue expected to be recognized in the future (sales of fuel cell systems, cryogenic equipment and other, engineered equipment and hydrogen installations and other infrastructure are expected to be recognized as revenue within one year; sales of electrolyzers are expected to be recognized as revenue within two years; sales of services, Power Purchase Agreements (“PPAs”), and fuel are expected to be recognized as revenue over five to ten years) related to performance obligations that are unsatisfied (or partially unsatisfied) at the end of the reporting period, including provision for common stock warrants (in thousands):

	September 30, 2023
Sales of fuel cell systems	\$ 48,354
Sales of hydrogen installations and other infrastructure	32,927
Sales of electrolyzers	295,647
Sales of engineered equipment	14,457
Services performed on fuel cell systems and related infrastructure	121,524
Power Purchase Agreements	439,429
Fuel delivered to customers and related equipment	99,234
Sales of cryogenic equipment and other	151,614
Total estimated future revenue	<u>\$ 1,203,186</u>

Contract costs

Contract costs consist of capitalized commission fees and other expenses related to obtaining or fulfilling a contract. Capitalized contract costs at September 30, 2023 and December 31, 2022 were \$0.8 million and \$0.6 million, respectively.

14. Income Taxes

The Company recorded \$4.7 million of an income tax benefit and \$1.5 million of income tax expense for the three months ended September 30, 2023 and 2022, respectively. The Company recorded \$6.9 million of income tax benefit and \$1.5 million of income tax expense for the nine months ended September 30, 2023 and 2022, respectively. The tax benefit for the nine months ended September 30, 2023 was due to foreign income taxes. The Company has not changed its overall conclusion with respect to the need for a valuation allowance against its domestic net deferred tax assets, which remain fully reserved.

The domestic net deferred tax asset generated from the Company's net operating loss has been offset by a full valuation allowance because it is more likely than not that the tax benefits of the net operating loss carryforward will not be realized. The Company recognizes accrued interest and penalties related to unrecognized tax benefits, if any, as a component of income tax expense.

15. Fair Value Measurements

The Company records the fair value of assets and liabilities in accordance with ASC 820, *Fair Value Measurement* (“ASC 820”). ASC 820 defines fair value as the price received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date and in the principal or most advantageous market for that asset or liability. The fair value should be calculated based on assumptions that market participants would use in pricing the asset or liability, not on assumptions specific to the entity.

In addition to defining fair value, ASC 820 expands the disclosure requirements around fair value and establishes a fair value hierarchy for valuation inputs. The hierarchy prioritizes the inputs into three levels based on the extent to which inputs used in measuring fair value are observable in the market. Each fair value measurement is reported in one of the three levels, which is determined by the lowest level input that is significant to the fair value measurement in its entirety.

These levels are:

- Level 1 — quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 — quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument.
- Level 3 — unobservable inputs reflecting management’s own assumptions about the inputs used in pricing the asset or liability at fair value.

Securities reported at fair value utilizing Level 1 inputs represent assets whose fair value is determined based upon observable unadjusted quoted market prices for identical assets in active markets. Level 2 securities represent assets whose fair value is determined using observable market information such as previous day trade prices, quotes from less active markets or quoted prices of securities with similar characteristics. Available-for-sale securities are characterized as Level 2 assets, as their fair values are determined using observable market inputs. Equity securities are characterized as Level 1 assets, as their fair values are determined using active markets for identical assets. There were no transfers between Level 1, Level 2, or Level 3 for the three and nine months ended September 30, 2023.

Financial instruments not recorded at fair value on a recurring basis include equity method investments that have not been remeasured or impaired in the current period, such as our investments in HyVia, AccionaPlug, and SK Plug Hyverse. During the three and nine months ended September 30, 2023, the Company contributed approximately \$17.8 million and \$58.7 million, respectively, to HyVia, AccionaPlug and SK Plug Hyverse.

Assets and liabilities measured at fair value on a recurring basis are summarized below (in thousands):

	As of September 30, 2023				
	Carrying Amount	Fair Value	Fair Value Measurements		
			Level 1	Level 2	Level 3
Assets					
Cash equivalents	\$ 118	\$ 118	\$ 118	\$ —	\$ —
Corporate bonds	128,111	128,111	—	128,111	—
U.S. Treasuries	260,657	260,657	260,657	—	—
Equity securities	67,823	67,823	67,823	—	—
Liabilities					
Contingent consideration	121,251	121,251	—	—	121,251
	As of December 31, 2022				
	Carrying Amount	Fair Value	Fair Value Measurements		
			Level 1	Level 2	Level 3
Assets					
Cash equivalents	\$ 212,577	\$ 212,577	\$ 212,577	\$ —	\$ —
Corporate bonds	193,633	193,633	—	193,633	—
U.S. Treasuries	1,139,310	1,139,310	1,139,310	—	—
Equity securities	134,836	134,836	134,836	—	—
Liabilities					
Contingent consideration	116,165	116,165	—	—	116,165

The liabilities measured at fair value on a recurring basis that have unobservable inputs and are therefore categorized as level 3 are related to contingent consideration. The fair value as of September 30, 2023 of \$121.3 million is comprised of \$74.2 million related to the acquisition of Joule, as well as \$47.1 million from the Frames Holding B.V. (“Frames”) in 2021 and the Giner ELX, Inc. and United Hydrogen Group Inc. acquisitions in 2020.

In connection with the Frames acquisition, the Company recorded on its consolidated balance sheet a liability of \$29.1 million representing the fair value of contingent consideration payable. The fair value of this contingent consideration was \$28.3 million and \$31.0 million as of September 30, 2023 and December 31, 2022, respectively. The change in fair value compared to December 31, 2022 was due to a decrease in the fair value of the liability balance as well as a change in the foreign currency translation. The Company recorded a decrease of \$1.9 million and \$2.7 million for the three and nine months ended September 30, 2023 in change in fair value of contingent consideration in the unaudited interim condensed consolidated statement of operations, respectively.

In connection with the Giner ELX, Inc. acquisition, the Company recorded on its consolidated balance sheet a liability of \$16.0 million representing the fair value of contingent consideration payable. The fair value of this contingent consideration was \$17.4 million and \$14.5 million as of September 30, 2023 and December 31, 2022, respectively, and as a result, an increase of \$0.6 million and \$2.9 million was recorded in change in fair value of contingent consideration in the unaudited interim condensed consolidated statement of operations for the three and nine months ended September 30, 2023, respectively.

In connection with the United Hydrogen Group Inc. acquisition the Company recorded on its consolidated balance sheet a liability of \$1.1 million representing the fair value of contingent consideration payable. The fair value of this contingent consideration was \$1.4 million and \$1.5 million as of September 30, 2023 and December 31, 2022, respectively, and as a result, a decrease of \$0.3 million and \$0.1 million was recorded in change in fair value of contingent consideration in the unaudited interim condensed consolidated statement of operations for the three and nine months ended September 30, 2023, respectively.

[Table of Contents](#)

In the unaudited interim condensed consolidated balance sheets, contingent consideration is recorded in the contingent consideration, loss accrual for service contracts, and other current liabilities financial statement line item, and was comprised of the following unobservable inputs as of September 30, 2023:

Financial Instrument	Fair Value	Valuation Technique	Unobservable Input	Range (Weighted Average)
Contingent Consideration	\$ 75,491	Scenario based method	Credit spread	14.05% - 14.20%
			Discount rate	18.71% - 19.67%
	10,960	Monte carlo simulation	Credit spread	14.20%
			Discount rate	19.64%
			Revenue volatility	38.64%
	34,800	Monte carlo simulation	Credit spread	14.19%
			Revenue volatility	25.00%
			Gross profit volatility	55.00%
	<u>\$ 121,251</u>			

In the unaudited interim condensed consolidated balance sheets, contingent consideration is recorded in the contingent consideration, loss accrual for service contracts, and other current liabilities financial statement line item, and was comprised of the following unobservable inputs as of December 31, 2022:

Financial Instrument	Fair Value	Valuation Technique	Unobservable Input	Range (Weighted Average)
Contingent Consideration	\$ 85,269	Scenario based method	Credit spread	15.73% - 15.74%
			Discount rate	19.85% - 20.68%
	11,310	Monte carlo simulation	Credit spread	15.74%
			Discount rate	20.00%-20.30%
			Revenue volatility	45.29%
	19,586	Monte carlo simulation	Credit spread	15.73%
			Revenue volatility	35.7% - 23.1% (35.0%)
			Gross profit volatility	106.7% - 23.2% (60.0%)
	<u>\$ 116,165</u>			

[Table of Contents](#)

The change in the carrying amount of Level 3 liabilities for the nine month period ended September 30, 2023 was as follows (in thousands):

		Nine Months Ended September 30, 2023
Beginning balance at December 31, 2022	\$	116,165
Cash payments		(2,000)
Fair value adjustments		8,769
Foreign currency translation adjustment		539
Ending balance at March 31, 2023		123,473
Cash payments		(11,000)
Payment settled in stock		(8,000)
Fair value adjustments		15,308
Foreign currency translation adjustment		60
Ending balance at June 30, 2023	\$	119,841
Fair value adjustments		2,239
Foreign currency translation adjustment		(829)
Ending balance at September 30, 2023	\$	121,251

16. Investments

The fair values of the Company's investments are based upon prices provided by an independent pricing service provider. Management has assessed and concluded that these prices are reasonable and has not adjusted any prices received from the independent pricing service provider.

The amortized cost, gross unrealized gains and losses, fair value of those investments classified as available-for-sale, and allowance for credit losses at September 30, 2023 are summarized as follows (in thousands):

	September 30, 2023				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Allowance for Credit Losses
Corporate bonds	\$ 128,111	\$ —	\$ —	\$ 128,111	—
U.S. Treasuries	260,657	—	—	260,657	—
Total	\$ 388,768	\$ —	\$ —	\$ 388,768	\$ —

The amortized cost, gross unrealized gains and losses, fair value of those investments classified as available-for-sale, and allowance for credit losses at December 31, 2022 are summarized as follows (in thousands):

	December 31, 2022				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Allowance for Credit Losses
Corporate bonds	\$ 200,735	\$ 7	\$ (7,109)	\$ 193,633	—
U.S. Treasuries	1,154,879	111	(15,680)	1,139,310	—
Total	\$ 1,355,614	\$ 118	\$ (22,789)	\$ 1,332,943	\$ —

We regularly review available-for-sale securities for declines in fair values that we determine to be credit related. In order to determine whether an allowance for credit losses was required, we considered factors such as whether amounts related to securities have become uncollectible, whether we intend to sell a security, and whether it is more likely than not that we will be required to sell a security prior to recovery. The Company also reviewed the declines in fair value related to our available-for-sale securities and determined that these declines were due to fluctuations in interest rates. As of September 30, 2023, the Company did not have an allowance for credit losses related to available-for-sale securities.

Additionally we regularly review whether available-for-sale securities are other-than-temporarily impaired ("OTTI"). Available-for-sale securities with unrealized losses are considered OTTI if the Company intends to sell the

security or if the Company will be required to sell the security prior to any anticipated recovery. If the Company determines that a security is OTTI under these circumstances, the impairment recognized in earnings is measured as the difference between the amortized cost and the current fair value. The Company recorded an other-than-temporary impairment of \$10.8 million for available-for-sale debt securities in an unrealized loss position due to a change in the Company's ability and intent to retain these investments for a period of time sufficient to allow for any anticipated recovery in the fair value. The Company no longer has available-for-sale securities that are in a loss position as of September 30, 2023.

The cost, gross unrealized gains and losses, and fair value of those investments classified as equity securities at September 30, 2023 are summarized as follows (in thousands):

	September 30, 2023			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Fixed income mutual funds	\$ 70,257	\$ —	\$ (2,434)	\$ 67,823
Total	\$ 70,257	\$ —	\$ (2,434)	\$ 67,823

The cost, gross unrealized gains and losses, and fair value of those investments classified as equity securities at December 31, 2022 are summarized as follows (in thousands):

	December 31, 2022			
	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Fixed income mutual funds	\$ 70,257	\$ —	\$ (2,620)	\$ 67,637
Exchange traded mutual funds	75,999	—	(8,800)	67,199
Total	\$ 146,256	\$ —	\$ (11,420)	\$ 134,836

A summary of the amortized cost and fair value of investments classified as available-for-sale, by contractual maturity, as of September 30, 2023 and December 31, 2022 was as follows (in thousands):

Maturity:	September 30, 2023		December 31, 2022	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Less than 12 months	\$ 281,748	\$ 281,748	\$ 1,045,120	\$ 1,039,333
12 months or greater	107,020	107,020	310,494	293,610
Total	\$ 388,768	\$ 388,768	\$ 1,355,614	\$ 1,332,943

Accrued interest income was \$2.1 million and \$3.0 million at September 30, 2023 and December 31, 2022, respectively, and included within the balance for prepaid expenses and other current assets in the unaudited interim condensed consolidated balance sheets.

Equity Method Investments

As of September 30, 2023 and December 31, 2022, the Company accounted for the following investments in the investee's common stock under the equity method, which are included in the investments in non-consolidated entities and non-marketable equity securities on the interim unaudited condensed consolidated balance sheets (amounts in thousands):

Investee	Formation Date	As of September 30, 2023		As of December 31, 2022	
		Common Stock Ownership %	Carrying Value	Common Stock Ownership %	Carrying Value
HyVia	Q2 2021	50%	\$ 14,876	50%	\$ 11,281
AccionaPlug S.L.	Q4 2021	50%	3,821	50%	2,225
SK Plug Hyverse	Q1 2022	49%	42,559	49%	8,937
			\$ 61,256		\$ 22,443

17. Operating and Finance Lease Liabilities

As of September 30, 2023, the Company had operating leases, as lessee, primarily associated with sale/leaseback transactions that are partially secured by restricted cash and security deposits (see also Note 19, “Commitments and Contingencies”) as summarized below. These leases expire over the next one to nine years. Minimum rent payments under operating leases are recognized on a straight-line basis over the term of the lease.

Leases contain termination clauses with associated penalties, the amount of which cause the likelihood of cancellation to be remote. At the end of the lease term, the leased assets may be returned to the lessor by the Company, the Company may negotiate with the lessor to purchase the assets at fair market value, or the Company may negotiate with the lessor to renew the lease at market rental rates. No residual value guarantees are contained in the leases. No financial covenants are contained within the lease; however, the lease contains customary operational covenants such as the requirement that the Company properly maintain the leased assets and carry appropriate insurance. The leases include credit support in the form of either cash, collateral or letters of credit. See Note 19, “Commitments and Contingencies” for a description of cash held as security associated with the leases.

The Company has finance leases associated with its property and equipment in Latham, New York and at fueling customer locations. The fair value of this finance obligation approximated the carrying value as of September 30, 2023.

Future minimum lease payments under operating and finance leases (with initial or remaining lease terms in excess of one year) as of September 30, 2023 were as follows (in thousands):

	Operating Lease Liability	Finance Lease Liability	Total Lease Liabilities
Remainder of 2023	\$ 23,865	\$ 2,926	\$ 26,791
2024	97,982	11,672	109,654
2025	93,278	14,592	107,870
2026	84,386	11,739	96,125
2027	70,097	8,062	78,159
2028 and thereafter	126,543	1,498	128,041
Total future minimum payments	496,151	50,489	546,640
Less imputed interest	(138,809)	(6,275)	(145,084)
Total	\$ 357,342	\$ 44,214	\$ 401,556

Rental expense for all operating leases was \$25.0 million and \$17.4 million for the three months ended September 30, 2023 and 2022, respectively. Rental expense for all operating leases was \$70.2 million and \$46.5 million for the nine months ended September 30, 2023 and 2022, respectively.

At September 30, 2023 and December 31, 2022, security deposits associated with sale/leaseback transactions were \$7.4 million and \$5.8 million, respectively, and were included in other assets in the unaudited interim condensed consolidated balance sheets.

At September 30, 2023 and December 31, 2022, the right of use assets associated with finance leases was \$62.6 million and \$58.4 million, respectively. The accumulated depreciation for these right of use assets was \$7.8 million and \$4.7 million at September 30, 2023 and December 31, 2022, respectively.

Other information related to the operating leases are presented in the following table:

	Nine Months Ended September 30, 2023	Nine Months Ended September 30, 2022
Cash payments (in thousands)	\$ 66,970	\$ 44,565
Weighted average remaining lease term (years)	6.01	6.31
Weighted average discount rate	11.3%	11.1%

Finance lease costs include amortization of the right of use assets (i.e., depreciation expense) and interest on lease liabilities (i.e., interest and other expense, net in the consolidated statement of operations), and were \$1.1 million and \$0.8 million for the three months ended September 30, 2023, respectively, and were \$3.3 million and \$2.3 million for the nine months ended September 30, 2023, respectively. Finance lease costs include amortization of the right of use assets (i.e., depreciation expense) and interest on lease liabilities (i.e., interest and other expense, net in the consolidated statement of operations), and were \$0.8 million and \$0.6 million for the three months ended September 30, 2022, respectively, and were \$2.4 million and \$1.8 million for the nine months ended September 30, 2022, respectively.

18. Finance Obligation

The Company has sold future services to be performed associated with certain sale/leaseback transactions and recorded the balance as a finance obligation. The outstanding balance of this obligation at September 30, 2023 was \$355.2 million, \$75.0 million and \$280.2 million of which was classified as short-term and long-term, respectively, on the accompanying unaudited interim condensed consolidated balance sheet. The outstanding balance of this obligation at December 31, 2022 was \$312.1 million, \$55.4 million and \$256.6 million of which was classified as short-term and long-term, respectively. The amount is amortized using the effective interest method. Interest expense recorded related to finance obligations for the three months ended September 30, 2023 and 2022 was \$10.4 million and \$7.4 million, respectively. Interest expense recorded related to finance obligations for the nine months ended September 30, 2023 and 2022 was \$29.4 million and \$21.1 million, respectively. The fair value of this finance obligation approximated the carrying value as of September 30, 2023 and December 31, 2022.

In prior periods, the Company entered into sale/leaseback transactions that were accounted for as financing transactions and reported as part of finance obligations. The outstanding balance of finance obligations related to sale/leaseback transactions at September 30, 2023 was \$17.2 million, \$10.4 million and \$6.8 million of which was classified as short-term and long-term, respectively on the accompanying consolidated balance sheet. The outstanding balance of this obligation at December 31, 2022 was \$17.2 million, \$3.5 million and \$13.7 million of which was classified as short-term and long-term, respectively on the accompanying consolidated balance sheets. The fair value of this finance obligation approximated the carrying value as of September 30, 2023 and December 31, 2022.

Future minimum payments under finance obligations notes above as of September 30, 2023 were as follows (in thousands):

	Sale of Future Revenue - Debt	Sale/Leaseback Financings	Total Finance Obligations
Remainder of 2023	\$ 26,835	\$ 1,158	\$ 27,993
2024	107,341	10,801	118,142
2025	102,084	1,897	103,981
2026	85,361	1,897	87,258
2027	68,790	1,897	70,687
2028 and thereafter	70,678	2,362	73,040
Total future minimum payments	461,089	20,012	481,101
Less imputed interest	(105,893)	(2,797)	(108,690)
Total	\$ 355,196	\$ 17,215	\$ 372,411

19. Commitments and Contingencies

Restricted Cash

In connection with certain of the above noted sale/leaseback agreements, cash of \$539.4 million and \$383.7 million was required to be restricted as security as of September 30, 2023 and December 31, 2022, respectively, which restricted cash will be released over the lease term. As of September 30, 2023 and December 31, 2022, the Company also had certain letters of credit backed by security deposits totaling \$426.9 million and \$379.6 million, respectively, of which \$396.2 million and \$354.0 million are security for the above noted sale/leaseback agreements, respectively, and \$30.7 million and \$25.6 million are customs related letters of credit, respectively.

As of both September 30, 2023 and December 31, 2022, the Company had \$76.7 million held in escrow related to the construction of certain hydrogen plants.

The Company also had \$1.2 million and \$1.2 million of consideration held by our paying agent in connection with each of the Joule and CIS acquisitions, respectively, reported as restricted cash as of September 30, 2023, with a corresponding accrued liability on the Company's unaudited interim condensed consolidated balance sheet. Additionally, the Company had \$6.2 million and \$10.8 million in restricted cash as collateral resulting from the Frames acquisition as of September 30, 2023 and December 31, 2022, respectively.

Litigation

Legal matters are defended and handled in the ordinary course of business. Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. Legal costs incurred in connection with loss contingencies are expensed as incurred. The Company has not recorded any accruals related to any legal matters.

As previously disclosed, several actions were filed in the U.S. District Courts for the Southern District of New York and for the Central District of California asserting claims under the federal securities laws against the Company and two of its senior officers, Mr. Marsh and Mr. Middleton. On July 22, 2021, the court consolidated those actions into *In re Plug Power, Inc. Securities Litigation*, No. 1:21-cv-2004, pending in the U.S. District Court for the Southern District of New York (the "2021 Securities Action") and appointed a lead plaintiff. On October 6, 2021, lead plaintiff filed a consolidated amended complaint asserting claims on behalf of a putative class composed of all persons who purchased or otherwise acquired the Company's securities between November 9, 2020 and March 16, 2021 (the "Amended Complaint"). The Amended Complaint asserted a claim against all defendants for alleged violations of Section 10(b) of the Securities Exchange Act of 1934 (the "Exchange Act") and Rule 10b5 promulgated thereunder and a claim under Section 20(a) of the Exchange Act against Mr. Marsh and Mr. Middleton as alleged controlling persons. The Amended Complaint alleged that defendants made "materially false" statements concerning (1) adjusted EBITDA; (2) fuel delivery and research and development expenses; (3) costs related to provision for loss contracts; (4) gross losses; and (5) the effectiveness of internal controls and procedures (the "accounting-related statements"), and that these alleged misstatements caused losses and damages for members of the alleged class. In an opinion and order entered on September 29, 2022, the court granted defendants' motion to dismiss the Amended Complaint in its entirety but permitted the lead plaintiff to further amend the complaint. On November 21, 2022, the lead plaintiff filed a second amended complaint purporting to assert claims under the same provisions against the same defendants on behalf of the same alleged class of purchasers of the Company's securities (the "Second Amended Complaint"). The Second Amended Complaint largely repeated the allegations in the Amended Complaint but, in addition, alleged that various public statements during the alleged class period were false or misleading because they allegedly failed to disclose the status of discussions and considerations relating to warrants to purchase the Company's common stock that were granted to a customer in connection with a commercial agreement. On August 29, 2023, the court granted defendants' motion to dismiss the Second Amended Complaint in its entirety, this time with prejudice. On September 29, 2023, the time period to appeal the court's dismissal of the Second Amended Complaint expired.

[Table of Contents](#)

On March 31, 2021, Junwei Liu, an alleged Company stockholder, derivatively and on behalf of nominal defendant Plug, filed a complaint in the U.S. District Court for the Southern District of New York against certain Company directors and officers (the “Derivative Defendants”), captioned *Liu v. Marsh et al.*, Case No. 1:21-cv-02753 (S.D.N.Y.) (the “Liu Derivative Complaint”). On April 5, 2021, alleged Company stockholders Elias Levy and Camerohn X. Withers, derivatively and on behalf of nominal defendant Plug, filed a complaint in the U.S. District Court for the Southern District of New York against the Derivative Defendants named in the Liu Derivative Complaint, captioned *Levy et al. v. McNamee et al.*, Case No. 1:21-cv-02891 (S.D.N.Y.) (the “Levy Derivative Complaint”). The Liu Derivative Complaint and the Levy Derivative Complaint have been consolidated in *In re Plug Power Derivative Litigation*, Lead Case No. 1:21-cv-02753-ER (S.D.N.Y.). The Liu and Levy Derivative Complaints allege that, between November 9, 2020 and March 1, 2021, the Derivative Defendants “made, or caused the Company to make, materially false and misleading statements concerning Plug Power’s business, operations, and prospects” by “issu[ing] positive financial information and optimistic guidance, and made assurances that the Company’s internal controls were effective,” when, “[i]n reality, the Company’s internal controls suffered from material deficiencies that rendered them ineffective.” The complaints assert claims derivatively on behalf of the Company for (1) breach of fiduciary duties, (2) unjust enrichment, (3) abuse of control, (4) gross mismanagement, (5) waste of corporate assets, and (6) contribution under Sections 10(b) and 21D of the Exchange Act (as to the named officer defendants). The complaints seek a judgment “[d]eclaring that Plaintiff may maintain this action on behalf of Plug”; “[d]eclaring that the [Derivative] Defendants have breached and/or aided and abetted the breach of their fiduciary duties”; “awarding to Plug Power the damages sustained by it as a result of the violations” set forth in the Liu Derivative Complaint, “together with pre-judgment and post-judgment interest thereon”; “[d]irecting Plug Power and the [Derivative] Defendants to take all necessary actions to reform and improve Plug Power’s corporate governance and internal procedures to comply with applicable laws”; and “[a]warding Plaintiff the costs and disbursements of this action, including reasonable attorneys’ and experts’ fees, costs, and expenses”; and “[s]uch other and further relief as the [c]ourt may deem just and proper.” By stipulation approved by the Court, the cases were stayed pending the resolution of the motion to dismiss in the 2021 Securities Action. Following expiration of the time period to appeal the dismissal of the 2021 Securities Action, the parties stipulated that Lead Plaintiff shall file a consolidated complaint by November 17, 2023, with Defendants’ responsive pleading due by January 16, 2024.

On May 13, 2021, alleged Company stockholder Romario St. Clair, derivatively and on behalf of nominal defendant Plug, filed a complaint in the Supreme Court of the State of New York, County of New York against the Derivative Defendants named in the Liu Derivative Complaint, captioned *St. Clair v. Plug Power Inc. et al.*, Index No. 653167/2021 (N.Y. Sup. Ct., N.Y. Cty.) (the “St. Clair Derivative Complaint”). The St. Clair Derivative Complaint alleges that, for approximately two years from March 13, 2019 onwards, the company made a number of improper statements that “failed to disclose and misrepresented the following material, adverse facts, which the [derivative] defendants knew, consciously disregarded, or were reckless in not knowing”, including: “(a) that the Company was experiencing known but undisclosed material weaknesses in its internal controls over financial reporting; (b) the Company was overstating the carrying amount of certain right of use assets and finance obligations associated with leases; (c) the Company was understating its loss accrual on certain service contracts; (d) the Company would need to take impairment charges relating to certain long-lived assets; (e) the Company was improperly classifying research and development costs versus costs of goods sold; and (f) the Company would be unable to file its annual Report for the 2020 fiscal year due to these errors.” The St. Clair Derivative Complaint asserts claims for (1) breach of fiduciary and (2) unjust enrichment. The St. Clair Derivative Complaint seeks a judgment “for the amount of damages sustained by the Company as a result of the defendants’ breaches of fiduciary duties and unjust enrichment”; “[d]irecting Plug Power to take all necessary actions to reform and improve its corporate governance and internal procedures to comply with applicable laws”; “[e]xtraordinary equitable and/or injunctive relief as permitted by law, equity, and state statutory provisions”; “[a]warding to Plug Power restitution from defendants, and each of them, and ordering disgorgement of all profits, benefits, and other compensation obtained by the defendants”; “[a]warding to plaintiff the costs and disbursements of the action, including reasonable attorneys’ fees, accountants’ and experts’ fees, costs, and expenses”; and “[g]ranteeing such other and further relief as the [c]ourt deems just and proper.” By stipulation approved by the Court, the case was stayed pending the resolution of the motion to dismiss in the 2021 Securities Action. A status conference to discuss a schedule for the orderly progress of the action is scheduled for November 27, 2023.

On June 13, 2022, alleged Company stockholder Donna Max, derivatively on behalf of the Company as nominal defendant, filed a complaint in the United States District Court for the District of Delaware against the Derivative

Defendants named in the Liu Derivative Complaint, captioned Max v. Marsh, et. al., Case No. 1:22-cv-00781 (D. Del.) (the “Max Derivative Complaint”). The Max Derivative Complaint alleges that, for the years 2018, 2019 and 2020, the defendants did not “assure that a reliable system of financial controls was in place and functioning effectively”; “failed to disclose errors in the Company’s accounting primarily relating to (i) the reported book value of right of use assets and related finance obligations, (ii) loss accruals for certain service contracts, (iii) the impairment of certain long-lived assets, and (iv) the classification of certain expenses previously included in research and development costs”; and that certain defendants traded Company stock at “artificially inflated stock prices.” The Max Derivative Complaint asserts claims derivatively on behalf of the Company for (1) breach of fiduciary against all defendants; (2) breach of fiduciary duty for insider trading against certain defendants; and (3) contribution under Sections 10(b) and 21D of the Exchange Act against certain defendants. The Max Derivative Complaint seeks an award “for the damages sustained by [the Company]” and related relief. By stipulation approved by the Court, the case was stayed pending the resolution of the motion to dismiss in the 2021 Securities Action. On October 30, 2023, the United States District Court for the District of Delaware dismissed the Max Derivative Complaint with prejudice upon joint stipulation of the parties.

On June 29, 2022, alleged Company stockholder Abbas Khambati, derivatively on behalf of the Company as nominal defendant, filed a complaint in the Court of Chancery in the State of Delaware against the Derivative Defendants named in the Liu Derivative Complaint and Gerard A. Conway, Jr. and Keith Schmid, captioned Khambati v. McNamee, et. al., C.A. No. 2022-05691 (Del. Ch.) (the “Khambati Derivative Complaint”). The Khambati Derivative Complaint alleges that the defendants “deceive[d] the investing public, including stockholders of Plug Power, regarding the Individual Defendants’ management of Plug Power’s operations and the Company’s compliance with the SEC’s accounting rules”; “facilitate[d]” certain defendants’ sales of “their personally held shares while in possession of material, nonpublic information”; and “enhance[d] the Individual Defendants’ executive and directorial positions at Plug Power and the profits, power, and prestige that the Individual Defendants enjoyed as a result of holding these positions.” The Khambati Derivative Complaint asserts claims derivatively on behalf of the Company for (1) breach of fiduciary; and (2) disgorgement and unjust enrichment. The Khambati Derivative Complaint seeks an award “for the damages sustained by [the Company] as a result of the breaches” alleged or “disgorgement or restitution”; “disgorgement of insider trading profits” and “all profits, benefits and other compensation obtained by [defendants’] insider trading and further profits flowing therefrom”; an order “[d]irecting the Company to take all necessary actions to reform and improve its corporate governance and internal procedures”; and related relief.

On July 19, 2022, alleged Company stockholder Anne D. Graziano, as Trustee of the Anne D. Graziano Revocable Living Trust, derivatively on behalf of the Company as nominal defendant, filed a complaint in the Court of Chancery in the State of Delaware against the Derivative Defendants named in the Khambati Derivative Complaint, captioned Graziano v. Marsh, et. al., C.A. No. 2022-0629 (Del. Ch.) (the “Graziano Derivative Complaint”). The Graziano Derivative Complaint alleges that the director defendants (i) “either knowingly or recklessly issued or caused the Company to issue the materially false and misleading statements” concerning “certain critical accounting issues”; (ii) “willfully ignored, or recklessly failed to inform themselves of, the obvious problems with the Company’s internal controls, practices, and procedures, and failed to make a good faith effort to correct the problems or prevent their recurrence”; (iii) the members of the Audit Committee failed “to prevent, correct, or inform the Board of the issuance of material misstatements and omissions regarding critical accounting issues and the adequacy of the Company’s internal controls”; (iv) “received payments, benefits, stock options, and other emoluments by virtue of their membership on the Board and their control of the Company”; (v) violated the Company’s Code of Conduct because they knowingly or recklessly engaged in and participated in making and/or causing the Company to make the materially false and misleading statements; and (vi) certain defendants “sold large amounts of Company stock while it was trading at artificially inflated prices.” The Graziano Derivative Complaint asserts claims derivatively on behalf of the Company for (1) breach of fiduciary; (2) breach of fiduciary duty against certain defendants for insider trading; (3) unjust enrichment; (4) aiding and abetting breach of fiduciary duty; and (5) waste of corporate assets. The Graziano Derivative Complaint seeks an award of “the amount of damages sustained by the Company”; seeks an order “[d]irecting Plug Power to take all necessary actions to reform and improve its corporate governance and internal procedures to comply with applicable laws and to protect Plug Power and its stockholders from a repeat of the damaging events described herein”; and related relief. The parties to the Graziano Derivative Complaint and Khambati Derivative Complaint have been consolidated in In re Plug Power, Inc. Stockholder Derivative Litigation, Consolidated C.A. No. 2022-0569 and, by stipulation approved by the court, the cases were stayed

pending the resolution of the motion to dismiss in the 2021 Securities Action. The parties are conferring regarding a proposed scheduling order for the orderly progress of the action.

On April 12, 2023, an action was filed in the U.S. District Court for the District of Delaware asserting claims under the federal securities laws against the Company and four of its senior officers, Mr. Marsh, Mr. Middleton, Mr. Mindnich, and Mr. Hull. The complaint asserts claims on behalf of a putative class composed of all persons who purchased or otherwise acquired the Company's securities between August 9, 2022 and March 1, 2023. The complaint asserted a claim against all defendants for alleged violations of Section 10(b) of the Exchange Act and Rule 10b5 promulgated thereunder and a claim under Section 20(a) of the Exchange Act against Mr. Marsh, Mr. Middleton, Mr. Mindnich, and Mr. Hull as alleged controlling persons. The complaint alleged that defendants made "materially false and/or misleading statements" about the Company's business and operations, including that "the Company was unable to effectively manage its supply chain and product manufacturing, resulting in reduced revenues and margins, increased inventory levels, and several large deals being delayed until at least 2023, among other issues." On May 25, 2023, a second action was filed in the U.S. District Court for the District of Delaware, also asserting claims under the federal securities laws against the Company, Mr. Marsh, Mr. Middleton, Mr. Mindnich, and Mr. Hull. On June 29, 2023, the court consolidated these actions into *In re Plug Power, Inc. Securities Litigation*, No. 1:23-cv-00576-MN (the "2023 Securities Action"), pending in the U.S. District Court for the District of Delaware and appointed a lead plaintiff. Under a stipulated schedule approved by the court, the lead plaintiffs filed an amended complaint on September 28, 2023. The amended complaint expanded the putative class period to include all stock purchasers between January 19, 2022 and March 1, 2023. The amended complaint added Mr. Shrestha as a defendant and no longer asserted any claims against Mr. Hull. The amended complaint primarily challenged statements concerning the Company's 2022 revenue goal of \$900-925 million and hydrogen production goal of 70 tons per day, alleging that these goals were "knowingly unfounded" due to purported "operational problems," "delays" and "supply chain problems." The defendants' response to the complaint is due on November 30, 2023.

On June 12, 2023, an action asserting similar claims was filed in the U.S. District Court for the Northern District of New York asserting claims under the federal securities laws against the Company and four of its senior officers, Mr. Marsh, Mr. Middleton, Mr. Mindnich, and Mr. Hull. The complaint asserts claims on behalf of a putative class composed of all persons who purchased or otherwise acquired the Company's securities between August 9, 2022 and March 1, 2023. The complaint asserted a claim against all defendants for alleged violations of Section 10(b) of the Exchange Act and Rule 10b5 promulgated thereunder and a claim under Section 20(a) of the Exchange Act against Mr. Marsh, Mr. Middleton, Mr. Mindnich, and Mr. Hull as alleged controlling persons. The complaint alleged that defendants made "materially false and misleading" statements, "and failed to disclose material adverse facts," about the Company's business and operations, including that "the Company was unable to effectively manage its supply chain and product manufacturing, resulting in reduced revenues and margins, increased inventory levels, and several large deals being delayed until at least 2023, among other issues." On June 27, 2023, the plaintiff filed a Notice of Voluntary Dismissal Without Prejudice against all defendants.

On May 2, 2023, a lawsuit entitled *Jacob Thomas and JTurbo Engineering & Technology, LLC v. Joule Processing, LLC and Plug Power Inc.*, Case No. 4:23-cv-01615, was filed in the United States District Court for the Southern District of Texas against the Company. The complaint alleges misappropriation of trade secrets under both the federal Defend Trade Secrets Act of 2016, 18 U.S.C. § 1836, and the Texas Uniform Trade Secrets Act, three breach of contract claims, and four common law claims under Texas law. On July 28, 2023, Joule Processing, LLC and Plug Power Inc. filed a partial motion to dismiss, and briefing on the motion was completed on August 25, 2023. On October 23, 2023, Jacob Thomas and JTurbo Engineering & Technology, LLC filed Plaintiff[s'] Verified Application for Temporary Restraining Order, Preliminary Injunction and Permanent Injunctive Relief (the "Application for Injunctive Relief"). Thereafter, the plaintiffs and the defendants submitted, and the Court entered, a joint stipulation that stayed briefing on the Application for Injunctive Relief until the Court has issued an order on the partial motion to dismiss.

On May 10, 2023, an action entitled *Ringling v. Plug Power, Inc., et al*, Case No. 1:23-cv-572, was filed in the U.S. District Court for the Northern District of New York asserting claims pursuant to 42 U.S.C. § 1981, Title VII of the Civil Rights Act of 1964, and the New York State Human Rights Law against the Company, Tom Rourke, individually, and/or Tom O'Grady, individually. The complaint asserts that the plaintiff is seeking damages to redress injuries suffered as a result of harassment and discrimination on the basis of his race, together with creating a hostile work environment,

failure to promote, retaliation, and constructive discharge. Plug disagrees with plaintiff's representations about his time at Plug and intends to vigorously defend against his allegations.

On July 24, 2023, an action entitled *Felton v. Plug Power, Inc.*, Case No. 1:23-cv-887, was filed in the U.S. District Court for the Northern District of New York asserting claims against the Company pursuant to the New York State Human Rights Law. The complaint asserts that the plaintiff is seeking damages to redress injuries suffered as a result of harassment and discrimination on the basis of his race, together with creating a hostile work environment, and retaliation. Plug disagrees with plaintiff's representations about his time at Plug and intends to vigorously defend against his allegations.

On September 13, 2023, alleged Company stockholder Peter Trappen, derivatively and on behalf of the Company as nominal defendant, filed a complaint in the U.S. District Court for the District of Delaware against Mr. Marsh, Mr. Middleton, Mr. Mindnich, Mr. Hull, Mr. McNamee, Gary Willis, Maureen Helmer, Gregory Kenausis, Kyungyeol Song, and Kavita Mahtani captioned *Trappen v. Marsh, et al.*, Case No. 1:23-cv-01007-UNA (the "Trappen Complaint"). The Trappen Complaint alleges that members of the Company's Board of Directors and other Plug Power executives (collectively, the "Individual Defendants") "made materially false and/or misleading statements, as well as failed to disclose material adverse facts, about the Company's business and operations" based on allegations set forth in the Melton securities action discussed above. The Trappen Complaint asserts claims derivatively on behalf of the Company for (1) violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and SEC Rule 10b-5 promulgated thereunder; (2) breaches of fiduciary duties; (3) unjust enrichment; and (4) waste of corporate assets. The Trappen Complaint seeks a judgment "[d]eclaring that Plaintiff may maintain this action on behalf of Plug Power and that Plaintiff is an adequate representative of the Company"; "[d]etermining and awarding to Plug Power the damages sustained by it as a result of the violations set forth above from each of the Defendants, jointly and severally, together with interest thereon"; and "[d]irecting Plug Power and the Individual Defendants to take all necessary actions to reform and improve its corporate governance and internal procedures to comply with applicable laws and to protect Plug Power and its shareholders from a repeat of the damaging events."

On October 27, 2023, alleged Company stockholders Denish Bhavsar and Gamhita Gera, derivatively and on behalf of the Company as nominal defendant, filed a complaint in the U.S. District Court for the Southern District of New York against Mr. Marsh, Mr. Middleton, Mr. Mindnich, Sanjay Shrestha, Jean Bua, Ms. Helmer, Mr. Kenausis, Kavita Mahtani, Mr. McNamee, Mr. Schneider, Mr. Silver, Kyungyeol Song and Mr. Willis captioned *Bhavsar v. Marsh, et al.*, Case No. 1:23-cv-09452 (the "Bhavsar Complaint"). The Bhavsar Complaint alleges based on allegations set forth in the complaint in the securities action discussed above that members of the Company's Board of Directors and other Plug Power executives (collectively, the "Individual Defendants") "made materially false and/or misleading statements, as well as failed to disclose materially adverse facts about the Company's business, operations, and prospects." The Bhavsar Complaint asserts claims derivatively on behalf of the Company for (1) violations of Section 14(a) of the Exchange Act of 1934; (2) breaches of fiduciary duties; (3) unjust enrichment; and (4) abuse of control. The Bhavsar Complaint seeks a judgment "[d]eclaring that Plaintiff may maintain this action on behalf of Plug Power and that Plaintiff is an adequate representative of the Company"; "[d]etermining and awarding to Plug Power the damages sustained by it as a result of the violations set forth above from each of the Individual Defendants, jointly and severally, together with interest thereon"; and "[d]irecting Plug Power and the Individual Defendants to take all necessary actions to reform and improve Plug Power's corporate governance and internal procedures to comply with applicable laws and to protect Plug Power and its shareholders from a repeat of the damaging events."

On November 2, 2023, alleged Company stockholders Elias Levy and Camerohn X. Withers, derivatively and on behalf of the Company as nominal defendant, filed a complaint in the U.S. District Court for the District of Delaware against Mr. McNamee, Mr. Willis, Ms. Helmer, Mr. Kenausis, Mr. Song, Ms. Mahtani, Mr. Marsh, Mr. Middleton, Mr. Mindnich, Mr. Hull, Mr. Schneider, Mr. Silver, and Ms. Bua captioned *Levy v. McNamee, et al.*, Case No. 1:23-cv-01253 (the "2023 Levy Derivative Complaint"). The 2023 Levy Derivative Complaint alleges based on allegations in the securities complaint discussed above that current members of the Company's Board of Directors ("Current Directors") and other Plug Power executives (collectively, the "Individual Defendants") "breached their fiduciary duties by making, or causing the Company to make, several materially false and/or misleading statements and failed to disclose material adverse facts about the Company's business, finances, and operations." The 2023 Levy Derivative Complaint asserts

claims derivatively in behalf of the Company for (1) breaches of fiduciary duties; (2) unjust enrichment; (3) waste of corporate assets; (4) abuse of control; (5) gross mismanagement; and (6) contribution under Sections 10(b) and 21D of the Exchange Act. The 2023 Levy Derivative Complaint seeks a judgment “[d]eclaring that Plaintiffs may maintain this action on behalf of Plug Power and that Plaintiffs are adequate representatives of the Company”; “[d]irecting the Current Directors to take all necessary actions to reform and improve the Company’s corporate governance, risk management, and internal operating procedures to comply with applicable laws and to protect the Company and its stockholders”; and “[a]warding damages to the Company for the harm the Company suffered as a result of the Individual Defendants’ wrongful conduct.”

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to credit risk consist principally of cash, cash equivalents, restricted cash, accounts receivable and marketable securities. Cash and restricted cash are maintained in accounts with financial institutions, which, at times may exceed the Federal depository insurance coverage of \$0.3 million. The Company has not experienced losses on these accounts and management believes, based upon the quality of the financial institutions, that the credit risk with regard to these deposits is not significant. The Company’s available-for-sale securities consists primarily of investments in U.S. Treasury securities and short-term high credit quality corporate debt securities. Equity securities are comprised of fixed income and equity market index mutual funds.

Concentrations of credit risk with respect to receivables exist due to the limited number of select customers with whom the Company has commercial sales arrangements. To mitigate credit risk, the Company performs appropriate evaluation of a prospective customer’s financial condition.

At September 30, 2023, there were no customers that made up more than 10% of the Company’s total accounts receivable balance. At December 31, 2022, one customer comprised approximately 24.9% of the total accounts receivable balance.

For purposes of assigning a customer to a sale/leaseback transaction completed with a financial institution, the Company considers the end user of the assets to be the ultimate customer. For the three and nine months ended September 30, 2023, 44.3% and 46.6% of total consolidated revenues were associated with three customers, respectively. For the three and nine months ended September 30, 2022, 66.9% and 53.2% of total consolidated revenues were associated with two customers, respectively.

Guarantee

On May 30, 2023, HyVia entered into a government grant agreement with Bpifrance. As part of the agreement, our wholly-owned subsidiary, Plug Power France, was required to issue a guarantee to Bpifrance in the amount of €20 million through the end of January 2027. Plug Power France is liable to the extent of the guarantee for sums due to Bpifrance from HyVia under the agreement based on the difference between the total amount paid by Bpifrance and the final amount certified by HyVia and Bpifrance. As part of the agreement, there are certain milestones that HyVia is required to meet, and the non-performance of these milestones or termination of this agreement could result in this guarantee being called upon. As of September 30, 2023, no payments related to this guarantee have been made by the Company, and Plug Power France did not record a liability for this guarantee as the likelihood of the guarantee being called upon as of September 30, 2023 is remote.

Unconditional purchase obligations

The Company has entered into certain off-balance sheet commitments that require the future purchase of goods or services (“unconditional purchase obligations”). The Company’s unconditional purchase obligations primarily consist of supplier arrangements, take or pay contracts and service agreements. For certain vendors, the Company’s unconditional obligation to purchase a minimum quantity of raw materials at an agreed upon price is fixed and determinable; while certain other raw material costs will vary due to product forecasting and future economic conditions.

Future payments under non-cancelable unconditional purchase obligations with a remaining term in excess of one year as of September 30, 2023, are as follows (in thousands):

Remainder of 2023	\$ 14,725
2024	44,231
2025	8,023
2026	8,023
2027	2,638
2028 and thereafter	—
Total	<u>\$ 77,640</u>

20. Employee Benefit Plans

2011 and 2021 Stock Option and Incentive Plan

The Company has issued stock-based awards to employees and members of its Board of Directors (the “Board”) consisting of stock options and restricted stock and restricted stock unit awards. The Company accounts for all stock-based awards to employees and members of the Board as compensation costs in the consolidated financial statements based on their fair values measured as of the date of grant. These costs are recognized over the requisite service period. Stock-based compensation costs recognized, excluding the Company’s matching contributions of \$3.0 million to the Plug Power Inc. 401(k) Savings & Retirement Plan and quarterly Board compensation, were \$42.4 million and \$44.2 million for the three months ended September 30, 2023 and September 30, 2022, respectively. Stock-based compensation costs recognized, excluding the Company’s matching contributions of \$9.0 million to the Plug Power Inc. 401(k) Savings & Retirement Plan and quarterly Board compensation, were \$119.5 million and \$127.7 million for the nine months ended September 30, 2023 and September 30, 2022, respectively. The methods and assumptions used in the determination of the fair value of stock-based awards are consistent with those described in our 2022 Form 10-K.

The components and classification of stock-based compensation expense, excluding the Company’s matching contributions to the Plug Power Inc. 401(k) Savings & Retirement Plan and quarterly Board compensation, were as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Cost of sales	\$ 3,115	\$ 1,821	\$ 8,231	\$ 4,928
Research and development	2,935	1,483	6,982	4,062
Selling, general and administrative	36,392	40,935	104,278	118,710
	<u>\$ 42,442</u>	<u>\$ 44,239</u>	<u>\$ 119,491</u>	<u>\$ 127,700</u>

Option Awards

The Company issues options that are time and performance-based awards. All option awards are determined to be classified as equity awards.

Service Stock Options Awards

The following table reflects the service stock option activity for the nine months ended September 30, 2023:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms	Aggregate Intrinsic Value
Options outstanding at December 31, 2022	\$ 12,078,269	\$ 14.34	\$ 7.57	\$ 42,835
Granted	2,726,689	12.47	—	—
Exercised	(525,617)	2.50	—	—
Forfeited	(740,582)	28.01	—	—
Options outstanding at September 30, 2023	\$ 13,538,759	\$ 13.67	\$ 7.48	\$ 19,007
Options exercisable at September 30, 2023	7,850,918	10.98	6.20	19,007
Options unvested at September 30, 2023	\$ 5,687,841	\$ 17.39	\$ 9.24	\$ —

The weighted average grant date fair value of the service stock options granted during the nine months ended September 30, 2023 and 2022 was \$8.44 and \$15.31, respectively. The total intrinsic fair value of service stock options exercised during the nine months ended September 30, 2023 and 2022 was \$4.2 million and \$14.8 million, respectively. The total fair value of the service stock options that vested during the nine months ended September 30, 2023 and 2022 was approximately \$24.4 million and \$21.7 million, respectively.

Compensation cost associated with service stock options represented approximately \$8.6 million and \$6.8 million of the total share-based payment expense recorded for the three months ended September 30, 2023 and 2022, respectively. Compensation cost associated with service stock options represented approximately \$23.8 million and \$19.2 million of the total share-based payment expense recorded for the nine months ended September 30, 2023 and 2022, respectively. As of September 30, 2023, there was approximately \$51.4 million of unrecognized compensation cost related to service stock option awards to be recognized over the weighted average remaining period of 2.10 years.

Performance Stock Option Awards

In May 2023, the Compensation Committee approved the grant of performance stock options to the Company's Chief Executive Officer and certain other executive officers. These performance stock options are subject to both performance based conditions, tied to the achievement of stock price hurdles, and time-based vesting; therefore, a Monte Carlo Simulation was utilized to determine the grant date fair value with the associated expense recognized over the requisite service period. Up to one third (1/3) the performance stock options will vest and become exercisable on each of the first three anniversaries of the grant date, provided that the volume weighted average price of the Company's common stock during any 30 consecutive trading day period in the three year performance period following the grant date of the stock options ("VWAP") equals or exceeds certain levels.

There will be no interpolation for the performance stock option granted on May 18, 2023 if the VWAP falls between any two stock price hurdles, unless in the event of a change in control. For the Chief Executive Officer and executive officers, 33.33% of the performance stock options will be deemed to have satisfied the performance-based condition and will be eligible to be exercised if the VWAP equals \$9.84; an additional 33.33% of the options will be deemed to have satisfied the performance-based condition and will be eligible to be exercised if the VWAP equals \$11.81; and the remaining 33.34% of the options will be deemed to have satisfied the performance-based condition and will be eligible to be exercised if the VWAP equals or exceeds \$13.77.

Failure to achieve any of the stock price hurdles applicable to a performance stock option during the three-year performance period will result in the applicable options not becoming exercisable. The performance-based stock options have a maximum term of seven years from the grant date.

Key inputs and assumptions used to estimate the fair value of performance stock options include the grant price of the awards, the expected option term, VWAP hurdle rates, volatility of the Company's stock, an appropriate risk-free rate, and the Company's dividend yield. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by employees who receive equity awards, and subsequent events are not indicative of the reasonableness of the original estimates of fair value made by the Company.

The following table presents key assumptions used to estimate the fair value of the performance stock option awards granted in 2023:

	Nine Months Ended September 30, 2023
Remaining VWAP performance period (years)	3
Risk-free interest rate	3.60%
Expected volatility	75.00%
Closing stock price on grant date	\$ 7.87

The following table reflects the performance stock option award activity for the nine months ended September 30, 2023. Solely for the purposes of this table, the number of performance options is based on participants earning the maximum number of performance options (i.e. 200% of the target number of performance options):

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms	Aggregate Intrinsic Value
Options outstanding at December 31, 2022	15,520,000	\$ 26.87	5.81	\$ —
Granted	6,405,000	7.87	6.63	—
Options outstanding at September 30, 2023	21,925,000	\$ 21.32	5.52	\$ —
Options exercisable at September 30, 2023	2,782,000	26.92	4.98	—
Options unvested at September 30, 2023	19,143,000	\$ 20.50	5.60	\$ —

The weighted average grant-date fair value of the performance stock options granted during the nine months ended September 30, 2023 and 2022 was \$4.32 and \$12.78, respectively. There were no performance stock options exercised during the nine months ended September 30, 2023 or 2022. The total fair value of the performance stock options that vested during the nine months ended September 30, 2023 and 2022 was each \$20.8 million.

As of September 30, 2023, there were 1,391,000 unvested performance stock options for which the employee requisite service period had not been rendered but were expected to vest. The aggregate intrinsic value of these unvested performance stock options was \$0 as of September 30, 2023. The weighted average exercise price of these unvested performance stock options was \$26.92 and the weighted average remaining contractual term was 4.98 years as of September 30, 2023.

Compensation cost associated with performance stock options represented approximately \$18.4 million and \$26.1 million of the total share-based payment expense recorded for the three months ended September 30, 2023 and 2022, respectively. Compensation costs associated with performance stock options represented approximately \$53.6 million and \$76.5 million of the total share-based payment expense recorded for the nine months ended September 30, 2023 and 2022, respectively. As of September 30, 2023, there was approximately \$44.5 million of unrecognized compensation cost related to performance stock option awards to be recognized over the weighted average remaining period of 1.85 years.

Restricted Common Stock and Restricted Stock Unit Awards

The following table reflects the restricted stock and restricted stock unit activity for the nine months ended September 30, 2023 (in thousands except share amounts):

	Shares	Weighted Average Grant Date Fair Value	Aggregate Intrinsic Value
Unvested restricted common stock and restricted stock units at December 31, 2022	6,276,376	\$ 21.56	\$ 77,639
Granted	3,606,393	12.57	—
Vested	(1,973,283)	20.77	—
Forfeited	(648,354)	23.50	—
Unvested restricted common stock and restricted stock units at September 30, 2023	7,261,132	\$ 17.14	\$ 55,185

The weighted average grant-date fair value of the restricted common stock and restricted stock unit awards granted during the nine months ended September 30, 2023 and 2022 was \$12.57 and \$23.60, respectively. The total fair value of restricted shares of common stock and restricted stock unit awards that vested for the nine months ended September 30, 2023 and 2022 was \$41.0 million and \$34.3 million, respectively.

The Company recorded expense associated with its restricted common stock and restricted stock unit awards of approximately \$15.0 million and \$11.3 million for the three months ended September 30, 2023 and 2022, respectively. The Company recorded expense associated with its restricted common stock and restricted stock unit awards of approximately \$42.1 million and \$32.0 million for the nine months ended September 30, 2023 and 2022, respectively. Additionally, as of September 30, 2023, there was \$98.3 million of unrecognized compensation cost related to restricted stock and restricted common stock unit awards to be recognized over the weighted average period of 2.16 years.

Included in the total unvested restricted common stock and restricted stock units as of September 30, 2023, there were 375,000 restricted common stock units outstanding with a performance target. The Company recorded expense associated with the restricted common stock units with a performance target of \$0.4 million for the three and nine months ended September 30, 2023, respectively. Additionally, as of September 30, 2023 there was \$3.8 million of unrecognized compensation cost related to the restricted common stock units outstanding with a performance target to be recognized over the weighted average period of 2.83 years.

401(k) Savings & Retirement Plan

The Company issued 872,026 shares of common stock and 310,159 shares of common stock pursuant to the Plug Power Inc. 401(k) Savings & Retirement Plan during the nine months ended September 30, 2023 and 2022, respectively.

The Company's expense for this plan was approximately \$3.0 million and \$2.5 million for the three months ended September 30, 2023 and 2022, respectively. The Company's expense for this plan was approximately \$9.0 million and \$6.7 million for the nine months ended September 30, 2023 and 2022, respectively.

Non-Employee Director Compensation

The Company granted 13,662 shares of common stock and 4,342 shares of common stock to non-employee directors as compensation for the three months ended September 30, 2023 and 2022, respectively. The Company granted 35,444 shares of common stock and 14,282 shares of common stock to non-employee directors as compensation for the nine months ended September 30, 2023 and 2022, respectively. All common stock issued is fully vested at the time of issuance and is valued at fair value on the date of issuance. The Company's share-based compensation expense in connection with non-employee director compensation was approximately \$0.1 million and \$0.1 million for the three months ended September 30, 2023 and 2022, respectively. The Company's share-based compensation expense in connection with non-employee director compensation was approximately \$0.3 million and \$0.3 million for each of the nine months ended September 30, 2023 and 2022, respectively.

21. Accrued Expenses

Accrued expenses at September 30, 2023 and December 31, 2022 consisted of (in thousands):

	September 30, 2023	December 31, 2022
Accrued payroll and compensation related costs	\$ 27,320	\$ 18,231
Accrual for capital expenditures	62,037	53,089
Accrued accounts payable	45,404	53,899
Accrued sales and other taxes	11,028	15,112
Accrued interest	2,263	421
Accrued other	5,583	15,678
Total	\$ 153,635	\$ 156,430

22. Segment Reporting

Our organization is managed from a sales perspective on the basis of “go-to-market” sales channels, emphasizing shared learning across end user applications and common supplier/vendor relationships. These sales channels are structured to serve a range of customers for our products and services. As a result of this structure, we concluded that we have one operating and reportable segment — the design, development and sale of fuel cells and hydrogen producing equipment. Our chief executive officer was identified as the chief operating decision maker (CODM). All significant operating decisions made by management are largely based upon the analysis of Plug Power Inc. on a total company basis.

The revenue and long-lived assets based on geographic location are as follows (in thousands):

	Revenues		Revenues		Long-Lived Assets as of	
	Three Months Ended September 30, 2023	September 30, 2022	Nine Months Ended September 30, 2023	September 30, 2022	September 30, 2023	December 31, 2022
North America	\$ 156,645	\$ 157,426	\$ 557,644	\$ 385,620	\$ 1,721,516	\$ 1,209,900
Europe	34,097	15,582	86,367	51,390	95,670	13,215
Asia	3,128	13,528	12,746	36,219	—	—
Other	4,841	2,092	12,422	7,469	3,428	—
Total	\$ 198,711	\$ 188,628	\$ 669,179	\$ 480,698	\$ 1,820,614	\$ 1,223,115

23. Related Party Transactions

HyVia

Our 50/50 joint venture, HyVia, manufactures and sells fuel cell powered electric light commercial vehicles (“FCE-LCVs”) and supplies hydrogen fuel and fueling stations to support the FCE-LCV market, in each case primarily in Europe. For the three months ended September 30, 2023 and 2022, we recognized related party total revenue of \$3.1 million and \$0.4 million, respectively. For the nine months ended September 30, 2023 and 2022, we recognized related party total revenue of \$9.2 million and \$2.4 million, respectively. As of September 30, 2023 and December 31, 2022, we had outstanding accounts receivable of \$9.4 million and \$3.4 million, respectively.

24. Subsequent Events

We have evaluated events as of November 9, 2023 and have not identified any subsequent events.

Item 2 — Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with our accompanying unaudited interim condensed consolidated financial statements and notes thereto included within this Quarterly Report on Form 10-Q, and our audited and notes thereto included in our 2022 Form 10-K. In addition to historical information, this Quarterly Report on Form 10-Q and the following discussion contain statements that are not historical facts and are considered forward-looking within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act. These forward-looking statements contain projections of our future results of operations or of our financial position or state other forward-looking information. In some cases, you can identify these statements by forward-looking words such as “believe,” “could,” “continue,” “estimate,” “expect,” “forecast,” “intend,” “may,” “should,” “will,” “would,” “plan,” “project” or the negative of such words or other similar words or phrases. We believe that it is important to communicate our future expectations to our investors. However, there may be events in the future that we are not able to accurately predict or control and that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. Investors are cautioned not to unduly rely on forward-looking statements because they involve risks and uncertainties, and actual results may differ materially from those discussed as a result of various factors, including, but not limited to:

- the risk that we continue to incur losses and might never achieve or maintain profitability;
- the risk that we will need to raise additional capital to fund our operations and such capital may not be available to us;
- the risks associated with global economic uncertainty, including inflationary pressures, fluctuating interest rates, currency fluctuations, bank failure, and supply chain disruptions;
- the risk that we may not be able to obtain from our hydrogen suppliers a sufficient supply of hydrogen at competitive prices or the risk that we may not be able to produce hydrogen internally at competitive prices;
- the risk that we may not be able to expand our business or manage our future growth effectively;
- the risk that delays in or not completing our product development and hydrogen plant construction goals may adversely affect our revenue and profitability;
- the risk with regards to the impact of the Inflation Reduction Act on our business;
- the risk that we may be unable to successfully pursue, integrate, or execute upon our new business ventures;
- the risk of dilution to our stockholders and/or stock price should we need to raise additional capital;
- the risk that our lack of extensive experience in manufacturing and marketing of certain of our products may impact our ability to manufacture and market said products on a profitable and large-scale commercial basis;
- the risk that unit orders may not ship, be installed and/or converted to revenue, in whole or in part;
- the risk that a loss of one or more of our major customers could result in a material adverse effect on our financial condition, or if one of our major customers delays payment of or is unable to pay its receivables, a material adverse effect could result on our financial condition;
- the risk that we may not be able to convert all of our estimated future revenue into revenue and cash flows;
- the risk that a sale or issuance of a significant number of shares of stock could depress the market price of our common stock;
- the risk that our convertible senior notes, if settled in cash, could have a material adverse effect on our financial results;
- the risk that our convertible note hedges may affect the value of our convertible senior notes and our common stock;
- the risk that negative publicity related to our business or stock could result in a negative impact on our stock value and profitability;
- the risk of potential losses related to any product liability claims or contract disputes;
- the risk of loss related to an inability to remediate the material weaknesses identified in internal control over financial reporting as of December 31, 2022 and 2021, or inability to otherwise maintain an effective system of internal control over financial reporting;
- our ability to attract and retain key personnel;
- the risks related to the use of flammable fuels in our products;
- the risk that pending orders may not convert to purchase orders, in whole or in part;
- the cost and timing of developing, marketing, and selling our products;

[Table of Contents](#)

- the risks involved with participating in joint ventures, including our ability or inability to execute our strategic growth plan through joint ventures;
- our ability to obtain financing arrangements to support the sale or leasing of our products and services to customers;
- our ability to achieve the forecasted revenue and costs on the sale of our products;
- the cost and availability of fuel and fueling infrastructures for our products;
- the risks, liabilities, and costs related to environmental, health, and safety matters;
- the risk of elimination or reduction of government subsidies and economic incentives for alternative energy products;
- market acceptance of our products and services;
- our ability to establish and maintain relationships with third parties with respect to product development, manufacturing, distribution, and servicing, and the supply of key product components;
- the cost and availability of components and parts for our products;
- the risk that possible new tariffs could have a material adverse effect on our business;
- our ability to continue as a going concern, including our ability to raise sufficient funds to fund our operations through the next 12 months from the date of this Quarterly Report;
- the risk that some or all of the recorded goodwill, intangible assets and property, plant, and equipment could be subject to impairment;
- our ability to develop commercially viable products;
- our ability to reduce product and manufacturing costs;
- our ability to successfully market, distribute and service our products and services internationally;
- our ability to improve system reliability for our products;
- competitive factors, such as price competition and competition from other traditional and alternative energy companies;
- our ability to protect our intellectual property;
- our operational dependency on information technology and the risk of the failure of such technology, including failure to effectively prevent, detect, and recover from security compromises or breaches, including cyber-attacks;
- the cost of complying with current and future federal, state and international governmental regulations;
- the expense and resources associated with being subject to legal proceedings and legal compliance;
- the risks associated with past and potential future acquisitions;
- the risks associated with geopolitical instability, including the conflict between Russia and Ukraine and growing tensions between U.S. and China and neighboring regions; and
- the volatility of our stock price.

The risks included here are not exhaustive, and additional factors could adversely affect our business and financial performance, including factors and risks discussed in the section titled “Risk Factors” included under Part I, Item 1A, in our 2022 Form 10-K and supplemented by Part II, Item 1A of the Quarterly Report on Form 10-Q for the quarters ended March 31, 2023 and June 30, 2023 and Part II, Item 1A of this Quarterly Report on Form 10-Q. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time, and it is not possible for management to predict all such risk factors, nor can we assess the impact of all such risk factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. While forward-looking statements reflect our good faith beliefs, they are not guarantees of future performance. These forward-looking statements speak only as of the date on which the statements were made. Except as may be required by applicable law, we do not undertake or intend to update any forward-looking statements after the date of this Quarterly Report on Form 10-Q.

References in this Quarterly Report on Form 10-Q to “Plug,” the “Company,” “we,” “our” or “us” refer to Plug Power Inc., including as the context requires, its subsidiaries.

Overview

Plug is facilitating the paradigm shift to an increasingly electrified world by innovating cutting-edge hydrogen and fuel cell solutions. While we continue to develop commercially viable hydrogen and fuel cell product solutions, we have expanded our offerings to support a variety of commercial operations that can be powered with green hydrogen. We provide electrolyzers that allow customers — such as refineries, producers of chemicals, steel, fertilizer and commercial refueling stations — to generate hydrogen on-site. We are focusing our efforts on (a) industrial mobility applications, including electric forklifts and electric industrial vehicles, at multi-shift high volume manufacturing and high throughput distribution sites where we believe our products and services provide a unique combination of productivity, flexibility, and environmental benefits; (b) stationary power systems that will support critical operations, such as data centers, microgrids, and generation facilities, in either a backup power or continuous power role and replace batteries, diesel generators or the grid for telecommunication logistics, transportation, and utility customers; and (c) production of hydrogen. Plug expects to support these products and customers with an ecosystem of vertically integrated products that produce, transport, store and handle, dispense, and use hydrogen for mobility and power applications.

Our current products and services include:

GenDrive: GenDrive is our hydrogen fueled Proton Exchange Membrane (“PEM”) fuel cell system, providing power to material handling electric vehicles, including Class 1, 2, 3 and 6 electric forklifts, Automated Guided Vehicles, and ground support equipment.

GenFuel: GenFuel is our liquid hydrogen fueling delivery, generation, storage, and dispensing system.

GenSure: GenSure is our stationary fuel cell solution providing scalable, modular PEM fuel cell power to support the backup and grid-support power requirements of the telecommunications, transportation, and utility sectors; GenSure High Power Fuel Cell Platform will support large scale stationary power and data center markets.

GenCare: GenCare is our ongoing “Internet of Things”-based maintenance and on-site service program for GenDrive fuel cell systems, GenSure fuel cell systems, GenFuel hydrogen storage and dispensing products and ProGen fuel cell engines.

GenKey: GenKey is our vertically integrated “turn-key” solution combining either GenDrive or GenSure fuel cell power with GenFuel fuel and GenCare aftermarket service, offering complete simplicity to customers transitioning to fuel cell power.

ProGen: ProGen is our fuel cell stack and engine technology currently used globally in mobility and stationary fuel cell systems, and as engines in electric delivery vans. This includes Plug’s membrane electrode assembly, a critical component of the fuel cell stack used in zero-emission fuel cell electric vehicle engines. Our ProGen technology provides heavy duty scalable power ranges between 15kW and 125kW.

Electrolyzers: The design and implementation of 5 and 10MW electrolyzer systems that are modular, scalable hydrogen generators optimized for clean hydrogen production. Electrolyzers generate hydrogen from water using electricity and a special membrane and “green” hydrogen is generated by using electricity from renewable energy inputs, such as solar or wind power.

Liquefaction Systems: Plug’s 15 ton-per-day and 30 ton-per-day liquefiers are engineered for high efficiency, reliability, and operational flexibility — providing consistent liquid hydrogen to customers. This design increases plant reliability and availability while minimizing parasitic losses like heat leak and seal gas losses.

Cryogenic Equipment: Engineered equipment including trailers and mobile storage equipment for the distribution of liquified hydrogen, oxygen, argon, nitrogen and other cryogenic gases.

We provide our products and solutions worldwide through our direct sales force, and by leveraging relationships with original equipment manufacturers (“OEMs”) and their dealer networks. We are currently targeting Asia, Australia, Europe, Middle East and North America for expansion in adoption. The European Union (the “EU”) has rolled out ambitious targets for the hydrogen economy as part of the EU strategy for energy integration and we are seeking to execute on our strategy to become one of the European leaders in the hydrogen economy. This includes a targeted account strategy for material handling, securing strategic partnerships with European OEMs, energy companies, utility leaders and accelerating our electrolyzer business. Our global strategy includes leveraging a network of integrators or contract manufacturers. Additionally, we have a joint venture with Niloco Hydrogen Holdings LLC, a wholly-owned subsidiary of Olin named “Hidrogenii”. Plug has been successful with acquisitions, strategic partnerships and joint ventures, and we plan to continue this mix.

Part of our long-term plan includes Plug penetrating the European and Asian hydrogen market, on-road vehicle market, and large-scale stationary market. Plug’s formation of joint ventures with HyVia and AccionaPlug in Europe and SK Plug Hyverse in Asia not only support this goal but are expected to provide us with a more global footprint.

We manufacture our commercially viable products in Latham, New York, Rochester, New York, Slingerlands, New York, Houston, Texas, Lafayette, Indiana, and Spokane, Washington, and support liquid hydrogen production and logistics in Charleston, Tennessee and Kingsland, Georgia.

Recent Developments

Liquidity and Capital Resources

The Company’s working capital was \$1.3 billion at September 30, 2023, which included unrestricted cash and cash equivalents of \$110.8 million and restricted cash of \$225.8 million. In addition, the Company had available-for-sale securities and equity securities of \$388.8 million and \$67.8 million, respectively, as of September 30, 2023.

Since inception, the Company has financed its operations with proceeds from the sales of equity securities, convertible notes, debt and redeemable convertible preferred stock. As of September 30, 2023, the Company had an accumulated deficit of \$3.8 billion. The Company has continued to experience negative cash flows from operations and net losses. The Company incurred net losses attributable to common stockholders of \$726.4 million for the nine months ended September 30, 2023, and net losses attributable to common stockholders of \$724.0 million, \$460.0 million and \$596.2 million for the years ended December 31, 2022, 2021 and 2020, respectively. The net cash used in operating activities for the nine months ended September 30, 2023, was \$863.9 million and the net cash used in operating activities for the year ended December 31, 2022 and 2021 was \$828.6 million and \$358.2 million, respectively. The Company expects to generate operating losses for the foreseeable future as it continues to devote significant resources to expand its current production and manufacturing capacity, construct hydrogen plants and fund the acquisition of additional inventory to deliver our end-products and related services. The net cash provided by/(used in) investing activities for the nine months ended September 30, 2023 and 2022 was \$460.5 million and (\$20.6) million, respectively. This increase was due to an increase in proceeds from maturities of available-for-sale securities compared to the prior year, partially offset by an increase of capital spending. Included in purchases of property, plant and equipment and outflows associated with materials, labor, and overhead are costs necessary to construct new leased property. Cash outflows related to equipment that we lease directly to customers are included in net cash used in investing activities. The net cash provided by/(used in) financing activities for the nine months ended September 30, 2023 and 2022 was \$14.4 million and (\$41.3) million, respectively. The change was primarily driven by an increase in proceeds from finance obligations, partially offset by an increase in payments of contingent consideration.

In light of the Company's projected capital expenditure and operating requirements under its current business plan, the Company is projecting that its existing cash and available for sale and equity securities will not be sufficient to fund its operations through the next twelve months from the date of issuance of this Quarterly Report on Form 10-Q. These conditions and events raise substantial doubt about the Company's ability to continue as a going concern. In accordance with Accounting Standards Update ("ASU") No. 2014-15, "Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern (Subtopic 205-40)," management has evaluated whether there are conditions and events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date of the condensed consolidated financial statements are issued and has determined that the Company's ability to continue as a going concern is dependent on its ability to raise additional capital. To alleviate the conditions and events that raise substantial doubt about the Company's ability to continue as a going concern, management is currently evaluating several different options to enhance the Company's liquidity position, including the sale of securities, incurrence of debt or other financing alternatives. The Company's plan includes various financing solutions from third parties with a particular focus on corporate level debt solutions, investment tax credit related project financings and loan guarantee programs, and/or large scale hydrogen generation infrastructure project financing. The amount of additional capital that the Company will need to raise may change based on changes to the Company's business plan and changes to management's assumptions regarding projected liquidity. Although the Company has been successful in raising capital in the past and expects to continue to raise capital as required, those plans are not final and are subject to market and other conditions not within the Company's control. As such, there can be no assurance that the Company will be successful in obtaining sufficient funding. Accordingly, management has concluded under the accounting standards that these plans do not alleviate substantial doubt about the Company's ability to continue as a going concern.

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and satisfaction of liabilities in the ordinary course of business. The financial statements do not include any adjustments related to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might result from the outcome of this uncertainty.

The Company's significant obligations consisted of the following as of September 30, 2023:

- (i) Operating and finance leases totaling \$357.3 million and \$44.2 million, respectively, of which \$62.1 million and \$9.1 million, respectively, are due within the next 12 months. These leases are primarily related to sale/leaseback agreements entered into with various financial institutions to facilitate the Company's commercial transactions with key customers.
- (ii) Finance obligations totaling \$372.4 million, of which approximately \$85.4 million is due within the next 12 months. Finance obligations consist primarily of debt associated with the sale of future revenues and failed sale/leaseback transactions.
- (iii) Convertible senior notes totaling \$194.9 million at September 30, 2023 due June 1, 2025.

SEC Settlement

On August 30, 2023, the Company reached a settlement of a civil administrative proceeding with the SEC related to the Company's restatement of its previously issued financial statements as of and for the years ended December 31, 2019 and 2018, and as of and for each of the quarterly periods ended March 31, 2020 and 2019, June 30, 2020 and 2019, and September 30, 2020 and 2019. The Company, without admitting or denying the findings, agreed to a cease-and-desist order regarding Sections 13(a), 13(b)(2)(A), and 13(b)(2)(B) of the Exchange Act and Rules 13a-1, 13a-13, and 13a-15(a) - (c) thereunder. As part of the settlement, the Company paid a civil monetary penalty to the SEC in the amount of \$1.25 million on September 20, 2023.

Cybersecurity Update

In or around March 2023, an unauthorized actor accessed our computer network and executed a ransomware attack, resulting in the encryption of certain of our computer systems, including systems used to store proprietary and confidential data, and exfiltration of limited data sets. Upon detection, we took immediate steps to contain, assess and

remediate the incident, including engaging outside legal counsel and external forensic investigators, and to restore impacted systems. The Company has and is continuing to implement a series of additional security and related measures aimed at further safeguarding the integrity of its information technology systems and strengthening the overall security of the Company's computer network and has engaged external forensic investigators to conduct a thorough independent investigation of the ransomware attack. We will continue to assess the potential impact of the ransomware attack on our business but based on information available to date, we do not believe that the ransomware attack has had a material impact on our business, operations or financial condition.

Inflation, Material Availability and Labor Shortages

Most components essential to our business are generally available from multiple sources; however, we believe there are some component suppliers and manufacturing vendors, particularly those suppliers and vendors that supply materials in very limited supply worldwide or supply commodities that have high degree of volatility, whose loss to us or general unavailability could have a material adverse effect upon our business and financial condition. Furthermore, global commodity pricing has been volatile and may be influenced by political events and worldwide economic trends, which may impact our sourcing strategies resulting in adverse impacts on our business and financial condition. We are mitigating these potential risks by introducing alternate system architectures that we expect will allow us to diversify our supply chain with multiple fuel cell, electrolyzer stack and air supply component vendors. For example, although we believe the current hydrogen supply challenge is a transitory issue, we have experienced supply chain issues relating to the availability of hydrogen, including but not limited to suppliers utilizing force majeure provisions under existing contracts, which has negatively impacted the amount of hydrogen we have been able to provide under certain of our supply and other agreements. In addition, we continue to invest in our supply chain to improve its resilience with a focus on automation, dual sourcing of critical components and localized manufacturing when feasible. We are also working closely with these vendors and other key suppliers on coordinated product introduction plans, product and sales forecasting, strategic inventories, and internal and external manufacturing schedules and levels. However, ongoing changes to, and evolution of, our products designs such as simultaneous design/build efforts and new product serviceability trends, or incorrect forecasting or updates to previously forecasted volumes could present challenges to those strategies despite best efforts in leveraging supplier relationships and capabilities. With respect to production, although we have experienced less cost pressures from global energy prices and inflation, those factors could rise again and there could be a negative impact to our key raw materials. Additionally, our regionally diverse supply chain could result in price shifts from one region to another region that may affect our costs and strategic initiatives. In cases where we have single sourced suppliers (typically due to new technology and products or worldwide shortages due to global demand), we work to engineer alternatives in our product design or develop new supply sources while covering short- and medium-term risks with supply contracts, building up inventory, and development partnerships. However, if we, or the industry or economy at large, were to experience a recession, then we may have a large stock of pre-purchased inventory that could be unused and aging for a period of time. In addition, during the fourth quarter of 2023, we are continuing discussions with suppliers to modify terms of our supply agreements, which may impact the timing of when we receive shipments of certain supplies or result in other supply chain issues. However, we continue to take proactive steps through our supply chain team to limit the impact of suppliers challenges generally and we continue to work closely with our suppliers and transportation vendors to ensure availability of products and implement other cost savings initiatives. With respect to its service business, the Company has experienced inflationary increases in labor, parts and related overhead. Accordingly, the Company increased its estimated projected costs to service fuel cell systems and related infrastructure, which resulted in an increase in the provision for loss contracts related to service during the third quarter of 2023. If these trends continue, we may have to record additional service loss provisions in the future. We anticipate bookings and revenue will be uneven in the near-term while we pursue sales opportunities and seek to build our liquefier backlog.

Additionally, we, as well as our suppliers and vendors, have observed an increasingly competitive labor market. Tight labor markets have resulted in labor inflation and longer times to fill open positions for us and our suppliers and vendors. Increased employee turnover, reassessment of employee responsibilities given current business needs, changes in the availability of our workers as well as labor shortages have resulted in, and could continue to result in, increased costs which could negatively affect our component or raw material purchasing abilities, and in turn, our financial condition, results of operations, or cash flows.

Results of Operations

Our primary sources of revenue are from sales of fuel cell systems, related infrastructure and equipment, services performed on fuel cell systems and related infrastructure, Power Purchase Agreements (PPAs), and fuel delivered to customers. A certain portion of our sales result from acquisitions in legacy markets, which we are working to transition to renewable solutions. Revenue from sales of fuel cell systems, related infrastructure and equipment represents sales of our GenDrive units, GenSure stationary backup power units, cryogenic stationary and on road storage, electrolyzers and hydrogen fueling infrastructure. Revenue from services performed on fuel cell systems and related infrastructure represents revenue earned on our service and maintenance contracts and sales of spare parts. Revenue from PPAs primarily represents payments received from customers who make monthly payments to access the Company's GenKey solution. Revenue associated with fuel delivered to customers represents the sale of hydrogen to customers that has been purchased by the Company from a third party or generated on site.

Provision for Common Stock Warrants

On August 24, 2022, the Company and Amazon entered into the 2022 Transaction Agreement, under which the Company concurrently issued to Amazon.com NV Investment Holdings LLC, a wholly owned subsidiary of Amazon, the Amazon Warrant, to acquire the Amazon Warrant Shares, subject to certain vesting events described below. The Company and Amazon entered into the 2022 Transaction Agreement in connection with a concurrent commercial arrangement under which Amazon agreed to purchase hydrogen fuel from the Company through August 24, 2029.

In 2017, in separate transactions, the Company issued to each of Amazon.com NV Investment Holdings LLC and Walmart Warrants to purchase shares of the Company's common stock.

The Company recorded a portion of the estimated fair value of the Amazon and Walmart Warrants as a reduction of revenue based upon the projected number of shares of common stock expected to vest under the warrants, the proportion of purchases by Amazon, Walmart and their affiliates within the period relative to the aggregate purchase levels required for vesting of the respective warrants, and the then-current fair value of the warrants. For the third tranche of the shares under Walmart's Warrant, the exercise price will be determined once the second tranche vests. For the third tranche of the Amazon Warrant Shares, see below for the exercise price and measurement dates used.

For the three months ended September 30, 2023, there was a negative provision recorded as an increase in revenue from PPAs and fuel delivered to customers. The negative provision for the three months ended September 30, 2023 was caused by a decline in the Company's stock price, which is one of the inputs in determining the fair value of the warrants. The amount of provision for Amazon and Walmart Warrants recorded as an increase/(reduction) to revenue for the three and nine months ended September 30, 2023 and 2022, respectively, is shown in the table below (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2023	2022	2023	2022
Sales of equipment, related infrastructure and other	\$ (765)	\$ (1,026)	\$ (1,891)	\$ (1,145)
Services performed on fuel cell systems and related infrastructure	(268)	(227)	(953)	(558)
Power purchase agreements	1,767	(3,791)	(4,635)	(5,800)
Fuel delivered to customers	831	(3,527)	(5,258)	(5,010)
Total	<u>\$ 1,565</u>	<u>\$ (8,571)</u>	<u>\$ (12,737)</u>	<u>\$ (12,513)</u>

Net revenue, cost of revenue, gross profit (loss) and gross margin (loss) percentage for the three and nine months ended September 30, 2023 and 2022 were as follows (in thousands):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	Net Revenue	Cost of Revenue	Gross Profit/(Loss)	Gross Margin/(Loss)	Net Revenue	Cost of Revenue	Gross Profit/(Loss)	Gross Margin/(Loss)
For the period ended September 30, 2023:								
Sales of equipment, related infrastructure and other	\$ 145,130	\$ 158,989	\$ (13,859)	(9.5)%	\$ 543,510	\$ 504,717	\$ 38,793	7.1 %
Services performed on fuel cell systems and related infrastructure	9,290	17,916	(8,626)	(92.9)%	27,088	53,586	(26,498)	(97.8)%
Provision for loss contracts related to service	—	41,581	(41,581)	N/A	—	55,801	(55,801)	N/A
Power purchase agreements	20,068	56,981	(36,913)	(183.9)%	44,135	157,773	(113,638)	(257.5)%
Fuel delivered to customers and related equipment	19,371	59,012	(39,641)	(204.6)%	47,391	177,963	(130,572)	(275.5)%
Other	4,852	2,197	2,655	54.7 %	7,055	4,843	2,212	31.4 %
Total	\$ 198,711	\$ 336,676	\$ (137,965)	(69.4)%	\$ 669,179	\$ 954,683	\$ (285,504)	(42.7)%
For the period ended September 30, 2022:								
Sales of equipment, related infrastructure and other	\$ 157,985	\$ 127,381	\$ 30,604	19.4 %	\$ 383,065	\$ 310,362	\$ 72,703	19.0 %
Services performed on fuel cell systems and related infrastructure	8,406	12,619	(4,213)	(50.1)%	25,468	38,106	(12,638)	(49.6)%
Provision for loss contracts related to service	—	5,727	(5,727)	N/A	—	8,843	(8,843)	N/A
Power purchase agreements	9,524	35,549	(26,025)	(273.3)%	30,730	102,194	(71,464)	(232.6)%
Fuel delivered to customers and related equipment	12,389	53,129	(40,740)	(328.8)%	40,289	134,008	(93,719)	(232.6)%
Other	324	286	38	11.7 %	1,146	1,063	83	7.2 %
Total	\$ 188,628	\$ 234,691	\$ (46,063)	(24.4)%	\$ 480,698	\$ 594,576	\$ (113,878)	(23.7)%

Net Revenue

Revenue – sales of equipment, related infrastructure and other. Revenue from sales of equipment, related infrastructure and other represents revenue from the sale of our fuel cells, such as GenDrive units and GenSure stationary backup power units, as well as hydrogen fueling infrastructure referred to at the site level as hydrogen installations, electrolyzer stacks and systems, and other equipment such as liquefiers and cryogenic storage equipment. Revenue from sales of equipment, related infrastructure and other for the three months ended September 30, 2023 decreased \$12.9 million, or 8.1%, to \$145.1 million from \$158.0 million for the three months ended September 30, 2022 primarily due to a decrease in revenue related to fuel cell systems of \$38.3 million due to a decrease in the volume of GenDrive units sold, with 1,452 units sold for the three months ended September 30, 2023 compared to 3,524 units sold for the three months ended September 30, 2022. Additionally, there was a decrease in revenue of \$18.3 million related to decreased sales of engineered oil and gas equipment from the Frames acquisition, which sales are not expected to continue beyond current commitments. Partially offsetting these decreases was an increase in revenue related to electrolyzers of \$19.8 million, which was due to 54 one megawatt equivalent units sold for the three months ended September 30, 2023 compared to 3 one megawatt equivalent units sold for the three months ended September 30, 2022. Additionally, revenue from cryogenic storage equipment and liquefiers increased \$22.9 million for the three months ended September 30, 2023 compared to the three months ended September 30, 2022 primarily due to executed agreements related to liquefier sales and \$8.3 million resulting from the acquisition of CIS for which there was no revenue recognized in the three months ended September 30, 2022.

Revenue from sales of equipment, related infrastructure and other for the nine months ended September 30, 2023 increased \$160.4 million, or 41.9%, to \$543.5 million from \$383.1 million for the nine months ended September 30, 2022 primarily due to increases in revenue related to hydrogen site installations, liquefiers, cryogenic equipment, and electrolyzer stacks and systems. The increase in the revenue related to cryogenic storage equipment and liquefiers of \$112.8 million was primarily due to executed agreements related to liquefier sales and \$34.4 million resulting from the acquisition of CIS for which there was no revenue recognized for the nine months ended September 30, 2022. The increase in hydrogen infrastructure revenue of \$49.1 million was due to 41 hydrogen site installations for the nine months ended September 30, 2023 compared to 30 for the nine months ended September 30, 2022. Revenue related to electrolyzers increased \$59.1 million, which was due to 120 one megawatt equivalent units sold for the nine months ended September 30, 2023 compared to 7 one megawatt equivalent units sold for the nine months ended September 30, 2022. Partially offsetting these increases was a decrease in revenue related to fuel cell systems of \$8.2 million due to a decrease in the volume of GenDrive units sold, with 5,167 units sold for the nine months ended September 30, 2023 compared to 6,011 units sold for the nine months ended September 30, 2022. Additionally, there was a decrease of \$52.3 million related to the sales of engineered oil and gas equipment from the Frames acquisition, which sales are not expected to continue beyond

current commitments. Lastly, there was a provision for common stock warrants of \$1.9 million and \$1.1 million for the nine months ended September 30, 2023 and 2022, respectively.

Revenue – services performed on fuel cell systems and related infrastructure. Revenue from services performed on fuel cell systems and related infrastructure represents revenue earned primarily on our service and maintenance contracts, as well as sales of spare parts. At September 30, 2023, there were 20,417 fuel cell units and 101 hydrogen installations under extended maintenance contracts, an increase from 19,726 fuel cell units and 89 hydrogen installations at September 30, 2022. Revenue from services performed on fuel cell systems and related infrastructure for the three months ended September 30, 2023 increased \$0.9 million, or 10.5%, to \$9.3 million from \$8.4 million for the three months ended September 30, 2022. The increase in revenue from services performed on fuel cell systems and related infrastructure for the three months ended September 30, 2023 compared to the three months ended September 30, 2022 was primarily related to the increase in number of units in service. Additionally, there was a provision for common stock warrants of \$0.3 million and \$0.2 million for the three months ended September 30, 2023 and 2022, respectively.

Revenue from services performed on fuel cell systems and related infrastructure for the nine months ended September 30, 2023 increased \$1.6 million, or 6.4%, to \$27.1 million from \$25.5 million for the nine months ended September 30, 2022. The increase in revenue from services performed on fuel cell systems and related infrastructure for the nine months ended September 30, 2023 compared to the nine months ended 2022 was primarily related to our expanding customer base and growth within our current customer base. Additionally, there was a provision for common stock warrants of \$1.0 million and \$0.6 million for the nine months ended September 30, 2023 and 2022, respectively.

Revenue – Power Purchase Agreements. Revenue from PPAs represents payments received from customers for power generated through the provision of equipment and service. At September 30, 2023, there were 138 GenKey sites associated with PPAs, as compared to 95 at September 30, 2022. Revenue from PPAs for the three months ended September 30, 2023 increased \$10.5 million, or 110.7%, to \$20.1 million from \$9.5 million for the three months ended September 30, 2022. The increase in revenue was primarily due to an increase in the number of units under PPA arrangements, as well as the decrease in the provision for common stock warrants, which went from \$3.8 million for the three months ended September 30, 2022 to a negative provision of \$1.8 million for the three months ended September 30, 2023. All 10 of the new PPA sites in the third quarter of 2023 were not deployed until late in the quarter; therefore, the full impact on revenue has yet to be realized.

Revenue from PPAs for the nine months ended September 30, 2023 increased \$13.4 million, or 43.6%, to \$44.1 million from \$30.7 million for the nine months ended September 30, 2022. The increase in revenue was primarily due to an increase in deployed units. Additionally, there was a decrease in the provision for common stock warrants, which went from \$5.8 million for the nine months ended September 30, 2022 to \$4.6 million for the nine months ended September 30, 2023. Additionally, all 10 of the new PPA sites in the third quarter of 2023 were not deployed until late in the quarter; therefore, the full impact on revenue has yet to be realized.

Revenue – fuel delivered to customers and related equipment. Revenue associated with fuel delivered to customers and related equipment represents the sale of hydrogen to customers that has been purchased by the Company from a third party or generated on site. Revenue associated with fuel delivered to customers for the three months ended September 30, 2023 increased \$7.0 million, or 56.4%, to \$19.4 million from \$12.4 million for the three months ended September 30, 2022. The increase in revenue was primarily due to an increase in the number of sites with fuel contracts, which increased from 182 sites as of September 30, 2022 to 237 sites as of September 30, 2023. Additionally, contributing to the increase in revenue was a change in the provision for common stock warrants, which went from \$3.5 million for the three months ended September 30, 2022 to a negative provision of \$0.8 million for the three months ended September 30, 2023. All of the new fuel sites in the third quarter of 2023 were not deployed until late in the quarter; therefore, the full impact on revenue has yet to be realized.

Revenue associated with fuel delivered to customers for the nine months ended September 30, 2023 increased \$7.1 million, or 17.6%, to \$47.4 million from \$40.3 million for the nine months ended September 30, 2022. The increase in revenue was primarily due to an increase in the number of sites with fuel contracts, which increased from 182 sites as of September 30, 2022 to 237 sites as of September 30, 2023. Partially offsetting these increases was an increase in

provision for common stock warrants, which went from \$5.0 million for the nine months ended September 30, 2022 to \$5.3 million for the nine months ended September 30, 2023. All of the new fuel sites in the third quarter of 2023 were not deployed until late in the quarter; therefore, the full impact on revenue has yet to be realized.

Cost of Revenue

Cost of revenue – sales of equipment, related infrastructure and other. Cost of revenue from sales of equipment, related infrastructure and other includes direct materials, labor costs, and allocated overhead costs related to the manufacture of our fuel cells such as GenDrive units and GenSure stationary backup power units, as well as hydrogen fueling infrastructure referred to at the site level as hydrogen installations, electrolyzer stacks and systems, and other equipment such as cryogenic storage equipment and liquefiers. Cost of revenue from sales of fuel cell systems, related infrastructure and equipment for the three months ended September 30, 2023 increased \$31.6 million, or 24.8%, to \$159.0 million from \$127.4 million for the three months ended September 30, 2022. The cost of revenue related to electrolyzer stacks and systems increased \$20.6 million, which was due to 54 one megawatt equivalent units sold for the three months ended September 30, 2023 compared to 3 one megawatt equivalent units sold for the three months ended September 30, 2022 and ramp up costs associated with the electrolyzer gigafactory. The increase in cryogenic storage equipment and liquefiers of \$14.6 million was due to an increase in costs related to the sales of liquefiers and cryogenic equipment. Included in the \$14.6 million is cost of revenue of \$6.9 million resulting from the acquisition of CIS for which there was no cost of revenue recognized for the three months ended September 30, 2022. Additionally, the Company recorded a \$18.7 million lower of cost or market adjustment to inventory due to losses on new product offerings. Partially offsetting these increases was a decrease of hydrogen infrastructure cost of revenue of \$0.6 million due to the decrease in the number of hydrogen site installations. There were 10 hydrogen site installations for the three months ended September 30, 2023 compared to 13 for the three months ended September 30, 2022. The decrease in the cost of revenue related to fuel cell systems of \$6.2 million was due to a decrease in the volume of GenDrive units sold, with 1,452 units sold for the three months ended September 30, 2023 compared to 3,524 units sold for the three months ended September 30, 2022. The decrease in cost of revenue of \$12.2 million is related to legacy oil and gas contracts from the Frames acquisition that are not expected to continue beyond current commitments. Gross margin decreased to (9.5%) for the three months ended September 30, 2023, compared to 19.4% for the three months ended September 30, 2022. The decrease in gross margin was primarily due to ramp up of costs on new product offerings for high power stationary units and electrolyzers as well as changes in customer mix.

Cost of revenue from sales of fuel cell systems, related infrastructure and equipment for the nine months ended September 30, 2023 increased \$194.4 million, or 62.6%, to \$504.7 million from \$310.4 million for the nine months ended September 30, 2022. The increase in hydrogen infrastructure cost of revenue of \$36.1 million was due to 41 hydrogen site installations for the nine months ended September 30, 2023 compared to 30 for the nine months ended September 30, 2022. The increase in cryogenic storage equipment and liquefiers of \$89.7 million was due to an increase in costs related to the sales of liquefiers and cryogenic equipment. Included in the \$89.7 million is cost of revenue of \$29.9 million resulting from the acquisition of CIS in which there was no cost of revenue recognized for the nine months ended September 30, 2022. The cost of revenue related to electrolyzer stacks and systems increased \$62.4 million, which was due to 120 one megawatt equivalent units sold for the nine months ended September 30, 2023 compared to 7 one megawatt equivalent units sold for the nine months ended September 30, 2022. The increase in the cost of revenue related to fuel cell systems of \$30.5 million was due to an increase in stationary builds and volume increases in low power stationary and mobility. Additionally, the Company recorded a \$18.7 million lower of cost or market adjustment to inventory due to losses on new product offerings. Partially offsetting these increases was a decrease in cost of revenue of \$39.6 million related to legacy oil and gas contracts from the Frames acquisition that are not expected to continue beyond current commitments. Gross margin decreased to 7.1% for the nine months ended September 30, 2023, compared to 19.0% for the nine months ended September 30, 2022. The decrease in gross margin was primarily due to ramp up of costs on new product offerings for high power stationary units and electrolyzers as well as changes in customer mix.

Cost of revenue – services performed on fuel cell systems and related infrastructure. Cost of revenue from services performed on fuel cell systems and related infrastructure includes the labor, material costs and allocated overhead costs incurred for our product service and hydrogen site maintenance contracts and spare parts. At September 30, 2023, there were 20,417 fuel cell units and 101 hydrogen installations under extended maintenance contracts, an increase from

19,726 fuel cell units and 89 hydrogen installations at September 30, 2022, respectively. Cost of revenue from services performed on fuel cell systems and related infrastructure for the three months ended September 30, 2023 increased \$5.3 million, or 42.0%, to \$17.9 million from \$12.6 million for the three months ended September 30, 2022. The increase in cost of revenue was primarily due to the increase in number of units and sites in service. Gross loss increased to (92.9%) for the three months ended September 30, 2023, compared to (50.1%) for the three months ended September 30, 2022. The increase in gross loss was primarily due to higher cost of parts experienced during the three months ended September 30, 2023.

Cost of revenue from services performed on fuel cell systems and related infrastructure for the nine months ended September 30, 2023 increased \$15.5 million, or 40.6%, to \$53.6 million from \$38.1 million for the nine months ended September 30, 2022. The increase in cost of revenue was primarily due to the increase in number of units and sites in service. Gross loss increased to (97.8%) for the nine months ended September 30, 2023, compared to (49.6%) for the nine months ended September 30, 2022. The increase in gross loss was primarily due higher cost of parts experienced during the nine months ended September 30, 2023.

Cost of revenue – provision for loss contracts related to service. The Company also recorded a provision for loss contracts related to service of \$41.6 million for the three months ended September 30, 2023, compared to \$5.7 million for the three months ended September 30, 2022. The Company increased the provision due to continued cost and inflationary increases of labor, parts and related overhead coupled with the timing of the remaining period of service required. Accordingly, the Company increased its estimated projected costs to service fuel cell systems and related infrastructure.

The Company also recorded a provision for loss contracts related to service of \$55.8 million for the nine months ended September 30, 2023, compared to \$8.8 million for the nine months ended September 30, 2022. The Company increased the provision due to continued cost and inflationary increases of labor, parts and related overhead coupled with the timing of the remaining period of service required. Accordingly, the Company increased its estimated projected costs to service fuel cell systems and related infrastructure.

Cost of revenue – Power Purchase Agreements. Cost of revenue from PPAs includes depreciation of assets utilized and service costs to fulfill PPA obligations and interest costs associated with certain financial institutions for leased equipment. At September 30, 2023, there were 138 GenKey sites associated with PPAs, as compared to 95 at September 30, 2022. Cost of revenue from PPAs for the three months ended September 30, 2023 increased \$21.4 million, or 60.3%, to \$57.0 million from \$35.5 million for the three months ended September 30, 2022 due to the increase in units and sites under PPA contract as well as the higher cost of parts experienced in the quarter ended September 30, 2023. Partially offsetting the increase in cost of revenue was a negative provision for common stock warrants of \$1.8 million for the three months ended September 30, 2023 compared to a provision of \$3.8 million for the three months ended September 30, 2022. Gross loss decreased to (183.9%) for the three months ended September 30, 2023, as compared to (273.3%) for the three months ended September 30, 2022 primarily due to the change in provision for warrants, offset by higher cost of parts and scrap events during the current quarter.

Cost of revenue from PPAs for the nine months ended September 30, 2023 increased \$55.6 million, or 54.4%, to \$157.8 million from \$102.2 million for the nine months ended September 30, 2022 due to the increase in units and sites under PPA contract as well as higher cost of parts. Gross loss increased to (257.5%) for the nine months ended September 30, 2023, as compared to (232.6%) for the nine months ended September 30, 2022 primarily due to higher cost of parts and scrap events during the current year. In addition, there was a provision for common stock warrants of \$4.6 million for the nine months ended September 30, 2023 compared to \$5.8 million for the nine months ended September 30, 2022.

Cost of revenue – fuel delivered to customers and related equipment. Cost of revenue from fuel delivered to customers and related equipment represents the purchase of hydrogen from suppliers that ultimately is sold to customers and costs for onsite generation. Cost of revenue from fuel delivered to customers for the three months ended September 30, 2023 increased \$5.9 million or 11.1%, to \$59.0 million from \$53.1 million for the three months ended September 30, 2022. The increase in cost of revenue was primarily due to an increase in the number of sites with fuel contracts, which increased from 182 sites as of September 30, 2022 to 237 sites as of September 30, 2023, as well as inefficiencies in fueling

systems. Gross loss decreased to (204.6%) during the three months ended September 30, 2023, compared to (328.8%) during the three months ended September 30, 2022 primarily due to the change in provision for warrants.

Cost of revenue from fuel delivered to customers for the nine months ended September 30, 2023 increased \$44.0 million, or 32.8%, to \$178.0 million from \$134.0 million for the nine months ended September 30, 2022. The increase was primarily due to higher volume of hydrogen delivered to customer sites as a result of an increase in the number of hydrogen installations completed under GenKey agreements, inefficiencies in fueling systems, and increased logistics costs due to instability in the hydrogen network created by force majeure events declared by our suppliers. Gross loss increased to (275.5%) during the nine months ended September 30, 2023, compared to (232.6%) during the nine months ended September 30, 2022, primarily due to the increase in cost of revenue described above.

Expenses

Research and development expense. Research and development (“R&D”) expense includes: materials to build development and prototype units, cash and non-cash stock-based compensation and benefits for the engineering and related staff, expenses for contract engineers, fees paid to consultants for services provided, materials and supplies consumed, facility related costs such as computer and network services, and other general overhead costs associated with our research and development activities.

Research and development expense for the three months ended September 30, 2023 decreased \$0.5 million, or 1.6%, to \$27.7 million from \$28.1 million for the three months ended September 30, 2022. The overall decrease in R&D investment is due to the timing of new product offerings going into production.

Research and development expense for the nine months ended September 30, 2023 increased \$11.3 million, or 15.7%, to \$83.4 million from \$72.1 million for the nine months ended September 30, 2022. The overall growth in R&D investment is commensurate with the Company’s future expansion into new markets, new product lines, acquisitions and varied vertical integrations, partially offset by the timing of new product offerings going into production.

Selling, general and administrative expenses. Selling, general and administrative expenses includes cash and non-cash stock-based compensation, benefits, amortization of intangible assets and related costs in support of our general corporate functions, including general management, finance and accounting, human resources, selling and marketing, information technology and legal services.

Selling, general and administrative expenses for the three months ended September 30, 2023 increased \$19.8 million, or 23.1%, to \$105.5 million from \$85.6 million for the three months ended September 30, 2022. This increase was primarily related to information technology and professional fees.

Selling, general and administrative expenses for the nine months ended September 30, 2023 increased \$48.2 million, or 18.4%, to \$310.6 million from \$262.4 million for the nine months ended September 30, 2022. This increase was primarily related to information technology and professional fees.

Impairment. Impairment for the three months ended September 30, 2023 increased to \$0.7 million from \$0 for the three months ended September 30, 2022. Impairment for the nine months ended September 30, 2023, increased to \$11.7 million from \$0 for the nine months ended September 30, 2022. This increase was primarily related to a one-time contract expense of \$9.8 million during the second quarter of 2023.

Other-than-temporary impairment of available-for-sale securities. Other-than-temporary impairment of available-for-sale securities for the three months ended September 30, 2023 increased to \$10.8 million from \$0 for the three months ended September 30, 2022. Other-than-temporary impairment of available-for-sale securities for the nine months ended September 30, 2023 increased to \$10.8 million from \$0 for the nine months ended September 30, 2022. This increase was due to a change in the Company’s ability and intent to retain these investments for a period of time sufficient to allow for any anticipated recovery in the fair value.

Contingent consideration. The fair value of the contingent consideration is related to earnouts for the Giner ELX, Inc., United Hydrogen Group Inc., Frames, Applied Cryo Technologies, Inc., and Joule acquisitions. The change in fair value for the three and nine months ended September 30, 2023 was \$2.2 million and \$26.3 million, respectively, primarily due to the passage of time and changes in assumptions related to future earnout payments.

Interest income. Interest income primarily consists of income generated by our investment holdings, restricted cash escrow accounts, and money market accounts. Interest income for the three and nine months ended September 30, 2023 decreased \$3.0 million and increased \$25.1 million, respectively, over the three and nine months ended September 30, 2022. The decrease during the three months ended September 30, 2023 was the primarily due to the maturity of the Company's available-for-sale portfolio of higher-yielding U.S. treasury securities during the first six months of the year. The increase over the nine months ended September 30, 2023 was primarily related to the interest earned on high-yielding U.S. treasuries during the first six months of the year.

Interest expense. Interest expense consists of interest expense related to our long-term debt, convertible senior notes, obligations under finance leases and our finance obligations. Interest expense for the three and nine months ended September 30, 2023 increased \$2.8 million and \$4.8 million over the three and nine months ended September 30, 2022, respectively. The increase in interest expense was primarily related to an increase in finance obligations as well as a decrease in capitalized interest.

Other income/(expense), net. Other income/(expense), net primarily consists of foreign currency translation and gains and losses related to energy contracts. Other income/(expense), net for the three months ended September 30, 2023 was income of \$5.0 million compared to an expense of \$5.4 million for the three months ended September 30, 2022. Other expense for the nine months ended September 30, 2023 decreased \$4.3 million compared to the nine months ended September 30, 2022. The changes were primarily related to a net gain of \$8.1 million on energy contracts for the three months ended September 30, 2023 as well as foreign currency translation gains.

Realized gain/(loss) on investments, net. Realized gain/(loss) on investments, net consists of the sales related to available-for-sale debt securities. For the three and nine months ended September 30, 2023, the Company had a realized gain on investments of \$0 and \$0.3 million, respectively, from net realized loss on investments of \$0 and \$1.3 million, respectively, for the three and nine months ended September 30, 2022.

Change in fair value of equity securities. The change in fair value of equity securities resulted in a gain of \$0.1 million and \$9.0 million for the three and nine months ended September 30, 2023, respectively, compared to a loss of \$4.2 million and \$22.9 million, respectively, for the three and nine months ended September 30, 2022.

Loss on equity method investments. Loss on equity method investments consists of our interest in HyVia, which is our 50/50 joint venture with Renault, AccionaPlug S.L., which is our 50/50 joint venture with Acciona, and SK Plug Hyverse, which is our 49/51 joint venture with SK E&S. For the three and nine months ended September 30, 2023, the Company recorded a loss of \$7.0 million and \$20.0 million, respectively, on equity method investments. These losses are driven from the start-up activities for commercial and production operations.

Income Taxes

The Company recorded \$4.7 million of an income tax benefit and \$1.5 million of income tax expense for the three months ended September 30, 2023 and 2022, respectively. The Company recorded \$6.9 million of income tax benefit and \$1.5 million of income tax expense for the nine months ended September 30, 2023 and 2022, respectively. The tax benefit for the nine months ended September 30, 2023 was due to foreign income taxes. The Company has not changed its overall conclusion with respect to the need for a valuation allowance against its domestic net deferred tax assets, which remain fully reserved.

The domestic net deferred tax asset generated from the Company's net operating loss has been offset by a full valuation allowance because it is more likely than not that the tax benefits of the net operating loss carryforward will not

be realized. The Company recognizes accrued interest and penalties related to unrecognized tax benefits, if any, as a component of income tax expense.

Public and Private Offerings of Equity and Debt

Common Stock Issuances

In February 2021, the Company sold 54,966,188 shares of its common stock to a subsidiary of SK Holdings at a purchase price of \$29.2893 per share, or an aggregate purchase price of approximately \$1.6 billion.

In January and February 2021, the Company issued and sold in a registered equity offering an aggregate of 32,200,000 million shares of its common stock at a purchase price of \$65.00 per share for net proceeds of approximately \$2.0 billion.

Convertible Senior Notes

In May 2020, the Company issued \$212.5 million in aggregate principal amount of 3.75% Convertible Senior Notes. The total net proceeds from this offering, after deducting costs of the issuance, were \$205.1 million. The Company used \$90.2 million of the net proceeds from the offering of the 3.75% Convertible Senior Notes to repurchase \$66.3 million of the \$100 million in aggregate principal amount of the 5.5% Convertible Senior Notes. In addition, the Company used approximately \$16.3 million of the net proceeds from the offering of the 3.75% Convertible Senior Notes to enter into privately negotiated capped called transactions. In the fourth quarter of 2020, \$33.5 million of the remaining 5.5% Convertible Senior Notes were converted into 14.6 million shares of common stock, resulting in a gain of approximately \$4.5 million which was recorded on the consolidated statement of operations on the gain (loss) on extinguishment of debt line. As of December 31, 2020, approximately \$0.2 million aggregate principal amount of the 5.5% Convertible Senior Notes remained outstanding, all of which were converted to common stock in January 2021.

Secured Debt

In June 2020, the Company acquired debt as part of its acquisition of United Hydrogen Group Inc. During the three and nine months ended September 30, 2023, the Company repaid \$0.3 million and \$5.7 million of principal related to this outstanding debt, respectively. The outstanding carrying value of the debt was \$4.1 million as of September 30, 2023. The remaining outstanding principal on the debt was \$5.8 million and the unamortized debt discount was \$1.7 million, bearing varying interest rates ranging from 5.6% to 8.3%. The debt is scheduled to mature in 2026. As of September 30, 2023, the principal balance is due at each of the following dates as follows (in thousands):

December 31, 2023	\$	300
December 31, 2024		3,357
December 31, 2025		1,200
December 31, 2026		900
Total outstanding principal	\$	<u>5,757</u>

3.75% Convertible Senior Notes

On May 18, 2020, the Company issued \$200.0 million in aggregate principal amount of 3.75% Convertible Senior Notes due June 1, 2025, in a private placement to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended (the "Securities Act"). On May 29, 2020, the Company issued an additional \$12.5 million in aggregate principal amount of 3.75% Convertible Senior Notes. During the three and nine months ended September 30, 2023, there were no conversions of the 3.75% Convertible Senior Notes.

The 3.75% Convertible Senior Notes consisted of the following (in thousands):

	September 30, 2023	December 31, 2022
Principal amounts:		
Principal	\$ 197,278	\$ 197,278
Unamortized debt issuance costs (1)	(2,356)	(3,359)
Net carrying amount	<u>\$ 194,922</u>	<u>\$ 193,919</u>

- (2) Included in the unaudited interim condensed consolidated balance sheets within the Convertible Senior Notes, net and amortized over the remaining life of the notes using the effective interest rate method.

The following table summarizes the total interest expense and effective interest rate related to the 3.75% Convertible Senior Notes for the three months ended September 30, 2023 (in thousands, except for the effective interest rate):

	September 30, 2023	September 30, 2022
Interest expense	\$ 1,849	\$ 1,849
Amortization of debt issuance costs	338	323
Total	<u>2,187</u>	<u>2,172</u>
Effective interest rate	4.5%	4.5%

Based on the closing price of the Company's common stock of \$7.60 on September 30, 2023, the if-converted value of the notes was greater than the principal amount. The estimated fair value of the notes at September 30, 2023 was approximately \$314.7 million. The fair value estimation was primarily based on a quoted price in an active market.

Capped Call

In conjunction with the pricing of the 3.75% Convertible Senior Notes, the Company entered into privately negotiated capped call transactions (the "3.75% Notes Capped Call") with certain counterparties at a price of \$16.2 million. The 3.75% Notes Capped Call covers, subject to anti-dilution adjustments, the aggregate number of shares of the Company's common stock that underlie the initial 3.75% Convertible Senior Notes and is generally expected to reduce potential dilution to the Company's common stock upon any conversion of the 3.75% Convertible Senior Notes and/or offset any cash payments the Company is required to make in excess of the principal amount of the converted notes, as the case may be, with such reduction and/or offset subject to a cap based on the cap price. The cap price of the 3.75% Notes Capped Call is initially \$6.7560 per share, which represents a premium of approximately 60% over the last then-reported sale price of the Company's common stock of \$4.11 per share on the date of the transaction and is subject to certain adjustments under the terms of the 3.75% Notes Capped Call. The 3.75% Notes Capped Call becomes exercisable if the conversion option is exercised.

The net cost incurred in connection with the 3.75% Notes Capped Call was recorded as a reduction to additional paid-in capital in the unaudited interim condensed consolidated balance sheets. The book value of the 3.75% Notes Capped Call is not remeasured.

Common Stock Forward

In March 2018, the Company issued \$100.0 million in aggregate principal amount of the 5.5% Convertible Senior Notes due on March 15, 2023, in a private placement to qualified institutional buyers pursuant to Rule 144A under the Securities Act, which have been fully repaid. In connection with the issuance of the 5.5% Convertible Senior Notes, the Company entered into a forward stock purchase transaction (the "Common Stock Forward"), pursuant to which the Company agreed to purchase 14,397,906 shares of its common stock for settlement on or about March 15, 2023. On May 18, 2020, the Company amended and extended the maturity of the Common Stock Forward to June 1, 2025. The number of shares of common stock that the Company will ultimately repurchase under the Common Stock Forward is subject to

customary anti-dilution adjustments. The Common Stock Forward is subject to early settlement or settlement with alternative consideration in the event of certain corporate transactions.

The net cost incurred in connection with the Common Stock Forward of \$27.5 million was recorded as an increase in treasury stock in the unaudited interim condensed consolidated balance sheets. The related shares were accounted for as a repurchase of common stock. The book value of the Common Stock Forward is not remeasured.

There were no shares of common stock that settled in connection with the Common Stock Forward during the three and nine months ended September 30, 2023 or during the three and nine months ended September 30, 2022

Amazon Transaction Agreement in 2022

On August 24, 2022, the Company and Amazon entered into a Transaction Agreement (the “2022 Transaction Agreement”), under which the Company concurrently issued to Amazon.com NV Investment Holdings LLC, a wholly owned subsidiary of Amazon, a warrant (the “Amazon Warrant”) to acquire up to 16,000,000 shares (the “Amazon Warrant Shares”) of the Company’s common stock, subject to certain vesting events described below. The Company and Amazon entered into the 2022 Transaction Agreement in connection with a concurrent commercial arrangement under which Amazon agreed to purchase hydrogen fuel from the Company through August 24, 2029.

1,000,000 of the Amazon Warrant Shares vested immediately upon issuance of the Amazon Warrant. 15,000,000 of the Amazon Warrant Shares will vest in multiple tranches over the 7-year term of the Amazon Warrant based on payments made to the Company directly by Amazon or its affiliates, or indirectly through third parties, with 15,000,000 of the Amazon Warrant Shares fully vesting if Amazon-related payments of \$2.1 billion are made in the aggregate. The exercise price for the first 9,000,000 Amazon Warrant Shares is \$22.9841 per share and the fair value on the grant date was \$20.36. The exercise price for the remaining 7,000,000 Amazon Warrant Shares will be an amount per share equal to 90% of the 30-day volume weighted average share price of the Company’s common stock as of the final vesting event that results in full vesting of the first 9,000,000 Amazon Warrant Shares. The Amazon Warrant is exercisable through August 24, 2029.

Upon the consummation of certain change of control transactions (as defined in the applicable warrant) prior to the vesting of at least 60% of the aggregate Amazon Warrant Shares, the Amazon Warrant will automatically vest and become exercisable with respect to an additional number of Amazon Warrant Shares such that 60% of the aggregate Amazon Warrant Shares shall have vested. If a change of control transaction is consummated after the vesting of at least 60% of the aggregate Amazon Warrant Shares, then no acceleration of vesting will occur with respect to any of the unvested Amazon Warrant Shares as a result of the transaction. The exercise price and the Amazon Warrant Shares issuable upon exercise of the Amazon Warrant are subject to customary antidilution adjustments.

On August 24, 2022, 1,000,000 of the Amazon Warrant Shares issued pursuant to the 2022 Transaction Agreement vested. The warrant fair value associated with the vested shares of tranche 1 of \$20.4 million was capitalized to contract assets based on the grant date fair value and is subsequently amortized ratably as a reduction to revenue based on the Company’s estimate of revenue over the term of the agreement. As of September 30, 2023 the balance of the contract asset related to tranche 1 was \$19.5 million which is recorded in contract assets in the Company’s unaudited interim condensed consolidated balance sheet. During the second quarter of 2023, all 1,000,000 of the Amazon Warrant Shares associated with tranche 2 vested. The warrant fair value associated with the vested shares of tranche 2 was \$20.4 million and was determined on the grant date of August 24, 2022. As of September 30, 2023 the balance of the contract asset related to tranche 2 was \$13.8 million. Tranche 3 will vest over the next \$1.0 billion of collections from Amazon and its affiliates. The grant date fair value of tranche 3 will also be amortized ratably as a reduction to revenue based on the Company’s estimate of revenue over the term of the agreement. As of September 30, 2023 the balance of the contract asset related to tranche 3 was \$3.8 million. Because the exercise price has yet to be determined, the fair value of tranche 4 will be remeasured at each reporting period end and amortized ratably as a reduction to revenue based on the Company’s estimate of revenue over the term of the agreement. The total amount of provision for common stock warrants recorded as a reduction of revenue for the Amazon Warrant during the three months ended September 30, 2023 and 2022 was \$1.6 million and \$1.8 million, respectively. The total amount of provision for common stock warrants recorded as a reduction

of revenue for the Amazon Warrant during the nine months ended September 30, 2023 and 2022 was \$4.3 million and \$1.8 million, respectively.

The assumptions used to calculate the valuations as of August 24, 2022 and September 30, 2023 are as follows:

	Tranches 1-3 August 24, 2022	Tranche 4 September 30, 2023
Risk-free interest rate	3.15%	4.50%
Volatility	75.00%	70.00%
Expected average term	7 years	4 years
Exercise price	\$22.98	\$6.84
Stock price	\$20.36	\$7.60

Amazon Transaction Agreement in 2017

On April 4, 2017, the Company and Amazon entered into a Transaction Agreement (the “2017 Amazon Transaction Agreement”), pursuant to which the Company agreed to issue to Amazon.com NV Investment Holdings LLC, a warrant to acquire up to 55,286,696 Amazon Warrant Shares, subject to certain vesting events described below. The Company and Amazon entered into the 2017 Amazon Transaction Agreement in connection with existing commercial agreements between the Company and Amazon with respect to the deployment of the Company’s GenKey fuel cell technology at Amazon distribution centers. The vesting of the Amazon Warrant Shares was conditioned upon payments made by Amazon or its affiliates (directly or indirectly through third parties) pursuant to the existing commercial agreements. At December 31, 2021, all 55,286,696 of the Amazon Warrant Shares had vested.

The warrant had been exercised with respect to 34,917,912 shares and 24,704,450 shares of the Company’s common stock as of September 30, 2023 and December 31, 2022, respectively.

Walmart Transaction Agreement

On July 20, 2017, the Company and Walmart entered into a Transaction Agreement (the “Walmart Transaction Agreement”), pursuant to which the Company agreed to issue to Walmart a warrant (the “Walmart Warrant”) to acquire up to 55,286,696 shares of the Company’s common stock, subject to certain vesting events (the “Walmart Warrant Shares”). The Company and Walmart entered into the Walmart Transaction Agreement in connection with existing commercial agreements between the Company and Walmart with respect to the deployment of the Company’s GenKey fuel cell technology across various Walmart distribution centers. The existing commercial agreements contemplate, but do not guarantee, future purchase orders for the Company’s fuel cell technology. The vesting of the warrant shares was conditioned upon payments made by Walmart or its affiliates (directly or indirectly through third parties) pursuant to transactions entered into after January 1, 2017 under existing commercial agreements.

The warrant had been exercised with respect to 13,094,217 shares of the Company’s common stock as of September 30, 2023 and December 31, 2022.

At September 30, 2023 and December 31, 2022, 27,643,347 of the Walmart Warrant Shares had vested. As of September 30, 2023, the balance of the contract liability related to the Walmart Warrant was \$2.4 million. For the three months ended September 30, 2023, there was a negative provision for common stock warrants recorded as an addition to revenue of \$3.1 million as compared to a provision of \$6.7 million recorded as a reduction to revenue for the three months ended September 30, 2022. The negative provision for the three months ended September 30, 2023 was caused by a decline in the Company’s stock price, which is one of the inputs in determining the fair value of the warrants. The total amount of provision for common stock warrants recorded as a reduction of revenue for the Walmart Warrant during the nine months ended September 30, 2023 and 2022 was \$8.4 million and \$10.4 million, respectively. During the three and nine months ended September 30, 2023 and 2022, there were no exercises with respect to the Walmart Warrant.

The assumptions used to calculate the valuations of the final tranche of the Walmart Warrant as of September 30, 2023 are as follows:

	September 30, 2023
Risk-free interest rate	4.61%
Volatility	70.00%
Expected average term	3.5 years
Exercise price	\$6.84
Stock price	\$7.60

Operating and Finance Lease Liabilities

As of September 30, 2023, the Company had operating leases, as lessee, primarily associated with sale/leaseback transactions that are partially secured by restricted cash and security deposits (see also Note 19, “Commitments and Contingencies”) as summarized below. These leases expire over the next one to nine years. Minimum rent payments under operating leases are recognized on a straight-line basis over the term of the lease.

Leases contain termination clauses with associated penalties, the amount of which cause the likelihood of cancellation to be remote. At the end of the lease term, the leased assets may be returned to the lessor by the Company, the Company may negotiate with the lessor to purchase the assets at fair market value, or the Company may negotiate with the lessor to renew the lease at market rental rates. No residual value guarantees are contained in the leases. No financial covenants are contained within the lease; however, the lease contains customary operational covenants such as the requirement that the Company properly maintain the leased assets and carry appropriate insurance. The leases include credit support in the form of either cash, collateral or letters of credit. See Note 19, “Commitments and Contingencies” for a description of cash held as security associated with the leases.

The Company has finance leases associated with its property and equipment in Latham, New York and at fueling customer locations. The fair value of this finance obligation approximated the carrying value as of September 30, 2023.

Finance Obligation

The Company has sold future services to be performed associated with certain sale/leaseback transactions and recorded the balance as a finance obligation. The outstanding balance of this obligation at September 30, 2023 was \$355.2 million, \$75.0 million and \$280.2 million of which was classified as short-term and long-term, respectively, on the accompanying unaudited interim condensed consolidated balance sheet. The outstanding balance of this obligation at December 31, 2022 was \$312.1 million, \$55.4 million and \$256.6 million of which was classified as short-term and long-term, respectively. The amount is amortized using the effective interest method. Interest expense recorded related to finance obligations for the three months ended September 30, 2023 and 2022 was \$10.4 million and \$7.4 million, respectively. Interest expense recorded related to finance obligations for the nine months ended September 30, 2023 and 2022 was \$29.4 million and \$21.1 million, respectively. The fair value of this finance obligation approximated the carrying value as of September 30, 2023 and December 31, 2022.

In prior periods, the Company entered into sale/leaseback transactions that were accounted for as financing transactions and reported as part of finance obligations. The outstanding balance of finance obligations related to sale/leaseback transactions at September 30, 2023 was \$17.2 million, \$10.4 million and \$6.8 million of which was classified as short-term and long-term, respectively on the accompanying consolidated balance sheet. The outstanding balance of this obligation at December 31, 2022 was \$17.2 million, \$3.5 million and \$13.7 million of which was classified as short-term and long-term, respectively on the accompanying consolidated balance sheets. The fair value of this finance obligation approximated the carrying value as of September 30, 2023 and December 31, 2022.

Restricted Cash

In connection with certain of the above noted sale/leaseback agreements, cash of \$539.4 million and \$383.7 million was required to be restricted as security as of September 30, 2023 and December 31, 2022, respectively, which restricted cash will be released over the lease term. As of September 30, 2023 and December 31, 2022, the Company also had certain letters of credit backed by security deposits totaling \$426.9 million and \$379.6 million, respectively, of which \$396.2 million and \$354.0 million are security for the above noted sale/leaseback agreements, respectively, and \$30.7 million and \$25.6 million are customs related letters of credit, respectively.

As of both September 30, 2023 and December 31, 2022, the Company had \$76.7 million held in escrow related to the construction of certain hydrogen plants.

The Company also had \$1.2 million and \$1.2 million of consideration held by our paying agent in connection with each of the Joule and CIS acquisitions, respectively, reported as restricted cash as of September 30, 2023, with a corresponding accrued liability on the Company's unaudited interim condensed consolidated balance sheet. Additionally, the Company had \$6.2 million and \$10.8 million in restricted cash as collateral resulting from the Frames acquisition as of September 30, 2023 and December 31, 2022, respectively.

Guarantee

On May 30, 2023, HyVia entered into a government grant agreement with Bpifrance. As part of the agreement, our wholly-owned subsidiary, Plug Power France, was required to issue a guarantee to Bpifrance in the amount of €20 million through the end of January 2027. Plug Power France is liable to the extent of the guarantee for sums due to Bpifrance from HyVia under the agreement based on the difference between the total amount paid by Bpifrance and the final amount certified by HyVia and Bpifrance. As part of the agreement, there are certain milestones that HyVia is required to meet, and the non-performance of these milestones or termination of this agreement could result in this guarantee being called upon. As of September 30, 2023, no payments related to this guarantee have been made by the Company, and Plug Power France did not record a liability for this guarantee as the likelihood of the guarantee being called upon as of September 30, 2023 is remote.

Unconditional purchase obligations

The Company has entered into certain off-balance sheet commitments that require the future purchase of goods or services ("unconditional purchase obligations"). The Company's unconditional purchase obligations primarily consist of supplier arrangements, take or pay contracts and service agreements. For certain vendors, the Company's unconditional obligation to purchase a minimum quantity of raw materials at an agreed upon price is fixed and determinable; while certain other raw material costs will vary due to product forecasting and future economic conditions.

Future payments under non-cancelable unconditional purchase obligations with a remaining term in excess of one year as of September 30, 2023, are as follows (in thousands):

Remainder of 2023	\$ 14,725
2024	44,231
2025	8,023
2026	8,023
2027	2,638
2028 and thereafter	—
Total	<u>\$ 77,640</u>

Investments

Our investment portfolio, including cash and cash equivalents, totaled \$567.4 million at September 30, 2023. Purchases of fixed maturity securities are classified as available-for-sale at the time of purchase based on individual security.

The composition of our investment portfolio, including cash and cash equivalents, as of September 30, 2023, is shown in the following table (in thousands):

	Carrying Amount	Percentage of Portfolio
Fixed maturity securities - available-for-sale		
U.S. Treasuries	\$ 260,657	45.9%
Corporate bonds	128,111	22.6%
Total fixed maturity securities - available-for-sale	\$ 388,768	68.5%
Equity securities	67,823	12.0%
Cash and cash equivalents	110,809	19.5%
Total investments, including cash and cash equivalents	\$ 567,400	100.0%

Extended Maintenance Contracts

On a quarterly basis, we evaluate any potential losses related to our extended maintenance contracts for fuel cell systems, related infrastructure and equipment that have been sold. The following table shows the roll forward of balances in the accrual for loss contracts, including changes due to the provision for loss accrual, releases to service cost of sales, releases due to the provision for warrants, and foreign currency translation adjustment (in thousands):

	Nine Months Ended September 30, 2023	Year Ended December 31, 2022
Beginning balance	\$ 81,066	\$ 89,773
Provision for loss accrual	55,194	23,295
Releases to service cost of sales	(19,908)	(35,446)
Increase to loss accrual related to customer warrants	607	3,506
Foreign currency translation adjustment	(59)	(62)
Ending balance	<u>\$ 116,900</u>	<u>\$ 81,066</u>

The Company increased its provision for loss accrual to \$55.2 million for the nine months ended September 30, 2023 due to continued cost and inflationary increases of labor, parts and related overhead coupled with the timing of the remaining period of service required. As a result, the Company increased its estimated projected costs to service fuel cell systems and related infrastructure.

Critical Accounting Estimates

Management's discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities at the date of and during the reporting period. On an on-going basis, we evaluate our estimates and judgments, including those related to revenue recognition, valuation of long-lived assets, accrual for service loss contracts and common stock warrants. We base our estimates and judgments on historical experience and on various other factors and assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about (1) the carrying values of assets and liabilities and (2) the amount of revenue and expenses realized that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

There have been no changes in our critical accounting estimates from those reported in our 2022 Form 10-K.

Valuation of Long-Lived Assets

The Company completes its annual impairment assessment of goodwill on October 31 of each fiscal year. The Company has concluded that it has one reporting unit. Management continues to closely monitor the results of the Company's business, the performance of the Company's common stock, current liquidity and key assumptions used in its fair value estimate, in addition to operational initiatives and macroeconomic conditions, which may impact the results of the Company's goodwill impairment assessment. The projected performance of the reporting unit, including the need for additional financing to fund the operations of the Company's business for the next twelve months and the potential for future developments in the global economic environment, introduces a heightened risk for impairment in the Company's goodwill, intangible assets and property, plant and equipment. If the Company cannot improve its current operating levels and meet its operating targets to achieve the growth and margin assumptions and/or if the Company is not able to obtain the additional financing required to fund its business for the next twelve months, some or all of the recorded goodwill, intangible assets and property, plant and equipment as of September 30, 2023 could be subject to impairment. Such potential impairment of goodwill, intangible assets and property, plant and equipment could be material to the Company's condensed consolidated financial statements.

Recent Accounting Pronouncements

Recently Adopted Accounting Guidance

Other than the adoption of the accounting guidance mentioned in our 2022 Form 10-K, there have been no other significant changes in our reported financial position or results of operations and cash flows resulting from the adoption of new accounting pronouncements.

Recent Accounting Guidance Not Yet Effective

All issued but not yet effective accounting and reporting standards as of September 30, 2023 are either not applicable to the Company or are not expected to have a material impact on the Company.

Item 3 — Quantitative and Qualitative Disclosures about Market Risk

There has been no material change from the information provided in the Company's 2022 Form 10-K under the section titled "Item 7A: Quantitative and Qualitative Disclosures About Market Risk."

Item 4 — Controls and Procedures

Evaluation of Disclosure Controls and Procedures

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

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), as of September 30, 2023. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that as of September 30, 2023, our disclosure controls and procedures were not effective because of material weaknesses in internal control over financial reporting described in Part II, Item 9A “Controls and Procedures” of our 2022 Form 10-K. The material weaknesses have not been remediated as of September 30, 2023.

Changes in Internal Control over Financial Reporting

There were no changes during the quarter ended September 30, 2023 in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Part II. OTHER INFORMATION

Item 1 – Legal Proceedings

See “Note 19: Commitments and Contingencies” within Item 1 of this Quarterly Report on Form 10-Q for a discussion regarding material legal proceedings.

Except as otherwise noted, there have been no material developments in legal proceedings. For previously reported information about legal proceedings, refer to Part I, Item 3, “Legal Proceedings,” of the Company’s 2022 Form 10-K.

Item 1A – Risk Factors

In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the risk factors that could materially affect the Company’s business, financial condition or future results discussed in the Company’s 2022 Form 10-K in Part I, Item 1A. “Risk Factors” and the Company’s Quarterly Reports on Form 10-Q for the quarters ended March 31, 2023 and June 30, 2023 in Part II, Item 1A “Risk Factors.” The risks described in the 2022 Form 10-K and the Quarterly Reports on Form 10-Q for the quarters ended March 31, 2023 and June 30, 2023 are not the only risks that could affect the Company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also materially adversely affect our business, financial condition and/or operating results in the future. Other than the following, there have been no material changes to the risk factors identified in the 2022 Form 10-K and the Quarterly Reports on Form 10-Q for the quarters ended March 31, 2023 and June 30, 2023.

Economic turmoil and political instability, including a potential U.S. government shutdown, could have a material adverse effect on our business, financial condition and results of operations.

Current economic turmoil and political instability in the geographic markets we serve, such as tight credit markets, inflation, low consumer confidence, limited capital spending, and changes in government priorities, could have a material adverse effect on our business, financial condition and results of operations. In addition, if there is a government shutdown in the United States, especially a prolonged shutdown, it could have a material adverse effect on our business, financial condition and results of operations. For example, the Inflation Reduction Act (“IRA”), which contains numerous credits and tax incentives that may be beneficial to us, was adopted in August 2022, but interagency guidance processes are still ongoing. A prolonged U.S. government shutdown could cause uncertainty or delay in such processes, which could impact the timing of any benefits we anticipate receiving under the IRA. In addition, a government shutdown may impact the availability and administration of government funding, which may impact our ability to secure a loan with the U.S. Department of Energy, or our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

Our products and performance depend largely on the availability of hydrogen gas and recent insufficient supplies of hydrogen have negatively affected, and any continued insufficient supply of hydrogen could, in the future, negatively affect, our sales and deployment of our products and services.

Our products and services depend largely on the availability of hydrogen gas. Although we are in the process of building multiple hydrogen production plants, our business could be materially and adversely affected by an inadequate availability of hydrogen or our failure to secure hydrogen supply at competitive prices. There is no assurance that our hydrogen production will scale at the rate we anticipate or that we will complete hydrogen production plants on schedule. Additionally, we are dependent upon hydrogen suppliers to provide us with hydrogen gas for the commercialization of our products and services. If these fuels are not readily available or if their prices are such that energy produced by our products costs more than energy provided by other sources, then our products could be less attractive to potential users and our products’ value proposition could be negatively affected. For example, we have experienced supply chain issues relating to the availability of hydrogen, including but not limited to suppliers utilizing force majeure provisions under existing contracts, which has led to volume constraints, delayed our deployments and service margin improvements, and negatively impacted the amount of hydrogen we have been able to provide under certain of our supply and other agreements. If

hydrogen suppliers elect not to participate in the material handling market or if supply chain issues relating to the availability of hydrogen continue, insufficient supplies of hydrogen may result, which could materially and adversely affect our sales and the deployment of our products and services.

Our ability to source parts and raw materials from our suppliers could be disrupted or delayed in our supply chain which could adversely affect our results of operations.

Our operations require significant amounts of necessary parts and raw materials. We deploy a continuous, companywide process to source our parts and raw materials from fewer suppliers, and to obtain parts from suppliers in low-cost countries where possible. If we are unable to source these parts or raw materials, our operations may be disrupted, or we could experience a delay or halt in certain of our manufacturing operations. We believe that our supply management and production practices are based on an appropriate balancing of the foreseeable risks and the costs of alternative practices. Nonetheless, reduced availability or interruption in supplies, whether resulting from more stringent regulatory requirements, supplier financial condition, increases in duties and tariff costs, disruptions in transportation, an outbreak of a severe public health pandemic, such as the COVID-19 pandemic, including resurgences and the emergence of new variants, severe weather, or the occurrence or threat of wars or other conflicts, could have an adverse effect on our financial condition, results of operations and cash flows. For example, we have experienced supply chain issues, including but not limited to suppliers utilizing force majeure provisions under existing contracts. We have experienced and may continue to experience issues relating to the availability of hydrogen, which has led to volume constraints, delayed our deployments and service margin improvements, and negatively impacted the amount of hydrogen we have been able to provide under certain of our supply and other agreements. Furthermore, ongoing global economic trends have caused significant challenges for global supply chains resulting in inflationary cost pressures, component shortages, and transportation delays, which have impacted our business. We expect that these challenges could continue to have an impact on our businesses for the foreseeable future.

We have incurred losses and anticipate continuing to incur losses, and there is a substantial doubt that we will have sufficient funds to fund our operations through the next 12 months from the date of this Quarterly Report on Form 10-Q.

We have not achieved operating profitability in any quarter since our formation and we will continue to incur net losses until we can produce sufficient revenue to cover our costs. As of September 30, 2023, we had an accumulated deficit of \$3.8 billion. We have continued to experience negative cash flows from operations and net losses. Our net losses attributable to common stockholders were \$726.4 million for the nine months ended September 30, 2023, and our net losses attributable to common stockholders were \$724.0 million, \$460.0 million and \$596.2 million for the years ended December 31, 2022, 2021 and 2020, respectively. The net cash used in operating activities for the nine months ended September 30, 2023 was \$863.9 million and the net cash used in operating activities for the year ended December 31, 2022 and 2021 was \$828.6 million and \$358.2 million, respectively. We expect to generate operating losses for the foreseeable future as we continue to devote significant resources to expand our current production and manufacturing capacity, construct hydrogen plants and fund the acquisition of additional inventory to deliver our end-products and related services.

In light of our projected capital expenditure and operating requirements under our current business plan, we have determined that there is a substantial doubt that we will have sufficient capital to fund our operations through the next twelve months from the date of issuance of this Quarterly Report on Form 10-Q. Our ability to continue as a going concern is dependent on our ability to raise additional capital. To alleviate the conditions and events that raise substantial doubt about our ability to continue as a going concern, management is currently evaluating several different options to enhance our liquidity position, including the sale of securities, incurrence of debt or other financing alternatives. Although we intend to diligently explore and pursue any number of financing alternatives, we do not know what forms of financing, if any, will be available to us, and the determination that there is substantial doubt about our ability to continue as a going concern could impair our ability to raise financing. If financing is not available on acceptable terms, we may not be able to execute on our current business plan, which could materially adversely affect our business, financial condition and results of operations. Moreover, if we raise additional capital through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders.

We anticipate that we will continue to incur losses until we can produce and sell our products and services on a large-scale and cost-effective basis. We cannot guarantee when we will operate profitably, if ever. In order to achieve profitability, we must successfully execute our planned path to profitability in the early adoption markets on which we are focused. The profitability of our products depends largely on material and manufacturing costs and the market price of hydrogen. The hydrogen infrastructure that is needed to support our growth readiness and cost efficiency must be available and cost efficient. We must continue to shorten the cycles in our product roadmap with respect to improvement in product reliability and performance that our customers expect. We must execute on successful introduction of our products into the market. We must accurately evaluate our markets for, and react to, competitive threats in both other technologies (such as advanced batteries) and our technology field. Finally, we must continue to lower our products' build costs and lifetime service costs. If we are unable to successfully take these steps, we may never operate profitably, and, even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future.

Our estimated future revenue may not be indicative of actual future revenue or profitability.

Our estimated future revenue represents, as of a point in time, expected future revenue from work not yet completed under executed contracts. As of September 30, 2023, our estimated future revenue was approximately \$1.2 billion. While we anticipate a significant amount of our estimated future revenue will be recognized as revenue over one to ten years, our estimated future revenue is subject to order cancellations and delays. We or our customers may attempt to cancel or modify orders in estimated future revenue, and we may not be able to convert all of our estimated future revenue into revenue and cash flows. In addition, if production of products are delayed resulting from parts availability and other constraints stemming from the supply chain disruptions, revenue recognition can occur over longer periods of time, and products may remain in estimated future revenue for extended periods of time. If we receive relatively large orders in any given quarter, fluctuations in quarterly levels of estimated future revenue can result because the estimated future revenue may reach levels which may not be sustained in subsequent quarters. Our estimated future revenue should not be relied on as a measure of actual future revenue or profitability.

Item 2 - Unregistered Sales of Equity Securities and Use of Proceeds

- (a) Not applicable.
- (b) Not applicable.
- (c) None.

Item 3 — Defaults Upon Senior Securities

None.

Item 4 — Mine Safety Disclosures

None.

Item 5 — Other Information

(c) Director and Officer Trading Arrangements

Gregory L. Kenausis, a member of our Board of Directors, adopted a stock trading plan on September 7, 2023. The trading plan provides for the sale of up to 80,000 shares of the Company's common stock in the aggregate upon the earlier of February 7, 2025 or the date all shares are sold thereunder. The trading plan was entered into during an open insider trading window and is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) under the Exchange Act. There were no other Rule 10b5-1 trading arrangements or non-Rule 10b5-1 trading arrangements adopted, modified or terminated by the Company's directors or executive officers during the quarter ended September 30, 2023.

Item 6 — Exhibits

- 3.1 [Amended and Restated Certificate of Incorporation of Plug Power Inc. \(filed as Exhibit 3.1 to Plug Power Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008 and incorporated by reference herein\).](#)
- 3.2 [Certificate of Amendment to Amended and Restated Certificate of Incorporation of Plug Power Inc. \(filed as Exhibit 3.3 to Plug Power Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008 and incorporated by reference herein\).](#)
- 3.3 [Second Certificate of Amendment of Amended and Restated Certificate of Incorporation of Plug Power Inc. \(filed as Exhibit 3.1 to Plug Power Inc.'s Current Report on Form 8-K filed on May 19, 2011 and incorporated by reference herein\).](#)
- 3.4 [Third Certificate of Amendment of Amended and Restated Certificate of Incorporation of Plug Power Inc. \(filed as Exhibit 3.1 to Plug Power Inc.'s Current Report on Form 8-K filed on July 25, 2014 and incorporated by reference herein\).](#)
- 3.5 [Certificate of Correction to Third Certificate of Amendment of Amended and Restated Certificate of Incorporation of Plug Power Inc. \(filed as Exhibit 3.9 to Plug Power Inc.'s Annual Report on Form 10-K for the year ended December 31, 2016 and incorporated by reference herein\).](#)
- 3.6 [Fourth Certificate of Amendment of Amended and Restated Certificate of Incorporation of Plug Power Inc. \(filed as Exhibit 3.1 to Plug Power Inc.'s Current Report on Form 8-K filed on June 30, 2017 and incorporated by reference herein\).](#)
- 3.7 [Fifth Certificate of Amendment of Amended and Restated Certificate of Incorporation of Plug Power Inc. \(filed as Exhibit 3.7 to Plug Power Inc.'s Quarterly Report on Form 10-Q filed on August 5, 2021 and incorporated by reference herein\).](#)
- 3.8 [Certificate of Designations, Preferences and Rights of a Series of Preferred Stock of Plug Power Inc. classifying and designating the Series A Junior Participating Cumulative Preferred Stock. \(filed as Exhibit 3.1 to Plug Power Inc.'s Registration Statement on Form 8-A filed on June 24, 2009 and incorporated by reference herein\).](#)
- 3.9 [Fifth Amended and Restated By-laws of Plug Power Inc. \(filed as Exhibit 3.9 to Plug Power Inc.'s Annual Report on Form 10-K for the year ended December 31, 2022 and incorporated by reference herein\).](#)
- 31.1* [Certification pursuant to 18 U.S.C. Section 1350, adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 31.2* [Certification pursuant to 18 U.S.C. Section 1350, adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.](#)
- 32.1** [Certification pursuant to 18 U.S.C. Section 1350, adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 32.2** [Certification pursuant to 18 U.S.C. Section 1350, adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.](#)
- 101.INS* Inline XBRL Instance Document
- 101.SCH* Inline XBRL Taxonomy Extension Schema Document
- 101.CAL* Inline XBRL Taxonomy Extension Calculation Linkbase Document
- 101.DEF* Inline XBRL Taxonomy Extension Definition Linkbase Document
- 101.LAB* Inline XBRL Taxonomy Extension Labels Linkbase Document
- 101.PRE* Inline XBRL Taxonomy Extension Presentation Linkbase Document
- 104* Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Submitted electronically herewith.

** Pursuant to Item 601(b)(32)(ii) of Regulation S-K, this certification is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

Signatures

Pursuant to requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

PLUG POWER INC.

Date: November 9, 2023

By: /s/ Andrew Marsh

Andrew Marsh
President, Chief Executive
Officer and Director (Principal
Executive Officer)

Date: November 9, 2023

By: /s/ Paul B. Middleton

Paul B. Middleton
Chief Financial Officer (Principal
Financial Officer)

I, Andrew Marsh, certify that:

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

Date: November 9, 2023

by: /s/ Andrew Marsh
Andrew Marsh
Chief Executive Officer

I, Paul B. Middleton, certify that:

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

Date: November 9, 2023

by: /s/ Paul B. Middleton
Paul B. Middleton
Chief 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 Plug Power Inc. (the “Company”) on Form 10-Q for the period ending September 30, 2023 as filed with the Securities and Exchange Commission (the “SEC”) on the date hereof (the “Report”), I, Andrew Marsh, Chief Executive Officer of the Company, certify, solely pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

This certification is being furnished and not filed, and shall not be incorporated into any documents for any other purpose, under the Securities Exchange Act of 1934, as amended or the Securities Act of 1933, as amended. A signed original of this written statement required by § 906 has been provided to the Company and will be retained by the Company and furnished to the SEC or its staff upon request.

/s/ Andrew Marsh

Andrew Marsh
Chief Executive Officer

November 9, 2023

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 Plug Power Inc. (the “Company”) on Form 10-Q for the period ending September 30, 2023 as filed with the Securities and Exchange Commission (the “SEC”) on the date hereof (the “Report”), I, Paul B. Middleton, Chief Financial Officer of the Company, certify, solely pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

This certification is being furnished and not filed, and shall not be incorporated into any documents for any other purpose, under the Securities Exchange Act of 1934, as amended or the Securities Act of 1933, as amended. A signed original of this written statement required by § 906 has been provided to the Company and will be retained by the Company and furnished to the SEC or its staff upon request.

/s/ Paul B. Middleton

Paul B. Middleton
Chief Financial Officer

November 9, 2023
