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

FORM 10-Q

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

For the quarterly period ended September 30, 2018

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

For the transition period from ___________ to __________

Commission file number: 001-37642

ENER-CORE, INC.
(Exact name of registrant as specified in its charter)

Delaware	3511	46-0525350
(State or other jurisdiction of Incorporation or organization)	Primary Standard Industrial Classification Code Number	(IRS Employer Identification No.)

30100 Town Center Dr, Suite O-209
Laguna Niguel, California 92677
(Address of principal executive offices and zip code)

(949) 732-4400
(Registrant's telephone number, including area code)

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 ☒

As of November 18, 2018 there were 4,256,393 shares of the issuer's common stock outstanding.

ENER-CORE, INC.
FORM 10-Q

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

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Certain information and footnote disclosures required under accounting principles generally accepted in the United States of America have been condensed or omitted from the following consolidated financial statements pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"). It is suggested that the following condensed consolidated financial statements be read in conjunction with the accompanying notes and financial statements and notes thereto in the annual financial statements included in the Annual Report on Form 10-K for Ener-Core, Inc. for the fiscal year ended December 31, 2017, filed with the SEC on April 16, 2018.

Ener-Core, Inc.
Condensed Consolidated Balance Sheets

	September 30, 2018 (unaudited)	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 10,000	$ 208,000
Accounts receivable	9,000	14,000
Inventory	3,047,000	3,028,000
Prepaid expenses and other current assets	365,000	333,000
Total current assets	$ 3,431,000	$ 3,583,000
Property and equipment, net	2,420,000	2,660,000
Intangibles, net	8,000	13,000
Deposits and other long term assets	--	32,000
Total assets	$ 5,859,000	$ 6,288,000
Liabilities and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 2,080,000	$ 1,749,000
Accrued expenses	1,964,000	1,380,000
Deferred revenues and customer advances	4,573,000	5,270,000
Accrued contract loss	391,000	617,000
Convertible unsecured notes payable, net of discounts	1,051,000	1,250,000
Convertible senior secured notes payable, net of discounts	8,698,000	5,994,000
Capital leases payable—short term	10,000	13,000
Total current liabilities	$ 18,767,000	$ 16,273,000
Long term liabilities:		
Capital lease payable	6,000	12,000
Total liabilities	$ 18,773,000	$ 16,285,000
Commitments and contingencies (Note 15)		
Stockholders' deficit:		
Preferred stock, $0.0001 par value. Authorized 50,000,000 shares; no shares issued and outstanding at September 30, 2018 and December 31, 2017	$ —	$ —
Common stock, $0.0001 par value. Authorized 200,000,000 shares; 4,206,393 and 4,081,393 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively	—	—
Additional paid-in capital	47,831,000	42,342,000
Accumulated deficit	(60,745,000)	(52,339,000)
Total stockholders' deficit	$ (12,914,000)	$ (9,997,000)
Total liabilities and stockholders' deficit	$ 5,859,000	$ 6,288,000

See accompanying notes to condensed consolidated financial statements.

Ener-Core, Inc.
Condensed Consolidated Statements of Operations
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	**2017**	**2018**	**2017**
Revenues	$ —	$ —	$ 1,100,000	$ —
Cost of goods sold	—	—	—	—
Gross profit	—	—	1,100,000	—
Operating expenses:				
Selling, general, and administrative	397,000	650,000	1,539,000	2,686,000
Research and development	429,000	452,000	1,280,000	1,634,000
Total operating expenses	826,000	1,102,000	2,819,000	4,320,000
Operating loss	(826,000)	(1,102,000)	(1,719,000)	(4,320,000)
Other income expenses:				
Interest expense	(38,000)	(77,000)	(174,000)	(417,000)
Amortization of debt discount	(3,493,000)	(1,256,000)	(6,503,000)	(3,969,000)
Loss on disposition of assets	—	—	—	(137,000)
Loss on debt extinguishment	—	—	—	(10,000)
Loss on modification of convertible debt	—	—	—	(43,000)
Loss on conversion of convertible debt	(11,000)	—	(11,000)	—
Total other expenses	(3,542,000)	(1,333,000)	(6,688,000)	(4,576,000)
Loss before provision for income taxes	(4,368,000)	(2,435,000)	(8,407,000)	(8,896,000)
Provision for income taxes	—	—	—	—
Net loss	$ (4,368,000)	$ (2,435,000)	$ (8,407,000)	$ (8,896,000)
Loss per share—basic and diluted	$ (1.05)	$ (0.60)	$ (2.04)	$ (2.21)
Weighted average common shares—basic and diluted	4,167,806	4,063,660	4,121,045	4,026,726

See accompanying notes to condensed consolidated financial statements.

Ener-Core, Inc.
Condensed Consolidated Statements of Cash Flows
(unaudited)

	Nine Months Ended September 30,	
	2018	**2017**
Cash flows from operating activities:		
Net loss	$ (8,407,000)	$ (8,896,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	245,000	340,000
Stock-based compensation	334,000	788,000
Amortization of debt discount and deferred financing fees	6,509,000	4,050,000
Loss on debt conversions	11,000	53,000
Loss on asset disposal	—	151,000
Changes in assets and liabilities:		
Restricted cash	—	50,000
Accounts and other receivables	—	(99,000)
Prepaid expenses and other current assets	46,000	56,000
Inventory	(245,000)	(271,000)
Deferred revenues, net	(697,000)	1,551,000
Deposits	—	5,000
Accounts payable and other current liabilities	955,000	548,000
Cash used in operating activities	$ (1,249,000)	$ (1,674,000)
Cash flows from investing activities:		
Proceeds from sale of assets	—	67,000
Net cash provided by investing activities	$ —	$ 67,000
Cash flows from financing activities:		
Proceeds from issuance of Senior Notes	1,060,000	500,000
Repayment of capital leases payable	(9,000)	(9,000)
Cash provided by financing activities	$ 1,051,000	$ 491,000
Net decrease in cash and cash equivalents	(198,000)	(1,116,000)
Cash and cash equivalents at beginning of period	208,000	1,310,000
Cash and cash equivalents at end of period	$ 10,000	$ 194,000

See accompanying notes to condensed consolidated financial statements.

Ener-Core, Inc.
Condensed Consolidated Statements of Cash Flows (continued)
(unaudited)

	Nine Months Ended September 30,	
	2018	**2017**
Supplemental disclosure of cash flow information:		
Cash paid during the period for:		
Income taxes	$ —	$ —
Interest	$ —	$ 75,000
Supplemental disclosure of non-cash activities:		
Capital lease for purchase of equipment	$ —	$ 25,000
Debt discount recorded upon issuance of warrants and beneficial conversion features	$ 5,110,000	$ 176,000
Conversion of convertible senior secured notes into shares of common stock	$ 25,000	$ 60,000
Accrued expenses exchanged for convertible senior secured notes	$ 135,000	$ —
Shares of common stock issued for prepaid retainer	$ 20,000	$ —

See accompanying notes to condensed consolidated financial statements.

Ener-Core, Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

Note 1—Organization

Organization

Ener-Core, Inc. (the "Company", "we", "us", "our"), a Delaware corporation, was formed on April 29, 2010 as Inventtech, Inc. On July 1, 2013, we acquired our wholly owned subsidiary, Ener-Core Power, Inc., (formerly Flex Power Generation, Inc.), a Delaware corporation. The stockholders of Ener-Core Power, Inc. are now our stockholders and the management of Ener-Core Power, Inc. is now our management. The acquisition was treated as a "reverse merger" and our financial statements are those of Ener-Core Power, Inc. All equity amounts presented have been retroactively restated to reflect the reverse merger as if it had occurred on November 12, 2012.

Effective as of September 3, 2015, we changed our state of incorporation from the State of Nevada to the State of Delaware (the "Reincorporation"), pursuant to a plan of conversion dated September 2, 2015, following approval by our stockholders of the Reincorporation at our 2015 Annual Meeting of Stockholders held on August 28, 2015. As a Delaware corporation following the Reincorporation, we are deemed to be the same continuing entity as the Nevada corporation prior to the Reincorporation, and as such continue to possess all of the rights, privileges and powers and all of the debts, liabilities and obligations of the prior Nevada corporation. Upon effectiveness of the Reincorporation, all of the issued and outstanding shares of common stock of the Nevada corporation automatically converted into issued and outstanding shares of common stock of the Delaware corporation without any action on the part of our stockholders. Concurrent with the Reincorporation, on September 3, 2015 our authorized shares increased to 250,000,000 shares of stock consisting of 200,000,000 authorized shares of common stock and 50,000,000 authorized shares of preferred stock.

Reverse Merger

We entered into an Agreement and Plan of Merger (the "Merger Agreement") with Ener-Core Power, Inc. and Flex Merger Acquisition Sub, Inc., a Delaware corporation and our wholly owned subsidiary ("Merger Sub"), pursuant to which the Merger Sub merged with and into Ener-Core Power, Inc., with Ener-Core Power, Inc. as the surviving entity (the "Merger"). Prior to the Merger, we were a public reporting "shell company," as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended. The Merger Agreement was approved by the boards of directors of each of the parties to the Merger Agreement. In April 2013, the pre-merger public shell company effected a 30-for-1 forward split of its common stock. All share amounts have been retroactively restated to reflect the effect of the stock split.

As provided in the Contribution Agreement dated November 12, 2012 (the "Contribution Agreement") by and among FlexEnergy, Inc. ("FlexEnergy"), FlexEnergy Energy Systems, Inc. ("FEES"), and Ener-Core Power, Inc., Ener-Core Power, Inc. was spun-off from FlexEnergy as a separate corporation. As a part of that transaction, Ener-Core Power, Inc. received all assets (including intellectual property) and certain liabilities pertaining to the Power Oxidizer business carved out of FlexEnergy. The owners of FlexEnergy did not distribute ownership of Ener-Core Power, Inc. pro rata. The assets and liabilities were transferred to us and recorded at their historical carrying amounts since the transaction was a transfer of net assets between entities under common control.

On July 1, 2013, Ener-Core Power, Inc. completed the Merger with us. Upon completion of the Merger, we immediately became a public company. The Merger was accounted for as a "reverse merger" and recapitalization. As part of the Merger, 2,410,400 shares of outstanding common stock of the pre-merger public shell company were cancelled. This cancellation has been retroactively accounted for as of the inception of Ener-Core Power, Inc. on November 12, 2012. Accordingly, Ener-Core Power, Inc. was deemed to be the accounting acquirer in the transaction and, consequently, the transaction was treated as a recapitalization of Ener-Core Power, Inc. Accordingly, the assets and liabilities and the historical operations that are reflected in the financial statements are those of Ener-Core Power, Inc. and are recorded at the historical cost basis of Ener-Core Power, Inc. Our assets, liabilities and results of operations were de minimis at the time of the Merger.

Reverse Stock Split

The board of directors of the Company approved a reverse stock split of the Company's authorized, issued and outstanding shares of common stock, par value $0.0001 per share, as well as the Company's authorized shares of preferred stock, par value $0.0001 per share, of which no shares are issued and outstanding (together, the "Stock"), at a ratio of 1-for-50 (the "Reverse Stock Split"). The Reverse Stock Split became effective on July 8, 2015 (the "Effective Date"). As a result of the Reverse Stock Split, the authorized preferred stock decreased to 1,000,000 shares and the authorized common stock decreased to 4,000,000 shares. Both the preferred stock and common stock par value remained at $0.0001 per share. The number of authorized shares subsequently increased to 200,000,000 authorized shares of common stock and 50,000,000 authorized shares of preferred stock on September 3, 2015 with the Company's reincorporation in Delaware, as described above.

On the Effective Date, the total number of shares of common stock held by each stockholder of the Company were converted automatically into the number of shares of common stock equal to: (i) the number of issued and outstanding shares of common stock held by each such stockholder immediately prior to the Reverse Stock Split divided by (ii) 50. The Company issued one whole share of the post-Reverse Stock Split common stock to any stockholder who otherwise would have received a fractional share as a result of the Reverse Stock Split, determined at the beneficial owner level by share certificate. As a result, no fractional shares were issued in connection with the Reverse Stock Split and no cash or other consideration will be paid in connection with any fractional shares that would otherwise have resulted from the Reverse Stock Split. The Reverse Stock Split also affected all outstanding options and warrants by dividing each option or warrant outstanding by 50, rounded up to the nearest option or warrant, and multiplying the exercise price by 50 for each option or warrant outstanding.

Description of the Business

We design, develop, license, manufacture and have commercially deployed industrial products based on proprietary technologies that generate usable heat using a wide variety of organic gases as fuel for an ultra-low emissions oxidation reaction. Our oxidizer vessels are capable of using a wide variety of organic compounds as fuel for a high-temperature oxidation reaction including many "waste" compounds traditionally considered to be air pollution. Our technology allows for the use of compounds that, historically, were unusable as fuels for traditional industrial gas to energy conversion systems and that typically required costly pollution abatement equipment required by industrial plants to comply with increasingly stringent air pollution standards.

We refer to our technology as "Power Oxidation," and refer to our products as "Power Oxidizers" or "Power Oxidation Vessels." We develop applications for our technology by integrating our Power Oxidizers with traditional gas-fired industrial equipment (such as boilers, dryers, ovens, and chillers) that require steady and consistent heat sources. In our first deployed applications, our technology serves as a low-emissions heat source alternative to combustion chambers used with gas-fired electric turbines. Our Power Oxidizers produce a steady heat source that can be used to (i) generate electricity by coupling our technology with a variety of modified gas turbines, (ii) produce steam by coupling our technology with a variety of modified steam boilers, or (iii) provide on-site heat at industrial facilities through heat exchanger applications.

Our proprietary and patented Power Oxidation technology is designed to create greater industrial efficiencies by providing the opportunity to convert low-quality organic waste gases generated from industrial processes into usable on-site energy, thereby decreasing operating costs and significantly reducing environmentally harmful gaseous emissions. We design, develop, license, manufacture and market our Power Oxidizers, which, when bundled with an electricity generating turbine in the 250 kilowatt ("kW"), and 2 megawatt ("MW") sizes, are called Powerstations. We currently partner and are pursuing partnerships with large established manufacturers to integrate our Power Oxidizer with their gas turbines, with the goal to open substantial new opportunities for our partners to market these modified gas turbines to industries for which traditional power generation technologies previously were not technically feasible. We currently manufacture our Powerstations in the 250 kW size and manufactured the Power Oxidizer for the 2 MW size for the initial two units sold. Going forward, pursuant to the CMLA (as defined below), our 2 MW partner, Dresser-Rand a.s., a subsidiary of Dresser-Rand Group Inc., a Siemens company ("Dresser-Rand"), will manufacture the 2 MW Power Oxidizers under a manufacturing license and will pay us a non-refundable license fee for each unit manufactured by Dresser-Rand.

On November 14, 2014, we entered into a commercial license agreement ("CLA") with Dresser-Rand, pursuant to which we agreed to jointly develop a Powerstation that consisted of our Power Oxidizer integrated with a Dresser-Rand KG2 turbine rated up to 2 MW of power output. The CLA granted Dresser-Rand the right to market and sell the Dresser-Rand KG2-3GEF 2 MW gas turbine coupled with our Power Oxidizer. In June 2016, we executed a contract manufacturing and commercial licensing agreement (the "CMLA") with Dresser-Rand, which both companies intended would supersede and replace the CLA. In April 2017, we amended the terms of the CMLA to make the CMLA effective as of January 1, 2017, at which time it superseded and replaced the CLA. The first two systems sold to Dresser-Rand pursuant to the CLA were shipped to a Stockton, California biorefinery site owned by Pacific Ethanol, Inc. in the fourth quarter of 2016 and were operational in January 2018. Due to issues unrelated to the Power Oxidizer performance, full commissioning of these units is expected in the fourth quarter of 2018. Under the CMLA, moving forward, KG2 manufacturing will transition to Dresser-Rand and each KG2 unit sold will generate for us a non-refundable license fee.

We sell our EC250 product directly and through distributors in two countries, the United States and Netherlands.

Going Concern

Our condensed consolidated financial statements are prepared using the accrual method of accounting in accordance with accounting principles generally accepted in the United States of America ("GAAP") and have been prepared on a going concern basis, which contemplates the realization of assets and settlement of liabilities in the normal course of business. Since our inception, we have made a substantial investment in research and development to develop the Power Oxidizer, have successfully deployed an EC250 field test unit at the U.S. Army base at Fort Benning, Georgia, and installed and commissioned our first commercial unit in the Netherlands in the second quarter of 2014. In November 2014, we entered into the CLA to incorporate our Power Oxidizer into Dresser-Rand's 1.75 MW turbine. In August 2015, the CLA became a mutually binding agreement due to the satisfaction of certain binding conditions contained in the CLA. On June 29, 2016 we entered into the CMLA with Dresser-Rand, which both companies intended would supersede and replace the CLA.

In April 2017, we amended the terms of the CMLA to make the CMLA effective as of January 1, 2017, at which time it superseded and replaced the CLA. Pursuant to the amendment, Dresser-Rand paid us $1.2 million in cash in April 2017, which represents advance payments on license fees for KG2/PO units representing less than the required minimum number of licenses which would otherwise be required to maintain their exclusivity under the CMLA. In exchange for this payment, we have agreed to provide a total credit of $1,760,000 against future license payments associated for these KG2/PO units, consisting of a payment credit of $1,200,000 and an additional discount of $560,000. In July 2017, we executed an additional amendment for additional payments of up to $250,000 to be applied against future license payments for a combined payment credit of $2.0 million. We have not, as yet, received a purchase order for any system subject to these license fee advances. As such, we do not consider the $1.45 million of cash advances to be backlog as of November 19, 2018.

We have sustained recurring net losses and negative cash flows since inception and have not yet established an ongoing source of revenues sufficient to cover our operating costs and allow us to continue as a going concern. Despite capital raises of $2.5 million in December 2015, $3.0 million in April 2016, $1.25 million in September 2016, $3.4 million in December 2016 and $2.6 million between September 2017 and June 2018, along with $1.45 million received in 2017 for advances on license fees, and $0.4 million received in the third quarter of 2018 from customer advances we expect to require additional sources of capital to support our growth initiatives. We must secure additional funding to continue as a going concern and execute our business plan.

Through the end of 2015, our product sales were limited to initial system sales that were not profitable and required additional cash in excess of expected cash receipts. In addition, we incurred significant development and administrative expenses in order to develop our products with little or no cash contribution from sales. Beginning in 2016, we began to focus on reduction of our operating costs payable in cash through headcount and overhead cost reductions and saw an increase in cash collections from customers from sales transactions that are expected to be cash flow positive. During 2015, we received no cash from license fees. In 2016, we received $1.1 million of cash from license fees and we received additional license fees in 2017 from the CMLA, including $1.2 million received in the second quarter of 2017 and $250,000 in the third quarter of 2017. We expect to receive additional license payments upon receipt of firm purchase orders for licenses in 2018 along with product sales receipts for 250kW unit sales.

Management's plan is to obtain capital sufficient to meet our operating expenses by seeking additional equity and/or debt financing. Our cash and cash equivalents balance on September 30, 2018 was approximately $10,000. We expect that our cash and cash equivalents as of September 30, 2018, combined with receipts on customer billings will continue to fund our working capital needs, general corporate purposes, and related obligations into the fourth quarter of 2018 at our current spending levels with additional customer deposits received in October 2018. However, we expect to require significantly more cash for working capital and as financial security to support our growth initiatives.

We will pursue raising additional equity and/or debt financing to fund our operations and product development. If future funds are raised through issuance of stock or debt, these securities could have rights, privileges, or preferences senior to those of our common stock and debt covenants that could impose restrictions on our operations. Any equity or convertible debt financing will likely result in additional dilution to our current stockholders. We cannot make any assurances that any additional financing will be completed on a timely basis, on acceptable terms or at all. Our inability to successfully raise capital in a timely manner will adversely impact our ability to continue as a going concern. If our business fails or we are unable to raise capital on a timely basis, our investors may face a complete loss of their investment.

The accompanying condensed consolidated financial statements do not give effect to any adjustments that might be necessary if we were unable to meet our obligations or continue operations as a going concern.

Note 2—Summary of Significant Accounting Policies

Basis of Presentation

The accompanying condensed consolidated financial statements include our accounts and our wholly-owned subsidiary, Ener-Core Power, Inc. All significant intercompany transactions and accounts have been eliminated in consolidation. All monetary amounts are rounded to the nearest $000, except certain per share amounts.

The accompanying financial statements have been prepared in accordance with GAAP. In the opinion of management, all adjustments that are necessary for a fair statement of the results for interim periods have been included.

Segments

We operate in one segment. All of our operations are located domestically.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Significant items subject to such estimates and assumptions include but are not limited to: collectability of receivables; the valuation of certain assets, useful lives, judgement on potential asset impairment and carrying amounts of property and equipment, equity instruments and share-based compensation; provision for contract losses; valuation allowances for deferred income tax assets; and exposure to warranty and other contingent liabilities. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Foreign Currency Adjustments

At September 30, 2018 and December 31, 2017, we did not hold any foreign currency asset or liability amounts. Gains and losses resulting from foreign currency transactions are reported as other income in the period they occurred.

Concentrations of Credit Risk

Cash and Cash Equivalents

We maintain our non-interest bearing transactional cash accounts at financial institutions for which the Federal Deposit Insurance Corporation ("FDIC") provides insurance coverage of up to $250,000. For interest bearing cash accounts, from time to time, balances exceed the amount insured by the FDIC. We have not experienced any losses in such accounts and believe we are not exposed to any significant credit risk related to these deposits. At September 30, 2018, we had $0 in excess of the FDIC limit.

We consider all highly liquid investments available for current use with an initial maturity of three months or less and are not restricted to be cash equivalents. We invest our cash in short-term money market accounts.

Accounts Receivable

Our accounts receivable are typically from credit worthy customers or, for international customers are supported by guarantees or letters of credit. For those customers to whom we extend credit, we perform periodic evaluations of them and maintain allowances for potential credit losses as deemed necessary. We generally do not require collateral to secure accounts receivable. We have a policy of reserving for uncollectible accounts based on our best estimate of the amount of probable credit losses in existing accounts receivable. We periodically review our accounts receivable to determine whether an allowance is necessary based on an analysis of past due accounts and other factors that may indicate that the realization of an account may be in doubt. Account balances deemed to be uncollectible are charged to the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. As of September 30, 2018 and December 31, 2017, two customers accounted for 100% of our accounts receivable.

Accounts Payable

As of September 30, 2018 and December 31, 2017, five vendors collectively accounted for approximately 56% and 53% of our total accounts payable, respectively.

Inventory

Inventory, which consists of raw materials and work-in-progress, is stated at the lower of cost or net realizable value, with cost being determined by the average-cost method, which approximates the first-in, first-out method. At each balance sheet date, we evaluate our ending inventory for excess quantities and obsolescence. This evaluation primarily includes an analysis of forecasted demand in relation to the inventory on hand, among consideration of other factors. Based upon the evaluation, provisions are made to reduce excess or obsolete inventories to their estimated net realizable values. Once established, write-downs are considered permanent adjustments to the cost basis of the respective inventories. At September 30, 2018 and December 31, 2017, we did not have a reserve for slow-moving or obsolete inventory.

Property and Equipment

Property and equipment are stated at cost, and are being depreciated using the straight-line method over the estimated useful lives of the related assets, ranging from three to ten years. Maintenance and repairs that do not improve or extend the lives of the respective assets are expensed. At the time property and equipment are retired or otherwise disposed of, the cost and related accumulated depreciation accounts are relieved of the applicable amounts. Gains or losses from retirements or sales are reflected in the condensed consolidated statements of operations.

Deposits

Deposits primarily consist of amounts incurred or paid in advance of the receipt of fixed assets or are deposits for rent and insurance.

Accrued Warranties

Accrued warranties represent the estimated costs that will be incurred during the warranty period of our products. We make an estimate of expected costs that will be incurred by us during the warranty period and charge that expense to the condensed consolidated statement of operations at the date of sale. We also reevaluate the estimate at each balance sheet date and if the estimate is changed, the effect is reflected in the condensed consolidated statement of operations. We had no warranty accrual at December 31, 2017 or September 30, 2018. We expect that most terms for future warranties of our Powerstations and Oxidizers will be one to two years depending on the warranties provided and the products sold. Accrued warranties for expected expenditures within one year are classified as current liabilities and as non-current liabilities for expected expenditures for time periods beyond one year.

Intangible Assets

Our intangible assets represent intellectual property acquired during the reverse merger. We amortize our intangible assets with finite lives over their estimated useful lives.

Impairment of Long-Lived Assets

We account for our long-lived assets in accordance with the accounting standards which require that long-lived assets be reviewed for impairment whenever events or changes in circumstances indicate that the historical carrying value of an asset may no longer be appropriate. We consider the carrying value of assets may not be recoverable based upon our review of the following events or changes in circumstances: the asset's ability to continue to generate income from operations and positive cash flow in future periods; loss of legal ownership or title to the assets; significant changes in our strategic business objectives and utilization of the asset; or significant negative industry or economic trends. An impairment loss would be recognized when estimated future cash flows expected to result from the use of the asset are less than its carrying amount. As of September 30, 2018 and December 31, 2017, we do not believe there have been any impairments of our long-lived assets. There can be no assurance, however, that market conditions will not change or demand for our products will continue, which could result in impairment of long-lived assets in the future.

Fair Value of Financial Instruments

Our financial instruments consist primarily of cash and cash equivalents, accounts receivable, accounts payable, and capital lease liabilities. Fair value estimates discussed herein are based upon certain market assumptions and pertinent information available to management as of September 30, 2018 and December 31, 2017. The carrying amounts of short-term financial instruments are reasonable estimates of their fair values due to their short-term nature or proximity to market rates for similar items.

We determine the fair value of our financial instruments based on a three-level hierarchy established for fair value measurements under which these assets and liabilities must be grouped, based on significant levels of observable or unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect management's market assumptions. This hierarchy requires the use of observable market data when available. These two types of inputs have created the following fair-value hierarchy:

- Level 1: Valuations based on unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities. Currently, we classify our cash and cash equivalents as Level 1 financial instruments.

- Level 2: Valuations based on observable inputs (other than Level 1 prices), such as quoted prices for similar assets at the measurement date quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability. We do not currently have any accounts under Level 2.

- Level 3: Valuations based on inputs that require inputs that are both significant to the fair value measurement and unobservable and involve management judgment (i.e., supported by little or no market activity). Currently, we classify our warrants and conversion options accounted for as derivative liabilities as Level 3 financial instruments.

If the inputs used to measure fair value fall in different levels of the fair value hierarchy, a financial security's hierarchy level is based upon the lowest level of input that is significant to the fair value measurement.

Revenue Recognition

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09 (Topic 606) "Revenue from Contracts with Customers," which supersedes the revenue recognition requirements in Topic 605 "Revenue Recognition" (Topic 605). Topic 606 requires entities to recognize revenue when control of the promised goods or services is transferred to customers. The amount of revenue recognized must reflect the consideration the entity expects to be entitled to receive in exchange for those goods or services. We adopted Topic 606 as of January 1, 2018 using the modified retrospective transition method. See Note 13 for further details.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs were $429,000 and $452,000 for the three months ended September 30, 2018 and 2017, respectively, and were $1,280,000 and $1,634,000 for the nine months ended September 30, 2018 and 2017, respectively.

Share-Based Compensation

We maintain an equity incentive plan and record expenses attributable to the awards granted under the equity incentive plan. We amortize share-based compensation from the date of grant on a weighted average basis over the requisite service (vesting) period for the entire award.

We account for equity instruments issued to consultants and vendors in exchange for goods and services at fair value. The measurement date for the fair value of the equity instruments issued is determined at the earlier of (i) the date at which a commitment for performance by the consultant or vendor is reached or (ii) the date at which the consultant's or vendor's performance is complete. In the case of equity instruments issued to consultants, the fair value of the equity instrument is recognized over the term of the consulting agreement.

In accordance with the accounting standards, an asset acquired in exchange for the issuance of fully vested, non-forfeitable equity instruments should not be presented or classified as an offset to equity on the grantor's balance sheet once the equity instrument is granted for accounting purposes. Accordingly, we record the fair value of the fully vested, non-forfeitable common stock issued for future consulting services as prepaid expense in our condensed consolidated balance sheets.

Income Taxes

We account for income taxes under FASB Accounting Standards Codification ("ASC") 740 "Income Taxes." Under the asset and liability method of FASB ASC 740, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under FASB ASC 740, the effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period the enactment occurs. A valuation allowance is provided for certain deferred tax assets if it is more likely than not that we will not realize tax assets through future operations.

Earnings (Loss) per Share

Basic loss per share is computed by dividing net loss attributable to common stockholders by the weighted average number of shares of common stock assumed to be outstanding during the period of computation. Diluted loss per share is computed similar to basic loss per share except that the denominator is increased to include the number of additional shares of common stock that would have been outstanding if the potential shares had been issued and if the additional shares of common stock were dilutive. Approximately 60.9 million and 9.8 million shares of common stock issuable upon full exercise of all options and warrants and all shares potentially issuable in the future under the terms of the convertible senior secured notes payable were excluded from the computation of diluted loss per share due to the anti-dilutive effect on the net loss per share at September 30, 2018 and 2017, respectively.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	**2017**	**2018**	**2017**
Net loss	$ (4,368,000)	$ (2,435,000)	$ (8,407,000)	$ (8,896,000)
Weighted average number of common shares outstanding:				
Basic and diluted	4,167,806	4,063,660	4,121,045	4,026,726
Net loss attributable to common stockholders per share:				
Basic and diluted	$ (1.05)	$ (0.60)	$ (2.04)	$ (2.21)

Comprehensive Income (Loss)

We have no items of other comprehensive income (loss) in any period presented. Therefore, net loss as presented in our condensed consolidated statements of operations equals comprehensive loss.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-2, Leases (Topic 842). ASU 2016-2 affects any entity entering into a lease and changes the accounting for operating leases to require companies to record an operating lease liability and a corresponding right-of-use lease asset, with limited exceptions. ASU 2016-2 is effective for fiscal years beginning after December 15, 2018. Early adoption is allowed. We have not yet assessed the impact ASU 2016-2 will have upon adoption.

In July 2017, the FASB issued ASU 2017-11, Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception. The amendments in Part I of this ASU change the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features. The amendments in Part II of this ASU recharacterize the indefinite deferral of certain provisions of Topic 480 that now are presented as pending content in the Codification, to a scope exception. Those amendments do not have an accounting effect. Amendments in Part I of this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The amendments in Part II of the ASU do not require any transition guidance because those amendments do not have an accounting effect. Early adoption is permitted for all entities, including adoption in an interim period. If an entity early adopts the amendments in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period. We have not yet assessed the impact ASU 2017-11 will have upon adoption.

Note 3—Inventory

Inventory primarily consists of Powerstation parts used as raw materials for the Company's EC250 and KG2 orders. Work-in-progress inventory consists of Powerstation parts and employee and contract labor assembly costs for Powerstation sub-assemblies. Sub-assemblies and parts are typically shipped to end customer locations and assembled on-site. Completed Powerstations awaiting final installation and commissioning would be carried as finished goods. There was no finished goods inventory as of September 30, 2018 and December 31, 2017. Inventories consist of:

	September 30, 2018 (unaudited)	December 31, 2017
Raw material and spare parts	$ 954,000	$ 953,000
Work-in-progress	2,093,000	2,075,000
Total	$ 3,047,000	$ 3,028,000

Note 4—Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	September 30, 2018 (unaudited)	December 31, 2017
Prepaid rent	$ —	$ 10,000
Prepaid offering costs	272,000	194,000
Prepaid insurance	31,000	19,000
Prepaid other	42,000	63,000
Prepaid professional fees	20,000	32,000
Current portion—deferred financing fees for letter of credit	—	15,000
Total	$ 365,000	$ 333,000

Note 5—Property and Equipment, Net

Property and equipment, net consisted of the following:

	September 30, 2018 (unaudited)	December 31, 2017
Machinery and equipment	$ 4,225,000	$ 4,225,000
Office furniture and fixtures	49,000	49,000
Computer equipment and software	202,000	202,000
Total cost	4,476,000	4,476,000
Less accumulated depreciation	(2,056,000)	(1,816,000)
Net	$ 2,420,000	$ 2,660,000

Assets recorded under capital leases and included in property and equipment in our balance sheets consist of the following:

	September 30, 2018 (unaudited)	December 31, 2017
Machinery and equipment	$ 27,000	$ 27,000
Computer equipment and software	25,000	39,000
Total assets under capital lease	52,000	66,000
Less accumulated amortization	(38,000)	(41,000)
Net assets under capital lease	$ 14,000	$ 25,000

Depreciation expense for the three and nine months ended September 30, 2018 and 2017 consisted of the following:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Research and development	$ 77,000	$ 102,000	$ 231,000	$ 282,000
General and administrative	3,000	29,000	9,000	56,000
	$ 80,000	$ 131,000	$ 240,000	$ 338,000

Amortization of assets under capital lease was $3,000 and $9,000 for the three and nine months ended September 30, 2018 and 2017, respectively.

Note 6—Accrued Expenses

Accrued expenses consisted of the following;

	September 30, 2018 (unaudited)	December 31, 2017
Accrued professional fees	$ 155,000	$ 155,000
Accrued payroll and related expenses	925,000	648,000
Accrued board of directors' fees	537,000	390,000
Accrued interest	275,000	138,000
Accrued other	72,000	49,000
Total accrued expenses	$ 1,964,000	$ 1,380,000

Note 7—Deferred Revenues and Customer Advances

Deferred revenues and customer advances consist of balances billed on existing customer contracts for which the revenue cycle is not complete. Customer advances on equipment sales represent down payments and progress payments under the terms and conditions of equipment sales of our Power Oxidizer and Powerstation units or spare parts for those units. Prepaid license fees represent payments of license fees by Dresser-Rand that we received in 2017 but for which the underlying unit sales had not been completed. Deferred revenues and customer advances consisted of the following:

	September 30, 2018 (unaudited)	December 31, 2017
Customer advances on equipment sales	$ 3,123,000	$ 2,720,000
Prepaid license fees	1,450,000	2,550,000
Total deferred revenues and customer advances	$ 4,573,000	$ 5,270,000

Note 8—Convertible Senior Notes Payable

Convertible Senior Notes payable consisted of the following as of September 30, 2018:

	Principal	Debt Discount	Offering Costs	Net Total
Balance, December 31, 2017	$ 10,687,000	(4,448,000)	(245,000)	5,994,000
Amortization of debt discount and offering costs	—	6,027,000	231,000	6,258,000
2018 convertible senior secured notes issuance	1,328,000	(625,000)	(76,000)	627,000
Discount for additional beneficial conversion feature	—	(4,167,000)	—	(4,167,000)
Conversion into common shares	(25,000)	11,000	—	(14,000)
Balance, September 30, 2018	11,990,000	(3,202,000)	(90,000)	8,698,000
Less: current portion	(11,990,000)	3,202,000	90,000	(8,698,000)
Long term portion	$ —	$ —	$ —	$ —

On January 25, 2018, the Company and certain investors agreed to further amend and restate the securities purchase agreement under which such investors purchased unregistered convertible senior secured promissory notes in September, November and December 2017 in aggregate principal amount of approximately $1,555,556 (the “2017 Senior Notes”), pursuant to which the Company agreed to issue to certain accredited investors, pursuant to a series of joinder agreements, additional unregistered convertible senior secured promissory notes in aggregate principal amount of approximately $555,556 (the “2018 Senior Notes”) and five-year warrants to purchase an aggregate of 222,219 shares of common stock at an exercise price of $1.50 per share, with aggregate gross proceeds to the Company of $465,000 and cancellation of indebtedness of $35,000. The closing of the first 2018 Senior Notes financing occurred on January 25, 2018.

On March 26, 2018, the Company and certain investors agreed to further amend and restate the securities purchase agreement under which such investors purchased the 2017 Senior Notes and 2018 Senior Notes, pursuant to which the Company agreed to issue to certain accredited investors, pursuant to a series of joinder agreements, additional 2018 Senior Notes in principal amount of approximately $333,335 and five-year warrants to purchase an aggregate of 133,332 shares of common stock at an exercise price of $1.50 per share, with aggregate cash gross proceeds to the Company of approximately $200,000 and cancellation of indebtedness of approximately $100,000, which consists of earned and unpaid salary due to certain employees of the Company who elected to receive payment in the form of 2018 Senior Notes in lieu of cash. The closing of the second 2018 Senior Notes financing occurred on March 26, 2018.

On June 5, 2018, the Company entered into a securities purchase agreement pursuant to which it issued convertible senior secured promissory notes in the aggregate principal amount of approximately $439,444 (the “June 2018 Senior Notes”) and related warrants to purchase an aggregate of 878,889 shares of common stock at an exercise price of $0.30 per share, with aggregate cash gross proceeds to the Company of approximately $394,500. The June 2018 Senior Notes are convertible into shares of common stock at a price of $0.25 per share. The June 2018 Senior Notes rank pari passu with the 2018 Senior Notes, 2017 Senior Notes, 2016 Senior Notes (as defined below) and 2015 Senior Notes (as defined below). The closing of the June 2018 Senior Notes financing occurred on June 5, 2018.

During the nine months ended September 30, 2018, one holder of 2016 Senior Notes converted an aggregate of $25,000 of principal outstanding under such 2016 Senior Notes into 100,000 shares of common stock. As a result of this conversion, the Company recorded a loss of $11,000, representing the unamortized debt discount and deferred financing fees associated with the 2016 Senior Notes converted.

Concurrent with the closing of our debt financing on June 5, 2018, pursuant to which certain investors purchased unregistered convertible senior secured promissory notes in aggregate principal amount of approximately $439,444, the Company and certain investors agreed to amend certain outstanding Senior Notes (as defined below) to reduce the conversion price of such Senior Notes from $2.50 per share of common stock to $0.25 per share of common stock, which conversion price was $0.10 lower than the closing price of the Company’s common stock on such date. We evaluated the conversion price adjustment to determine whether the change should be recorded as a debt extinguishment or a modification of terms and determined that the price adjustment should be accounted for as a modification. The intrinsic value, $0.10 per share of common stock, resulted in an additional beneficial conversion feature for the remaining Senior Notes of $4,167,000. This additional beneficial conversion feature was recorded as an additional Senior Notes discount and will be amortized ratably over the remaining life of the Senior Notes.

We incurred $76,000 of offering costs in conjunction with the issuance and sale of the 2018 Senior Notes consisting of legal and professional fees. We will amortize the offering costs to interest expense over the expected remaining life of the 2018 Senior Notes.

The Company refers to the June 2018 Senior Notes, 2018 Senior Notes, the 2017 Senior Notes, the convertible senior secured promissory notes in the fourth quarter of 2016 (the “2016 Senior Notes”) and the amended and restated convertible senior secured promissory notes originally issued in April and May 2015 (the “2015 Senior Notes”), collectively, as the “Senior Notes”. The Senior Notes are fully secured by all assets of the Company and the Company’s subsidiaries.

Upon an Event of Default, the Senior Notes will bear interest at a rate of 10% per annum. The Senior Notes will mature on December 31, 2018 and rank senior to the convertible unsecured notes issued in September 2016 (the “Convertible Unsecured Notes”). The Senior Notes are convertible at the option of the holder into the Company’s common stock at an exercise price of $0.25 (as subject to adjustment therein) and will automatically convert into shares of the Company’s common stock on the fifth trading day immediately following the issuance date of the Senior Notes on which (i) the Weighted Average Price (as defined in the Senior Notes) of the Company’s common stock for each trading day during a twenty trading day period equals or exceeds $5.00 (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction) and no Equity Conditions Failure (as defined in the Senior Notes) has occurred. The Senior Notes also contain a blocker provision that prevents the Company from effecting a conversion in the event that the holder, together with certain affiliated parties, would beneficially own in excess of either 4.99% or 9.99%, with such threshold determined by the holder prior to issuance, of the shares of the Company’s common stock outstanding immediately after giving effect to such conversion.

Upon an Event of Default and delivery to the holder of the Senior Note of notice thereof, such holder may require the Company to redeem all or any portion of its Senior Note at a price equal to 115% of the Conversion Amount (as defined in the Senior Notes) being redeemed. Additionally, upon a Change of Control and delivery to the holder of the Senior Note of notice thereof, such holder may also require the Company to redeem all or any portion of its Senior Note at a price equal to 115% of the Conversion Amount being redeemed. Further, at any time from and after January 1, 2019 and provided that the Company has not received either (i) initial deposits for at least eight 2 MW Power Oxidizer units or (ii) firm purchase orders totaling not less than $3,500,000 and initial payment collections of at least $1,600,000, in each case during the period commencing on the issuance date of the 2016 Senior Notes and ending on December 31, 2018, the holder of the Senior Note may require the Company to redeem all or any portion of its Senior Note at a price equal to 100% of the Conversion Amount being redeemed.

At any time after the issuance date of the Senior Notes, the Company may redeem all or any portion of the then outstanding principal and accrued and unpaid interest with respect to such principal, at 100% of such aggregate amount; provided, however, that the aggregate Conversion Amount to be redeemed pursuant to all Senior Notes must be at least $500,000, or such lesser amount as is then outstanding. The portion of the Senior Note(s) to be redeemed shall be redeemed at a price equal to the greater of (i) 110% of the Conversion Amount of the Senior Note being redeemed and (ii) the product of (A) the Conversion Amount being redeemed and (B) the quotient determined by dividing (I) the greatest Weighted Average Price (as defined in the Senior Notes) of the shares of the Company’s common stock during the period beginning on the date immediately preceding the date of the notice of such redemption by the Company and ending on the date on which the redemption by the Company occurs by (II) the lowest Conversion Price (as defined in the Senior Notes) in effect during such period.

The Senior Notes contain a provision that prevents the Company from entering into or becoming party to a Fundamental Transaction (as defined in the Senior Notes) unless the Company’s successor entity assumes all of the Company’s obligations under the Senior Notes and the related transaction documents (the “Transaction Documents”) pursuant to written agreements in form and substance satisfactory to at least a certain number of holders of the Senior Notes.

In connection with foregoing, Ener-Core Power, Inc., the Company’s wholly-owned subsidiary, entered into a Guaranty, pursuant to which it agreed to guarantee all of the obligations of the Company under the securities purchase agreements for the Senior Notes and the Transaction Documents.

Note 9—Convertible Unsecured Notes

Convertible Unsecured Notes payable consisted of the following:

	Notes	Debt Discount	Net Total
Balance at December 31, 2017	$ 1,250,000	$ —	$ 1,250,000
Discount for additional beneficial conversion feature	—	(450,000)	(450,000)
Amortization of debt discount	—	251,000	251,000
	1,250,000	(199,000)	1,051,000
Less: current portion	$ (1,250,000)	$ 199,000	$ (1,051,000)
Long term portion	$ —	$ —	$ —

Concurrent with the issuance of the June 2018 Senior Notes and execution of related amendments to the other Senior Notes described in Note 8, the Company and certain investors agreed to amend the Convertible Unsecured Notes to reduce the conversion price from $2.50 per share of common stock to $0.25 per share of common stock, which conversion price was $0.10 lower than the closing price of the Company’s common stock on such date. We evaluated the conversion price adjustment to determine whether the change should be recorded as a debt extinguishment or a modification of terms and determined that the price adjustment should be accounted for as a modification. The intrinsic value, or $0.10 per share of common stock, resulted in an additional beneficial conversion feature for the Convertible Unsecured Notes of $450,000. This additional beneficial conversion feature was recorded as an additional Convertible Unsecured Notes discount and will be amortized ratably over the remaining life of the Convertible Unsecured Notes.

On September 1, 2016, we entered into a securities purchase agreement and related notes and warrants pursuant to which we issued the Convertible Unsecured Notes and detachable five-year warrants to purchase an aggregate of 124,999 shares of the Company's common stock at an exercise price of $4.00 per share (the "September 2016 Financing"). The Company received total gross proceeds of $1,250,000, less transaction expenses of $45,000 consisting of legal costs for net proceeds of $1,205,000. We recorded a discount of $553,000 on the date of issuance representing the fair value of the warrants issued and the value of the beneficial conversion feature on the date of issuance. In the fourth quarter of 2016, we increased our debt discount recorded by $335,000, consisting of $305,000 recorded for the issuance of additional warrants at fair value of $305,000 and $30,000 for the difference in fair value for warrants repriced from $4.00 per share to $3.00 per share.

The Convertible Unsecured Notes bear interest at a rate of 12% per annum and were scheduled to mature on September 1, 2017; provided, however, that the Company may not prepay any portion of the outstanding principal and accrued and unpaid interest under the Convertible Unsecured Notes so long as any of the Senior Notes remain outstanding and in no event will the maturity date of such Convertible Unsecured Notes be earlier than at least ninety-one (91) days after the maturity date under the Senior Notes. As of September 30, 2018, the Convertible Unsecured Notes remain outstanding. The Convertible Unsecured Notes are subordinate to the Senior Notes described in Note 8. The Convertible Unsecured Notes were initially convertible at the option of the holder into common stock at a conversion price of $4.31 per share and will automatically convert into shares of common stock in the event of a conversion of at least 50% of the then outstanding (i) principal, (ii) accrued and unpaid interest with respect to such principal and (iii) accrued and unpaid late charges, if any, with respect to such principal and interest, under the Senior Notes. In connection with the issuance of the 2016 Senior Notes and amendment and restatement of the 2015 Senior Notes, the conversion price was reduced to $2.50 per share. In connection with the issuance of the June 2018 Senior Notes, the conversion price was reduced to $0.25 per share. The Convertible Unsecured Notes also contain a blocker provision that prevents the Company from effecting a conversion in the event that the holder, together with certain affiliated parties, would beneficially own in excess of 9.99% of the shares of common stock outstanding immediately after giving effect to such conversion. At any time after the issuance date of the Convertible Unsecured Notes, the Company may, at its option, redeem all or any portion of the then outstanding principal and accrued and unpaid interest with respect to such principal (the "Company Optional Redemption Amount"), at 100% of such aggregate amount; provided, however, that the Company may not redeem all or any portion of the Company Optional Redemption Amount so long as any of the Senior Notes remain outstanding without the prior written consent of the collateral agent with respect to such Senior Notes and certain investors holding the requisite number of conversion shares and warrant shares underlying the Senior Notes and related warrants.

The securities purchase agreement for the Convertible Unsecured Notes called for the issuance of additional five-year warrants to purchase an aggregate of 62,500 shares at an exercise price of $4.00 per share on each of the 61st, 91st, 121st and 151st days after the closing of the September 2016 Financing (in each case, an "Additional Warrant Date"), but only in the event the Company had not consummated a further financing consisting of the issuance of common stock and warrants for aggregate gross proceeds of at least $3,000,000 prior to such respective Additional Warrant Date. As of January 30, 2017, the Company had not consummated a further financing and, as a result, issued warrants to purchase an aggregate of 250,000 shares of the Company's common stock, consisting of the issuance of an aggregate of 62,500 shares of the Company's common stock on each of November 1, 2016, December 1, 2016, December 31, 2016 and January 30, 2017. The Company valued the warrants to purchase an aggregate of 62,500 shares of common stock issued in the first quarter of 2017 using the Black-Scholes option pricing model at $73,000 and recorded an additional discount on the date of issuance. The Company evaluated the accounting of the additional detachable warrants and determined that the warrants should not be accounted for as derivative liabilities.

Note 10—Capital Leases Payable

Capital Leases Payable

Capital leases payable consisted of the following:

	September 30, 2018 (unaudited)	December 31, 2017
Capital lease payable to De Lage Landen secured by forklift, 10.0% interest, due on October 1, 2018, monthly payment of $452	$ 2,000	$ 5,000
Capital lease payable to Dell Computers secured by computer equipment, 4.99% interest, due on May 1, 2020, monthly payment of $716	14,000	20,000
Total capital leases	$ 16,000	$ 25,000
Less: current portion	(10,000)	(13,000)
Long term portion of capital leases	$ 6,000	$ 12,000

The future minimum lease payments required under the capital leases and the present value of the net minimum lease payments as of September 30, 2018, are as follows:

	12 Months Ending September 30,	Amount
	2019	$ 10,000
	2020	7,000
Net minimum lease payments		$ 17,000
Less: amount representing interest		(1,000)
Present value of net minimum lease payments		$ 16,000
Less: current maturities of capital lease payables		(10,000)
Long term capital lease payables		$ 6,000

Note 11—Equity

During the nine months ended September 30, 2018, the Company issued 25,000 shares of common stock in exchange for services valued at $20,000.

During the nine months ended September 30, 2018 the Company issued 100,000 shares of common stock upon the partial conversion of $25,000 of principal outstanding under a 2016 Senior Note, as described in Note 8.

Restricted Stock

Restricted stock grants consist of shares of common stock of the Company owned by employees, consultants, and directors that are subject to vesting conditions, typically for services provided to the Company. All unvested shares of restricted stock are subject to repurchase rights and, therefore, are recorded as restricted stock. All restricted stock issued is valued at the market price on the date of grant.

Restricted stock activities during the three months ended September 30, 2018 were as follows:

	Shares	Weighted Average Grant Price
Balance, December 31, 2017	210,000	$ 1.55
Granted	—	$ —
Vested	(148,750)	$ —
Unvested balance, September 30, 2018	61,250	$ 1.55

Expenses related to vesting of restricted stock are included in stock-based compensation expense. The remaining unvested shares of restricted stock vest 50% per year on March 31, 2019 and 2020.

Note 12—Stock Options and Warrants

Stock Options

On July 1, 2013, the Company's board of directors adopted and approved the 2013 Equity Incentive Plan (the "2013 Plan") and amended the 2013 Plan on March 24, 2015 to increase the number of shares available for issuance. The 2013 Plan previously authorized us to grant non-qualified stock options and restricted stock purchase rights to purchase up to 420,000 shares of the Company's common stock to employees (including officers) and other service providers. With the approval of the 2015 Plan, described below, as of August 29, 2015, no shares of common stock were available for issuance under the 2013 Plan, other than pursuant to previously issued options.

On July 15, 2015, the Company's board of directors approved the 2015 Omnibus Incentive Plan (the "2015 Plan"), which was approved by the Company's stockholders on August 28, 2015. Upon adoption, the 2015 Plan authorized us to grant up to 300,000 shares of the Company's common stock and replaced the 2013 Equity Incentive Plan. As a result of the approval of the 2015 Plan, no additional grants will be made under the 2013 Plan. On August 22, 2016, the Company's board of directors approved an amendment to the 2015 Plan to increase the total authorized pool available under the 2015 Plan to 600,000 shares of the Company's common stock, subject to automatic increase for any shares subject to outstanding awards under the 2013 Plan that are subsequently canceled or expire. The Company's stockholders approved the foregoing amendment on September 26, 2016. As of September 30, 2018, the Company had issued 210,000 shares of common stock and options to purchase an aggregate of 444,000 shares of common stock under the 2015 Plan.

The 2015 Plan permits the granting of any or all of the following types of awards: incentive stock options, non-qualified stock options, stock appreciation rights, restricted stock, restricted stock units, other stock-based awards, and performance awards payable in a combination of cash and company shares. As of September 30, 2018, 163,683 shares of the Company's common stock were available for issuance under the 2015 Plan.

The 2015 Plan has the following limitations:

- *Limitation on terms of stock options and stock appreciation rights*. The maximum term of each stock option and stock appreciation right (SAR) is 10 years.

- *No repricing or grant of discounted stock options*. The 2015 Plan does not permit the repricing of options or SARs either by amending an existing award or by substituting a new award at a lower price without stockholder approval. The 2015 Plan prohibits the granting of stock options or SARs with an exercise price less than the fair market value of the Company's common stock on the date of grant.

- *Clawback*. Awards granted under the 2015 Plan are subject to any then current compensation recovery or clawback policy of the Company that applies to awards under the 2015 Plan and all applicable laws requiring the clawback of compensation.

- *Double-trigger acceleration*. Acceleration of the vesting of employee awards that are assumed or replaced by the resulting entity after a change in control is not permitted unless an employee's employment is also terminated by the Company without cause or by the employee with good reason within two years of the change in control.

- *Code Section 162(m) Eligibility*. The 2015 Plan provides flexibility to grant awards that qualify as "performance-based" compensation under Internal Revenue Code Section 162(m).

- *Dividends*. Dividends or dividend equivalents on stock options, SARs or unearned performance shares under the 2015 Plan will not be paid.

At September 30, 2018, total unrecognized deferred stock compensation expected to be recognized over the remaining weighted average vesting periods of 1.76 years for outstanding grants was $0.5 million.

The fair value of option awards is estimated on the grant date using the Black-Scholes option valuation model.

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 us.

Stock-based compensation expense is recorded only for those awards expected to vest. Currently, the forfeiture rate used to calculate stock-based compensation expense is zero, which approximates the effective actual forfeiture rate. The rate is adjusted if actual forfeitures differ from the estimates in order to recognize compensation cost only for those awards that actually vest. If factors change and different assumptions are employed in future periods, the share-based compensation expense may differ from that recognized in previous periods.

Stock-based award activity was as follows:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
Balance, December 31, 2017	668,607	$ 6.21	7.38	$ —
Forfeited or granted during 2018	(77,826)	15.18	—	—
Balance, September 30, 2018	590,781	$ 5.03	6.53	$ —
Exercisable on September 30, 2018	453,947	$ 5.73	5.97	$ —

The options granted have a contract term ranging between three and ten years. Options granted typically vest over a four-year period, with 25% vesting after one year and the remainder ratably over the remaining three years.

Of the Company's outstanding options, options to purchase 158,488 shares of the Company's common stock were outstanding and options to purchase 153,821 shares of the Company's common stock were exercisable under the 2013 Plan and options to purchase 432,293 shares of the Company's common stock were outstanding with 300,126 exercisable under the 2015 Plan on September 30, 2018.

The following table summarizes information about stock options outstanding and exercisable at September 30, 2018:

	Options Outstanding			Options Exercisable	
Exercise Prices	Number of Shares	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
		(In years)			
$0–$10.00	514,008	7.05	$ 3.34	377,563	$ 3.57
$10.01–$15.00	26,300	5.24	$ 12.50	25,911	$ 12.50
$15.01–$20.00	41,845	1.58	$ 17.50	41,845	$ 17.50
$20.01–$25.00	8,628	3.80	$ 22.61	8,628	$ 22.61
	590,781	6.53	$ 5.03	453,947	$ 5.73

Stock-based compensation expense consisted of the following:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Research and development	$ 46,000	$ 65,000	$ 143,000	$ 368,000
General and administrative	40,000	70,000	191,000	421,000
	$ 86,000	$ 135,000	$ 334,000	$ 789,000

Warrants

From time to time, we issue warrants to purchase shares of our common stock to investors, note holders and to non-employees for services rendered or to be rendered in the future. The following table represents the activity for warrants outstanding, exchanged, and issued for the nine months ended September 30, 2018.

	Number of Shares	Weighted Average Exercise Price
Balance outstanding at December 31, 2017	6,084,603	$ 3.38
Expired	(36,723)	28.48
Issued for 2018 Senior Notes	355,551	1.50
Issued for June 2018 Senior Notes	878,889	0.30
Balance outstanding at September 30, 2018	7,282,320	$ 2.79

All warrants were exercisable at September 30, 2018, the weighted average exercise price per share was $2.79 and the weighted average remaining life was 3.31 years. The warrants outstanding as of September 30, 2018 had an intrinsic value of $0.

2018 Senior Notes Warrants

Between January and March 2018, the Company issued warrants to purchase up to an aggregate of 355,551 shares of common stock to the holders of the 2018 Senior Notes with an exercise price of $1.50 per share. The Company incorporated the fair value of the warrants issued of $135,000, valued using the Black-Scholes pricing model, into the debt discount recorded for the 2018 Senior Notes, as described in Note 8.

On June 5, 2018, the Company issued warrants to purchase up to an aggregate of 878,889 shares of common stock to the holders of the June 2018 Senior Notes with an exercise price of $0.30 per share. The Company incorporated the fair value of the warrants issued of $227,000, valued using the Black-Scholes pricing model, into the debt discount recorded for the June 2018 Senior Notes, as described in Note 8.

Warrants outstanding as of September 30, 2018 consist of:

	Issue Date	Expiry Date	Number of Warrants	Exercise Price per Share
2013 Services Warrants—November	Nov-13	Nov-18	2,400	50.00
2014 Services Warrants—April(1)	Apr-14	Apr-19	13,657	39.00
2014 Services Warrants—September(2)	Aug-14	Aug-19	16,000	25.00
2014 Services Warrants—November(3)	Nov-14	Nov-18	6,500	25.00
2014 Settlement Warrants—December(4)	Dec-14	Dec-19	38,464	25.00
2015 Senior Notes Warrants(5)(13)	Apr/May-15	Apr/May-20	219,785	3.00
2015 Services Warrants—May(6)	May-15	May-20	5,514	12.50
2015 LOC Guarantee Warrants—November(7)	Nov-15	Nov-20	74,000	3.00
2015 Debt Amendment Warrants—December(8)(14)	Dec-15	Dec-20	50,000	3.00
2015 PIPE Warrants—December(9)	Dec-15	Dec-20	312,500	4.00
2016 Debt Amendment Warrants—February(10)(14)	Feb-16	Feb-21	50,000	3.00
2016 Debt Amendment Warrants—March(11)(14)	Mar-16	Mar-21	500,000	3.00
2016 Convertible Unsecured Notes Warrants (12)	Sep–Dec-16	Sep–Dec-21	312,499	3.00
2016 Senior Notes Warrants	Dec-16	Dec-21	3,720,839	3.00
2017 Convertible Unsecured Notes Warrants (12)	Jan-17	Jan-22	62,500	3.00
2017 Backstop Warrants	Apr-17	Apr-22	41,000	3.00
2017 Senior Notes Warrants	Sep/Nov/Dec-17	Sep/Nov/Dec-22	622,222	1.50
2018 Senior Notes Warrants	Jan/Mar-18	Jan/Mar-23	355,551	1.50
June 2018 Senior Notes Warrants	Jun-18	Jun-23	878,889	0.30
Warrants outstanding and exercisable at September 30, 2018			7,282,320	$ 2.79

(1) The 2014 Services Warrants—April were issued for fees incurred in conjunction with the issuance of convertible notes in 2014. The warrants were valued on the issuance date at $11.50 per share in conjunction with the valuation approach used for the initial valuation of the warrants issued in connection with the convertible notes issued in 2014.

(2) The 2014 Services Warrants—September were issued to a consultant in exchange for advisory services with no readily available fair value. The warrants were originally issued at an exercise price of $39.00 per share and had a one-time price reset provision to the exercise price of the warrants issued to investors in the convertible notes offering in April 2014 if the exercise price of such convertible notes warrants changed prior to September 30, 2014. On September 22, 2014, the exercise price was changed to $25.00 per share. There are no further exercise price changes for this warrant series. The warrants were valued using the Black-Scholes option pricing model at $131,000 on the issuance date with an additional $6,000 recorded to expense on September 22, 2014 to reflect the change in fair value resulting from the exercise price change.

(3) On November 26, 2014, the Company issued warrants to purchase up to 6,500 shares of common stock with an exercise price of $25.00 per share for compensation for investor relations services provided. The warrants were valued using the Black-Scholes option pricing model at $43,000 on the issuance date.

(4) On December 1, 2014, the Company issued warrants to purchase up to 19,232 shares of common stock with an exercise price of $39.00 per share and on December 15, 2014 issued warrants to purchase up to 19,232 shares of common stock with an exercise price of $25.00 per share to settle potential legal disputes resulting from claims made by the investors in the November 2013 private equity placement. The warrants issued on December 1, 2014 were issued concurrent with the issuance of 8,462 shares of the Company's common stock in partial settlement of the potential legal disputes arising from claims by two investors. The Company settled all remaining potential legal disputes with all of the remaining investors in the November 2013 private placement on December 15, 2014 by issuing the second tranche of warrants and setting the exercise price of each warrant series issued at $25.00 with no further reset provisions. The combined issuance of the warrants and expense resulting from any price changes were valued using the Black-Scholes option pricing model at $246,000 and expensed to general and administrative expense.

(5) On April 23, 2015, the Company issued warrants to purchase up to 136,267 shares of common stock and on May 7, 2015, the Company issued warrants to purchase up to 83,518 shares of common stock, each with an exercise price of $12.50 per share in conjunction with the issuance of the 2015 Senior Notes. The warrants were valued using the Black-Scholes option pricing model at $2,139,000 on the issuance date. On August 24, 2016, the exercise price of the warrants was reduced to $4.00 per share. Concurrent with the issuance of the 2016 Senior Notes, the exercise price of the warrants was further reduced to $3.00 per share.

(6) On May 1, 2015, the Company issued warrants to purchase up to 5,514 shares of common stock with an exercise price of $12.50 per share in conjunction with placement agent services for the Company's May 2015 private equity placement. The warrants were valued using the Black-Scholes option pricing model at $56,000 on the issuance date.

(7) On November 2, 2015, the Company issued warrants to purchase up to 74,000 shares of common stock with an exercise price of $15.00 per share in conjunction with the Letter of Credit described in Note 15. The warrants were valued using the Black-Scholes option pricing model at $246,000 on the issuance date. The warrants are exercisable beginning on November 1, 2016. On April 2017, the exercise price was reduced to $3.00 per share as a term of an amendment to the backstop security.

(8) On December 30, 2015, the Company issued warrants to purchase up to 50,000 shares of common stock with an initial exercise price of $12.50 per share in conjunction with an amendment of the 2015 Senior Notes in December 2015. On September 30, 2016, concurrent with the issuance of the March 2016 Warrants, the exercise price was reduced to $5.00 per share. On August 24, 2016, the exercise price of the warrants was reduced to $4.00 per share. Concurrent with the issuance of the 2016 Senior Notes, the exercise price of the warrants was further reduced to $3.00 per share.

(9) On December 31, 2015, the Company issued warrants to purchase up to 312,500 shares of common stock with an initial exercise price of $5.00 per share in conjunction with the December private equity placement (the "December PIPE"). The warrants initially provided that if, prior to the earlier of September 30, 2016 or thirty days after the date on which the December PIPE shares and underlying warrants are registered for resale, the Company issued common share derivative securities at a price per share less than $5.00 per share, the Company was obligated to reduce the exercise price of the December PIPE warrants to a price per share equal to the newly issued shares or derivative common stock securities. This price protection clause expired on September 30, 2016. On August 24, 2016, the exercise price of the warrants was reduced to $4.00 per share.

(10) On February 2, 2016, the Company issued warrants to purchase up to 50,000 shares of common stock with an initial exercise price of $12.50 per share in conjunction with an amendment of the 2015 Senior Notes in December 2015. The warrants were valued using the Black-Scholes option pricing model at $148,000 on the issuance date and were recorded as a derivative liability and additional debt discount. The warrants provided that, in the event that the Company issued additional common stock derivative securities at a price per share less than the exercise price, the Company was obligated to reduce the exercise price of the February 2016 Warrants to a price per share equal to the newly issued shares or derivative common stock securities. On March 31, 2016, concurrent with the issuance of the additional debt amendment warrants, the exercise price was reduced to $5.00 per share. This price protection clause expired on September 30, 2016. On August 24, 2016, the exercise price of the warrants was reduced to $4.00 per share. Concurrent with the issuance of the 2016 Senior Notes, the exercise price of the warrants was further reduced to $3.00 per share.

(11) On March 31, 2016, the Company issued warrants to purchase up to 500,000 shares of common stock with an initial exercise price of $5.00 per share in conjunction with an amendment of the 2015 Senior Notes in December 2015. The warrants were valued using the Black-Scholes option pricing model at $1,497,000 on the issuance date and were recorded as a derivative liability and additional debt discount. The warrants provided that, in the event that the Company issued additional common stock derivative securities at a price per share less than the exercise price, the Company was obligated to reduce the exercise price of the March 2016 Warrants to a price per share equal to the newly issued shares or derivative common stock securities. This price protection clause expired on September 30, 2016. On August 24, 2016, the exercise price of the warrants was reduced to $4.00 per share. Concurrent with the issuance of the 2016 Senior Notes, the exercise price of the warrants was further reduced to $3.00 per share.

(12) On September 1, 2016, the Company issued warrants to purchase up to 124,999 shares of common stock with an initial exercise price of $4.00 per share in conjunction with Unsecured Convertible Notes as described in Note 8 above. The warrants were valued using the Black-Scholes option pricing model at $271,000 on the issuance date and were recorded as additional debt discount. Between November 1, 2016 and December 31, 2016, the Company issued additional warrants to purchase up to 187,500 shares of common stock, as described above. The additional warrants were valued using the Black-Scholes option pricing model at $305,000 and were recorded as additional debt discount. Concurrent with the issuance of the 2016 Senior Notes, the exercise price of the warrants issued on November 1, 2016 was reduced to $3.00 per share. The warrants issued on December 1, 2016, December 31, 2016, and January 30, 2017 were issued with an initial exercise price of $3.00 per share. On January 30, 2017 the Company issued warrants to purchase up to 62,500 shares of common stock with an exercise price of $3.00 per share

(13) Warrant exercise price was reduced from $12.50 to $4.00 per share on August 24, 2016 and further reduced to $3.00 per share concurrent with the issuance of the 2016 Senior Notes.

(14) Warrant exercise price was reduced from $5.00 to $4.00 per share on August 24, 2016 and further reduced to $3.00 per share concurrent with the issuance of the 2016 Senior Notes. On August 24, 2016, the warrant agreement was amended to remove all provisions that had previously required derivative liability accounting treatment.

Note 13—Revenue

On January 1, 2018, we adopted Topic 606. We elected to use the modified retrospective approach for contracts that were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented in accordance with Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting method under Topic 605. As a result of applying the new standard, there were no changes to any financial statement line item.

Performance Obligations

Our performance obligations include delivery of product, installation of product, and servicing of product as well as technology transfer licensing and royalty-based licensing for subsequent sales of units under license. We recognize product revenue performance obligations when the product is delivered to the customer and commissioned for use by the customer. Upon commissioning and at that point in time, the control of the product is transferred to the customer. We recognize technology transfer licensing upon successful integration of the technology into usable products. Our royalty-based licenses are calculated as a percentage of the value of the units sold under license. We recognize royalty-based licensing upon subsequent unit orders, represented by purchase orders from our licensing partners with specified unit values. We expect to satisfy our current and future performance obligations within a few months of entering into the contract. Depending on the size of the project, the performance obligations could be satisfied sooner or later.

Our customers have a limited right to return our products which is not expected to be material and would further result in cancellation penalties. We provide a warranty on some of our products ranging from nine months to one year, depending on the contract with an option to purchase extended warranties. The amount accrued for expected returns and warranty claims was immaterial as of September 30, 2018.

Contract Balances

All of the current contracts are expected to be completed within one year. We have elected to use the practical expedient in 340-40-25-4 (regarding the incremental costs of obtaining a contract) for costs related to contracts that are estimated to be complete within one year and as a result, we have not recognized a contract asset account. If we had chosen not to use this practical expedient, we would not expect a material difference in the contract balances. For our product sales where amounts received or expected to be received are less than the expected costs of a contract, we record contract loss provisions and contract loss liabilities. Anticipated losses on contracts are recognized in full in the period in which losses become probable and estimable. Changes in estimate of profit or loss on contracts are included in earnings on a cumulative basis in the period the estimate is changed. As of September 30, 2018 and December 31, 2017, we had provisions for contract losses of $391,000 and $617,000, respectively.

Licensing Arrangements

Patent and technology licensing arrangements result in fixed payments received over time, with guaranteed minimum payments on occasion, variable payments calculated based on the licensee's sale or use of the intellectual property ("IP"), or a mix of fixed and variable payments.

Under our existing licensing arrangements, Dresser-Rand has a worldwide perpetual license (the "License") to manufacture, market, commercialize and sell Power Oxidizers as part of a Dresser-Rand KG2-3GEF 2 MW gas turbine coupled with our Power Oxidizer (a "Combined System") within the 1 MW to 4 MW range of power capacity. Initially, the License will be exclusive within this power capacity range, for so long as Dresser-Rand sells a minimum number of units of the Combined System in each annual sales threshold (the "Sales Threshold"), subject to certain conditions and exceptions. If Dresser-Rand does not meet either the initial or any subsequent annual Sales Thresholds, and the Sales Threshold is not otherwise waived, Dresser-Rand may maintain exclusivity of the License by making a true-up payment to us for each unit that is in deficit of the Sales Threshold (a "True-Up Payment"); *provided, however*, that Dresser-Rand may not maintain an exclusive License by making a True-Up Payment for more than two consecutive Sales Threshold periods. In the event Dresser-Rand does not meet the Sales Threshold, does not qualify for a waiver and elects not to make the True-Up Payment, the License will convert to a non-exclusive License.

- For fixed-fee arrangements, consisting of the initial licensing fee to facilitate the integration of the technology into a Combined System, the Company recognizes revenue upon control over the underlying IP use right transferring to the licensee and for the initial license, where the initial commercial units are deemed to be operational in order to verify technological feasibility. Where a licensee has the contractual right to terminate a fixed-fee arrangement for convenience without any substantive penalty payable upon such termination, the Company applies the guidance in Topic 606 to the duration of the contract in which the parties have present enforceable rights and obligations and only recognizes revenue for amounts that are due and payable. To date, all fixed-fee arrangements have been paid in full prior to revenue recognition.

- For variable arrangements, the Company recognizes revenue based on the licensee's sale or usage of the IP during the period of reference, represented by receipt of purchase orders from the licensee representing use of the IP. To date, amounts received under variable arrangements have been recorded as deferred revenues since the licensee has not provided purchase orders for Combined Systems utilizing IP for the variable arrangement component of the licensing arrangement.

These arrangements do not typically grant the licensee the right to terminate for convenience and where such rights exist, termination is prospective, with no refund of fees already paid by the licensee.

The Company's per-unit royalty agreement contains a provision which sets forth minimum amounts to be received by the Company in order for Dresser-Rand to maintain exclusivity of its License as a True-Up Payment. Under ASC 606, we would consider any such True-Up Payments as minimum royalties at a fixed transaction price to which the Company will have an unconditional right once all other performance obligations, if any, are satisfied. Therefore, if the Company receives any True-Up Payments for exclusivity in the future, such receipts would be recorded as revenues in the period in which all remaining revenue recognition criteria have been met.

Significant Judgments

For license or royalty based revenue contracts, we invoice the customer when the performance obligation is satisfied and payment is due. For our royalty-based contract with Dresser-Rand, we invoice 50% of the order upon license order placement and the second 50% on the earlier of subsequent unit delivery or 12 months, whichever occurs first. For our products sold under contract, terms such as progress billings or longer terms are agreed to on a case-by-case basis. We do not have significant financing components, non-cash consideration, or variable consideration except that our royalty-based unit licenses vary by the value of the unit sold, which is established at order placement. As of September 30, 2018, we had $4.2 million allocated to performance obligations that were unsatisfied and we expect those obligations to be satisfied within one year.

Disaggregation of Revenue

All revenue recognized in the condensed consolidated statement of operations is considered to be revenue from contracts with customers. For the three and nine months ended September 30, 2018, all revenues were associated with technology transfer licenses under fixed-fee arrangements.

Note 14—Related Party Transactions

Between September 2017 and June 2018, we sold and issued to 26 accredited investors 2017 Senior Notes, 2018 Senior Notes and June 2018 Senior Notes in an aggregate principal amount of approximately $2.8 million, five-year warrants to purchase an aggregate of 977,773 shares of our common stock at an exercise price of $1.50 per share and five-year warrants to purchase an aggregate of 878,889 shares of our common stock at an exercise price of $0.30 per share, with aggregate net proceeds to us of approximately $2.5 million of cash and conversion of $0.1 million of accrued liabilities. The following officers and directors participated in such transactions, in which they purchased the number of securities listed adjacent to their name.

Name	Position with Company	Principal Amount of Notes ($)	Number of Shares Underlying Warrants (#)	Aggregate Purchase Price ($)
Domonic J. Carney	Chief Financial Officer	87,222(1)	34,888	78,500
Mark Owen	Vice President, Business Development	34,722	13,888	31,250
Douglas Hamrin	Vice President, Engineering	25,278	10,111	22,750
Michael Hammons	Director	33,334	57,778(2)	30,000

(1) Includes 2017 Senior Notes in the principal amounts of $27,778 and $8,333 purchased in the name of Charles Schwab & Co Inc. FBO Domonic Carney IRA in September and December 2017, respectively, over which Mr. Carney has investment control and which securities he may be deemed to beneficially owned.

(2) Includes warrants to purchase 2,222 shares of common stock at an exercise price of $1.50 issued in January 2018 and warrants to purchase 55,556 shares of common stock at an exercise price of $0.30 per share issued in June 2018.

Note 15—Commitments and Contingencies

We may become a party to litigation in the normal course of business. We accrue for open claims based on our historical experience and available insurance coverage. In the opinion of management, there are no legal matters involving us that would have a material adverse effect upon our financial condition, results of operations or cash flows.

Lease

We lease our office facility, research and development facility and equipment under operating leases, which for the most part, are renewable. The leases also provide that we pay insurance and taxes. Our primary operating lease expired on December 31, 2016 and we extended the lease for a three-month period ended March 31, 2017 at a reduced interim rate. We signed a new lease in February 2017 for a separate facility and moved into our new headquarters facilities in April 2017.

Through March 31, 2017, our headquarters was located at 9400 Toledo Way, Irvine, California 92618. The property consisted of a mixed use commercial office, production, and warehouse facility of 32,649 square feet and expired December 31, 2016. We extended the lease at a reduced rate until March 31, 2017. The monthly rent was $15,000 per month for the three months ended March 31, 2017. As of April 1, 2017, our headquarters are located at 8965 Research Drive, Irvine, California 92618 and consists of a mixed use commercial office of 4,960 square feet. From January through March 2017, our monthly rent was $15,000 for the Toledo Way property holdover and, from April 1, 2017, our monthly rent is $10,168 per month, with annual escalations on April 1, 2018 to $10,473 per month and on April 1, 2019 to $10,787 per month for the Research Drive property. The Toledo Way lease terminated on April 1, 2017 and the Research Drive property lease terminated in October 2018. Our rent expense under these leases was $37,000 and $104,000 for the three and nine months ended September 30, 2018 and 2017, respectively.

Standby Letter of Credit

Pursuant to the terms of the CLA, the Company was required to provide a backstop security of $2.1 million to secure performance of certain obligations under the CLA (the "Backstop Security"). Effective November 2, 2015, the Company executed that certain Backstop Security Support Agreement (the "Support Agreement"), pursuant to which an investor agreed to provide the Company with financial and other assistance (including the provision of sufficient and adequate collateral) as necessary in order for the Company to obtain a $2.1 million letter of credit acceptable to Dresser-Rand as the Backstop Security and with an expiration date of September 30, 2017 ("Letter of Credit"). If the investor was required to make any payments on the Letter of Credit, subject to the terms of the Intercreditor Agreement (as defined below), the Company would have been required to reimburse the investor the full amount of any such payment. Such payment obligation was secured by a pledge of certain collateral of the Company pursuant to a Security Agreement dated November 2, 2015 ("Security Agreement"), and the security interest in favor of and the payment obligations to the investor were subject to the terms of that certain Subordination and Intercreditor Agreement executed concurrently with the Support Agreement and Security Agreement (the "Intercreditor Agreement") by and among the investor, the Company and the collateral agent pursuant to the Senior Notes.

The term of the Company's obligations under the Support Agreement (the "Term") commenced on November 2, 2015, the issuance date of the Letter of Credit, and was scheduled to terminate on the earliest of: (a) replacement of the Letter of Credit with an alternative Backstop Security in favor of Dresser-Rand, (b) Dresser-Rand eliminating the Backstop Security requirement under the CLA, or (c) the last day of the twenty-fourth calendar month following the commencement of the Term. In consideration of the investor's support commitment, the Company paid the investor a one-time fee equal to 4% of the amount of the Letter of Credit and was obligated to pay a monthly fee equal to 1% of the amount of the Letter of Credit for the first twelve months with an additional one-time fee equal to 4% of the amount of the Letter of Credit at the one year anniversary, and a monthly fee equal to 2% for an additional twelve months.

Concurrent with the execution of the amendment to the CMLA in April 2017, we and Dresser-Rand agreed to modify the requirements for our existing backstop security. As modified, we were required to maintain a $500,000 backstop security, reduced from $2.1 million, the monthly fee reduced to 1% of the amount of the amended Letter or Credit and the backstop security was extended from June 2017 to March 31, 2018. The Letter of Credit and the related backstop security were cancelled on April 10, 2018, with an effective date of March 31, 2018, with no claims having been made by Dresser-Rand thereunder.

Note 16—Subsequent Events

None.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Unless otherwise indicated, the following discussion and analysis of our financial condition is as of September 30, 2018 Our results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and notes thereto included elsewhere in this quarterly report on Form 10-Q and the audited consolidated financial statements and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2017.

Forward-Looking Statements

Forward-looking statements contained in this quarterly report on Form 10-Q are made under the Safe Harbor Provision of the Private Securities Litigation Reform Act of 1995. These forward-looking statements involve risks, uncertainties, assumptions, and other factors, which, if they do not materialize or prove correct, could cause our results to differ materially from historical results, or those expressed or implied by such forward-looking statements. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including statements containing the words "can," "may," "scheduled," "planned," "expects," "believes," "strategy," "opportunity," "anticipates," and similar words. These statements may include, among others, plans, strategies, and objectives of management for future operations; any statements regarding proposed new products, services, or developments; any statements regarding future economic conditions or performance; statements of belief; and any statements of assumptions underlying any of the foregoing. The information contained in this quarterly report on Form 10-Q is as of the date of this report. Except as otherwise expressly referenced herein, we assume no obligation to update forward-looking statements.

Overview

Our proprietary and patented Power Oxidation technology is designed to create greater industrial efficiencies by providing the opportunity to use sub-premium organic gases and compounds as a fuel source; thereby decreasing both industrial operating costs and significantly reducing environmentally harmful gaseous emissions. Either as a standalone fuel source or as a supplement to a premium fuel source, our Power Oxidizers utilize and eliminate low-quality organic waste compounds, including organic gases such as methane as well as volatile organic compounds (VOCs) such as solvents or paint thinners. We design, develop, license, manufacture and market our Power Oxidizers, which, when bundled with an electricity generating turbine in the 250 kilowatt, or kW, and 2 megawatt, or MW, sizes, are called Powerstations. We currently partner and are pursuing partnerships with large established manufacturers to integrate our Power Oxidizer with their gas turbines, with the goal to open substantial new opportunities for our partners to market these modified gas turbines to industries for which traditional power generation technologies previously were not technically feasible. We currently manufacture our Powerstations in the 250 kW size and manufactured the Power Oxidizer for the 2 MW size for the initial two units sold. Going forward, pursuant to the CMLA (as defined below), our 2 MW partner, Dresser-Rand a.s., a subsidiary of Dresser-Rand Group Inc., a Siemens company, or Dresser-Rand, will manufacture the 2 MW Power Oxidizers under a manufacturing license and will pay us a non-refundable license fee for each unit manufactured by Dresser-Rand.

Historically, basic industries such as Petroleum, Plastics, Steel and Paper have consumed electricity in their manufacturing processes and created heat for their manufacturing processes through the burning of fossil fuels in a combustion chamber. Nearly all such combustion chambers use high quality premium fuels and burn those fuels at high temperatures, while low-quality waste gases and VOCs were typically destroyed or vented into the atmosphere. Our technology utilizes these waste gases by modifying turbines with our gradual oxidation vessel. Inside this vessel, gases are injected and diffused to facilitate an oxidation reaction under optimized pressure and temperature conditions. This reaction occurs as a sustainable exothermic reaction which converts hydrocarbon gases or VOCs into heat and at sufficient temperature and residence time to also destroy other contaminants and thereby return a nearly contaminant-free source of heat energy. This heat then powers additional third-party equipment such as a turbine in a combined heat and power application to create electricity and with sufficient residual heat to operate industrial heat equipment such as boilers, ovens, or dryers. This technology unlocks a new, global source of clean power generation (electricity, steam and/or heat energy) while reducing harmful emissions. Our Power Oxidizers can utilize unrefined methane gas from landfills and anaerobic digesters, which provide us with a lower fuel cost than existing and standard Combined Heat and Power, or CHP, or co-generation equipment. Our goal is to enable industrial process facilities to generate clean energy from their existing waste gases as a full or partial fuel source, thus reducing the amount of energy they purchase from their regional utilities, and simultaneously reducing their pollution profile, including costs of compliance with local, state, and federal air quality regulations, by avoiding or reducing their reliance on the chemicals, catalysts and complex permitting required by existing pollution abatement systems.

Our Products and Value Proposition

We have developed a 250 kW Power Oxidizer that we integrate with a 250 kW gas turbine to produce 250 kW Powerstations. We have EC250 Powerstations currently installed at a landfill site in the Netherlands and at the Irvine campus of the University of California, Irvine, and a third Powerstation currently in the production phase planned for installation at a landfill in southern California. We have also designed, built, and deployed a Power Oxidizer of a significantly larger size, capable of generating sufficient heat and airflow to power a 2 MW KG2 gas turbine produced by Dresser-Rand. Together, the Power Oxidizer and KG2 turbine comprise a 2 MW KG2/PO unit. The initial unit was constructed in the first quarter of 2016 and was used in field tests during 2016 at a third party location in Southern California. We have sold two 2 MW KG2/PO units to Dresser-Rand, each of which was delivered to the Stockton, California biorefinery site owned by Pacific Ethanol in October 2016. In December 2016, we combined two of our 2 MW Power Oxidizers with KG2 turbines and installed the resulting two KG2/PO units. Final commissioning has been delayed due to project changes outside of the scope of our deliverables under the larger project installation. The units became operational in January 2018 and we anticipate full project handoff in the fourth quarter of 2018. We believe this scaled-up version of our Power Oxidizer, once combined with the KG2 turbine, results in a Powerstation product that is better aligned with the scale of emissions (and energy requirements) observed at the industrial facilities that we believe stand to benefit most from this technology. As with the 250 kW Powerstation, the larger 2 MW Powerstations are designed to provide an alternative to typical combustion-based power generation and enable industries to utilize their own waste gases to generate power.

We expect to integrate our Power Oxidizer technology into additional sized gas turbines as well as other "downstream" applications that can use the heat generated by our Power Oxidizers to power other industrial applications. We believe other waste gas-to-heat opportunities, powered by an ultra-low pollution Power Oxidizer, include: (i) the generation of steam from coupling a Power Oxidizer with a traditional steam boiler, (ii) use in industrial grade dryers for kilns or industrial drying customer requirements, and (iii) use in industrial chiller units for customers requiring cold air or water in their processes. We further expect to integrate our Power Oxidizer technology into "upstream" equipment such as anaerobic digesters and rotary concentrators which will serve to expand our potential fuel sources from sub-premium fuels such as volatile organic compounds (VOCs) and unrefined hydrocarbon gases. These additional fuel sources are expected to reduce the annual fuel-related operating costs of projects that incorporate our Power Oxidizers and become a significant competitive advantage.

We believe our Power Oxidizer solutions provide an enhanced value proposition over the value proposition provided by standard CHP solutions. Standard CHP solutions typically provide cost savings to industrial customers by using a common, lower cost heat source to both generate electricity and to provide heat to be used in industrial processes such as for steam, drying, ovens, or chiller units for air conditioning or cold storage.

We believe our Power Oxidizers provide a superior return to standard CHP solutions due to our ability to oxidize low energy content gases at very low pollution output. As such, our Power Oxidizers are designed to serve as an opportunity for our industrial customers to reduce their fuel costs with an added benefit of serving as a built-in pollution abatement solution.

Utilizing Power Oxidizers to provide heat for a CHP system results in a significantly lower fuel cost per generated kilowatt hour since Power Oxidizers can operate using any one or a combination of premium and refined natural gas, a wide variety of lower quality, low hydrocarbon gases, traditionally considered to be "waste" gases, as well as certain Volatile Organic Compounds, or VOCs, such as paint solvents. These gases and compounds are typically seen as a waste by-product of industrial processes, which often represent a source of pollution and, in turn, require expensive waste abatement equipment and significant recurring operating costs.

We also believe our Power Oxidizers provide a superior air pollution waste abatement solution for industrial customers. Typically, industrial customers require electricity and steam and generate industrial gases as a by-product of their facility operations. Prior to the introduction of our Powerstations, these customers would purchase or produce energy using a traditional gas turbine or gas reciprocating engine, which both use a combustion chamber to ignite natural gas and generate air pollution in the form of carbon dioxide, carbon monoxide and nitrogen oxides. The traditional gas turbine (or traditional engine) and by-product gases generally require pollution control equipment and recurring costs in order to comply with existing pollution standards, which vary by geography. Since both the natural gas fuel and the industrial by-product gases are oxidized in our Power Oxidizers over a much longer residence time than the comparable times of traditional combustion processes, the Power Oxidizer reduces both the gas fuels and by-products to levels below substantially all of the existing and proposed air quality emission standards in most areas of the world.

Dresser-Rand 2 MW Integration

On November 14, 2014, we entered into a Commercial License Agreement, or, as amended, the CLA, with Dresser-Rand through our wholly-owned subsidiary, Ener-Core Power, Inc., which granted Dresser-Rand the right to market and sell the Dresser-Rand KG2-3GEF 2 MW gas turbine coupled with our Power Oxidizer, as a Combined PowerStation System, and the exclusive right to commercialize our Power Oxidizer within the 1–4 MW range of power capacity, bundled with the Dresser-Rand KG2 gas-turbine product line. Between November 14, 2014 and December 31, 2016, we integrated the equipment and conducted field tests on the initial Combined System, which consists of a Dresser-Rand KG2-3GEF 2 MW gas turbine coupled with our Power Oxidizer, located in Corona, California. By April 2017, with the execution of the amendment of the CMLA, as described below, we had passed all required field tests on the initial Combined System and were required to conduct one additional field test on one of the two production systems located at the Stockton, California biorefinery site owned by Pacific Ethanol, Inc., or Pacific Ethanol, which we sold to Dresser-Rand and delivered to the installation site in Stockton in October 2016. In December 2016, we combined the two 2 MW Power Oxidizers with two KG2 turbines and installed the resulting two Combined Systems. In April 2017, we conducted the tests on one of the Combined Systems in Stockton and, in May 2017, provided the test results to Dresser-Rand for its review. The two Combined Systems made operational in January 2018 but were unable to be fully commissioned for reasons unrelated to the Power Oxidizer components. Full commissioning and handoff of the two Combined Systems is underway and is expected in the fourth quarter of 2018.

Dresser-Rand Commercial and Manufacturing Agreement

On June 29, 2016, we entered into a Commercial and Manufacturing License Agreement (the "CMLA") with Dresser-Rand, through our wholly-owned subsidiary, Ener-Core Power, Inc. In April 2017, we amended the terms of the CMLA to make the CMLA effective as of January 1, 2017, at which time it superseded and replaced the CLA.

Under the CMLA, as amended, Dresser-Rand has a worldwide license to manufacture, market, commercialize and sell the Power Oxidizer as part of the Combined System within the 1 MW to 4 MW range of power capacity (the "License"). Initially, the License will be exclusive, even as to us, and will remain exclusive for so long as Dresser-Rand sells a minimum number of units of the Combined System in each annual sales threshold (the "Sales Threshold") over a predetermined Sales Threshold time period, subject to certain conditions and exceptions. The initial Sales Threshold began on July 15, 2017 and will be fifteen months long. Each subsequent Sales Threshold will be one year in length thereafter. If Dresser-Rand does not meet either the initial or any subsequent Sales Threshold, and the Sales Threshold is not otherwise waived, Dresser-Rand may maintain exclusivity of the License by making a true-up payment to us for each unit that is in deficit of the Sales Threshold, or a True-Up Payment; *provided, however*, that Dresser-Rand may not maintain an exclusive License by making a True-Up Payment for more than two consecutive Sales Threshold periods. In the event Dresser-Rand does not meet the Sales Threshold, does not qualify for a waiver and elects not to make the True-Up Payment, the License will convert to a non-exclusive License.

Upon a sale by Dresser-Rand of a Combined System unit to a customer, before any discounts, the CMLA requires Dresser-Rand to make a license fee payment to us equal to a percentage of the sales price of the Combined System purchased, in accordance with a predetermined fee schedule that is anticipated to result in a payment of between $370,000 and $650,000 per Combined System unit sold (the "License Fee"). Payment terms to us from Dresser-Rand will be 50% of each License Fee within 30 days of order and 50% upon the earlier of the Combined System commissioning or twelve months after the order date.

In April 2017, we executed an amendment to the CMLA with Dresser-Rand, pursuant to which Dresser-Rand paid us $1.2 million in cash in April 2017, which represents advance payments on a portion of the total license fees for KG2/PO units representing less than the required minimum number of licenses which would otherwise be required to maintain their exclusivity under the CMLA. In exchange for this payment, we have agreed to provide a total credit of $1,760,000 against a portion of future license payments associated for these KG2/PO units, consisting of a payment credit of $1,200,000 and an additional discount of $560,000. In July 2017, we executed an additional amendment for additional payments of up to $250,000 for a combined payment credit of $2.0 million. To date, we have billed and collected the entire $1,450,000 relating to the April 2017 and July 2017 amendments.

Dresser-Rand may also request that we undertake design and development work on modifications to the Combined Systems, each referred to as a Bespoke Development. We and Dresser-Rand will negotiate any fees resulting from any such Bespoke Development on a case-by-case basis. Further, any obligation by us to undertake such Bespoke Development will be conditioned upon the execution of mutually agreed-upon documentation.

As long as the exclusive License remains in effect, we will provide certain ongoing sales and marketing support services, at no additional cost to Dresser-Rand, subject to certain agreed restrictions. Any additional sales and marketing services agreed upon by us and Dresser-Rand will be compensated at a mutually agreed upon rate.

If we and Dresser-Rand so elect, we may manufacture a certain number of Power Oxidizers as part of a certain number of Combined System projects during a transition period (the "Transition Phase") beginning after execution of the CMLA and prior to the period in which Dresser-Rand manufactures its first three Power Oxidizers as part of at least two individual Combined System projects (the "Initial Manufacturing Phase"), as mutually agreed by the parties. So long as the License remains exclusive during the Transition Phase, if any, and the Initial Manufacturing Phase, we will provide a mutually agreed upon number of hours of engineering support services. After the conclusion of the Initial Manufacturing Phase, we will, for so long as the License remains exclusive, continue providing up to an agreed upon number of hours of such support services on an annual basis at no additional cost to Dresser-Rand, subject to certain conditions. Any additional engineering support services agreed upon by us and Dresser-Rand will be compensated at an hourly rate, to be upwardly adjusted annually. During the Transition Phase, we must also develop the spare parts list pertaining to the scope of supply to allow Dresser-Rand to offer service agreements for the Combined System.

Under the CLA, we were required to maintain a backstop security, or Backstop Security, in favor of Dresser-Rand in support of all products manufactured, supplied or otherwise provided by us during the period beginning on the execution date of the CLA (the "Execution Date") and continuing through the expiration of the warranty period for the Combined System units sold to customers as of the Execution Date. Concurrent with the execution of the amendment to the CMLA in April 2017, we and Dresser-Rand modified the Backstop Security requirement to reduce the initial Backstop Security and to not require future backstop securities for future sales. In April 2017, we reduced our existing Backstop Security from $2.1 million to $500,000, and the existing Backstop Security termination date was extended from June 2017 to March 31, 2018. The letter of credit and the related Backstop Security were cancelled on April 10, 2018, with an effective date of March 31, 2018, with no claims having been made by Dresser-Rand thereunder.

Dresser-Rand must also: (i) develop the controls strategy for the Dresser-Rand gas turbine control system and integrate it with the Power Oxidizer control system; (ii) with support from us, manufacture and commercialize the Combined System following the Transition Phase; (iii) with support from us, develop and prioritize sales opportunities for the Combined System; (iv) assume the sales lead role with respect to each customer; and (v) take commercial lead in developing sales to customers. In addition, Dresser-Rand will be primarily responsible for overall warranty and other commercial conditions to Combined System customers, as well as sole project and service provider and interface with customers. Dresser-Rand will also be responsible for warranty, service and after-sales technical assistance for all portions of Combined Systems that comprise Dresser-Rand products. We, however, will be responsible for warranty and service for all products manufactured or otherwise provided by us prior to or during the Transition Phase.

The CMLA prohibits us from, without the prior written consent of Dresser-Rand, permitting the creation of any encumbrance, lien or pledge of our intellectual property which would result in any modification to, revocation of, impairment of or other adverse effect on Dresser-Rand's rights with respect to the exclusive License. In addition, all intellectual property rights that are owned by either us or Dresser-Rand as of the Execution Date will remain the sole property of such party, subject to the licenses described in the CMLA. The CMLA also contains provisions that govern the treatment of process and technology developments and any joint inventions that (i) relate to the subject matter of the CMLA and (ii) occur after the Execution Date and during the term thereof.

The CMLA also contains certain restrictions on publicity and obligates Dresser-Rand to use its commercially reasonable efforts to include our name and logo and otherwise promote our brand and Power Oxidizers in a mutually agreed-upon manner. We and Dresser-Rand have also mutually agreed to withhold disclosure of certain commercial and technologically sensitive terms of the CMLA including technical specifications, License Fee percentages, and the Sales Threshold minimum annual quantities to maintain exclusivity.

Commercial Sales Efforts

We are entering the CHP market, which is highly competitive and historically conservative in its acceptance of new technologies. To date, we have sold and delivered one 250 kW commercial Powerstation unit to the Netherlands and have sold one additional 250 kW Powerstation unit to a landfill site in Southern California. We also sold two 2 MW Power Oxidizers to Dresser-Rand in October 2016, which were delivered to a Stockton, California biorefinery site owned by Pacific Ethanol and placed into commercial operation in January 2018. These three systems represent our $2.9 million order backlog as of November 19, 2018. To date, we have billed and collected $2.8 million of our existing backlog. To date, full commissioning has not occurred for the two Pacific Ethanol systems due to site specific items unrelated to our portion of the larger Pacific Ethanol project. The two systems have operated in excess of 1,000 hours to date.

Between March and September 2018, the site-specific items and issues with respect to the two Pacific Ethanol systems were substantially resolved. The units were recommissioned in October 2018 and are available for full operations as of November 15, 2018. Additional automation and controls testing is required before the units are considered to be fully automated commissioned and recognizable for revenues by us, which we currently expect to occur in late 2018 or early 2019.

In May 2016, we received a conditional purchase order for four 250 kW Powerstations, which are scheduled to be installed at the Toyon Canyon landfill site in Los Angeles, California in the middle of 2018. This order is valued at approximately $4.0 million and is subject to additional pre-sales engineering and permitting requirements, which had been delayed. During the quarter ended September 30, 2018, the project received approval for the electricity tariff/offtake rate, which we believe represents significant progress towards the commercialization of the project. We are actively working with the customer and expect to see progress on this order in the first quarter of 2019.

In April 2017, we executed an amendment to the CMLA with Dresser-Rand, pursuant to which Dresser-Rand paid us $1.2 million in April 2017 and a further $250,000 in July 2017. These payments represent an advance payment on a portion of future license fees for KG2/PO units to be sold under the CMLA. We have not, as yet, received a purchase order for any system subject to these license fee advances. As such, we do not consider the $1.45 million of advances to be backlog as of November 19, 2018.

Dresser-Rand Initial Commercial Activity

In January 2015, Pacific Ethanol announced the first sale of the new KG2-3GEF/PO unit, which placed a two unit order with Dresser-Rand. Pursuant to the terms of the CLA, we began working on the initial phase of these two systems immediately after the announcement of the order received by Dresser-Rand from Pacific Ethanol. In August 2015, we received a binding purchase order from Dresser-Rand for two KG2/PO Power Oxidizer units rated for 1.75 MW for a total purchase price of $2.1 million, subsequently changed to $2.0 million by mutual agreement. We received the entire $2.0 million purchase price in the fourth quarter of 2015 after we satisfied the Dresser-Rand performance security requirement in November 2015. In September 2016, we secured the release of the license fees payable from Dresser-Rand, which had previously been placed in an escrow account and which were contingent upon satisfaction of the “Full-Scale Acceptance Test,” or FSAT, a technical milestone under the CLA that included a multitude of tests using a full, working Combined System. We received $1.1 million in cash, representing the $1.6 million license fee net of $500,000 paid to Dresser-Rand for engineering services. We recognized $1.1 million of net license fees as revenues for the nine months ended September 30, 2018, effective on the date the two Pacific Ethanol units were placed into initial operation through grid synchronization, representing a successful technology integration milestone.

Other Commercial Efforts

In May 2015, we received an award for our second commercial EC250 Powerstation as part of a California Energy Commission award of $1.5 million to the University of California, Irvine’s Advanced Power & Energy Program. We received a formal purchase order of approximately $900,000 in the third quarter of 2015 and through September 30, 2018, we have billed and collected $815,000. We anticipate that delivery and commission of this Powerstation will occur in the first quarter of 2019.

During 2018, our commercial sales and marketing focus is to work with the domestic and international sales and marketing teams from Dresser-Rand to facilitate additional KG2/PO unit sales in order to drive Power Oxidizer sales and facilitate our technology adoption. While we expect to close multiple KG2/PO opportunities within the next twelve months, some of our potential orders for KG2/PO units require the initial system commissioning, which we expect to occur in the fourth quarter of 2018. In parallel, our existing internal sales team has continued to advance commercial opportunities and enter new industrial markets with our EC250 product. We have also expanded our understanding of our greater, integrated Powerstation solution and are working towards value-added partnership relationships with key providers of products which can use our ultra-low emissions heat.

Additionally, we are currently exploring projects that would entail construction of our own power installations using a Build-Own-Operate (BOO) model, which we forecast could provide unlevered internal rates of return in excess of 20%, depending upon a variety of factors, including the degree to which such projects are successful. While we expect to receive the bulk of our future revenues for the next several years from the CMLA with Dresser-Rand, we believe that the selected project opportunities may provide an additional revenue channel. We are evaluating our possible role in the development of certain California-based projects which would involve the integration of our technology with additional third-party equipment, to provide a recurring revenue stream from power sales and increase our cash flows from other sources that make use of our Power Oxidizer systems. We are exploring the possibility of financing any such projects from external sources. To the extent we engage in such projects, we do not expect them to be deployed prior to our fiscal year ending December 31, 2019. To the extent that we engage in such projects and they are successful, we expect them to increase our revenues and cash flows, increase our asset base, and accelerate the technological adoption and commercial acceptance of our Power Oxidizer technology. We may not, however, achieve positive results in any such projects and all projects under consideration are in the early planning stages.

In September 2018, we entered into a memorandum of understanding to sell the unit previously utilized for the FSAT. The customer provided us a cash advance of $350,000 during the three months ended September 30, 2018 pursuant to the memorandum of understanding. The memorandum of understanding calls for the good faith negotiation of a binding contract to purchase the FSAT unit at a mutually agreed upon price. The customer may demand repayment of the cash advance at any time prior to the execution of a binding contract, and we may refund the advance at any time at our discretion. As of November 19, 2018 we had not reached a binding contract agreement with the customer. We do not consider the cash received to be backlog at November 19, 2018.

Revenue, Order-to-Cash Cycle and Customer Order Cash Flows

Our order-to-cash cycle is lengthy and requires multiple steps to complete. As such, we utilize and evaluate certain metrics such as bookings, backlog, and billed backlog. The initial commercial phase involves our sales team identifying a suitable project and evaluating each site to determine whether our value proposition fits the potential customer's needs. We evaluate potential industrial sites based on the amount, density and quality of the waste gas produced, the impacts of air quality penalties and required pollution abatement, and the expected cost savings or sales value of on-site power production. We also evaluate with the potential customer whether there are other financial considerations that could further strengthen the economic payback to the potential customer (which could include revenue increases that may result from pollution abatement benefits or emission credits or tax avoidance). As part of this evaluation, we work with potential customers to produce financial models, which seek to capture and quantify all of the various benefits of the potential project to determine the overall economic payback to the potential customer. If the potential customer determines to proceed after this evaluation, we enter into an agreement with the customer, which typically includes purchase order arrangements.

Customer orders, which are defined as firm commitments to purchase with fixed and determinable prices and contracted delivery terms, are considered bookings and are included as backlog. From the date of booking until the projected shipping date, we follow the standard practices that are typically followed by other power equipment producers, which include payment terms that involve customer advance payments designed to mirror our cash inventory outlays for sourcing parts and materials necessary to assemble the power plants to achieve a neutral customer order cash flow until delivery. All customer advance payments are recorded as billings, are reported as billed backlog and are represented on our balance sheet as deferred revenue or customer advances. As the Power Oxidizer plant assets are built, the costs are capitalized as inventory.

Powerstations are shipped to the customer locations and assembled on site. We supervise the assembly and commissioning of the Powerstations, which can take several months to complete. Once commissioning of the fully installed Powerstation(s) is/(are) concluded and title passes to the customer, we issue the final billings and recognize revenues and costs of revenues by decrementing deferred revenues and inventory respectively.

We also charge customers for commissioning services, post-sale support, and post-warranty service and maintenance on our Power Oxidizer units. We provide a standard warranty, which typically ends between nine months and one year after commissioning.

We recognized $1.1 million of license fee revenues for the nine months ended September 30, 2018 from previously recorded deferred revenues. We evaluated the revenue recognition under the new applicable accounting guidance, Topic 606, and determined that the revenue recognition for the licensing fees was tied to the transfer of technology and the integration of the technology embedded in the Power Oxidizers with the Dresser-Rand KG2 units. Upon the commercial installation of the units, and since the units had in excess of 1,000 hours of commercial operation during the nine months ended September 30, 2018, the use of the technology was transferred, and the revenue cycle was completed.

Of our remaining deferred revenues:

- We have $2.0 million of deferred revenues for the Power Oxidizers sold to Dresser-Rand since the commissioning of these units was not completed as of September 30, 2018;

- We have $0.8 million of deferred revenues for the Powerstation sold to the California Energy Commission since the unit was not commissioned as of September 30, 2018; and

- We have the $1.5 million of deferred license fees paid by Dresser-Rand since the underlying units associated with those license fees were not sold or delivered by Dresser-Rand.

- We have received $0.4 million of deferred revenues from a cash advance on the sale of the FSAT unit under a memorandum of understanding. The memorandum of understanding is non-binding and the advance may be refunded to the customer upon demand or at any time at our option if we and the customer do not enter into a binding contract for the sale of the FSAT unit.

Management Change

On December 17, 2017, we and Alain Castro, our former Chief Executive Officer, entered into a Separation Agreement pursuant to which we and Mr. Castro mutually agreed to terminate Mr. Castro's employment, as well as his position as our Chief Executive Officer, effective as of a date no later than May 31, 2018. Beginning in January 2018, our Board of Directors began an executive search for Mr. Castro's replacement. On May 31, 2018, Mr. Castro resigned as a director and our Chief Executive Officer. Effective on June 1, 2018, our Board of Directors named our Chief Financial Officer as our Interim President and Principal Executive Officer until we identify a replacement for Mr. Castro.

Operating Losses

For the nine months ended September 30, 2018, we recognized $1,100,000 of license revenue associated with the successful technology transfer, as reduced by $2,819,000 of operating expenses, for operating loss of $1,719,000. This compares to an operating loss of $4,320,000 for the nine months ended September 30, 2017 on no revenues. Notwithstanding the foregoing, the license revenues recognized for the technology transfer to Dresser-Rand are non-recurring in nature, and we anticipate that future operating income or losses will depend on sales-based royalties which have not, as yet, been realized.

Operating Expense Reduction

Beginning in the second quarter of 2016, we identified and implemented cost reductions, primarily the reduction of employee and consulting headcount and professional services, and we implemented additional cost reductions later in 2016 and into 2017. During 2017, we reduced our headcount downsized our office and manufacturing facilities and eliminated additional consultants. Our goal beyond 2017 was to bring our "Non-GAAP" cash-basis operating expenses (consisting of GAAP basis operating expenses adjusted for capitalized recurring expenses and excluding stock compensation and depreciation) to below $1.0 million per quarter on a recurring basis and to receive payments from customers and licensors which will offset, in part, our research and development spending and further reduce our cash burn.

For the three months ended September 30, 2018, the following table reconciles our operating expenses to this target:

	Three Months Ended September 30, 2018 (unaudited)
Operating Expenses	$ 826,000
Less:	
Stock-based compensation	(86,000)
Depreciation and amortization	(80,000)
Adjusted "Non-GAAP" cash basis operating expenses	$ 660,000

During the quarter ended September 30, 2018 we did not allocate any recurring operating expenses to inventory.

Reverse Merger

Prior to the reverse merger discussed below, pursuant to a contribution agreement dated November 12, 2012 by and among FlexEnergy, Inc., FlexEnergy Energy Systems, Inc., and Ener-Core Power, Inc., Ener-Core Power, Inc. (formerly Flex Power Generation, Inc.) was spun-off from FlexEnergy, Inc. as a separate corporation. As part of that transaction, Ener-Core Power, Inc. received all of the assets (including intellectual property) and liabilities pertaining to the Power Oxidizer business, which was the business carved out of FlexEnergy, Inc.

We were originally incorporated on April 29, 2010 in Nevada under the name Inventtech, Inc. On April 16, 2013, we entered into a merger agreement with Ener-Core Power, Inc. and a wholly-owned merger sub, pursuant to which the merger sub merged with and into Ener-Core Power, Inc., with Ener-Core Power, Inc. as the surviving entity. Prior to the merger, we were a public reporting "shell company," as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). On May 6, 2013, the pre-merger public shell company effected a 30-for-1 forward split of its common stock. All share amounts have been retroactively restated to reflect the effect of that stock split.

On July 1, 2013, we completed the reverse merger with Ener-Core Power, Inc., which remains our operating subsidiary. The merger was accounted for as a “reverse merger” and recapitalization. As part of the reverse merger, 120,520,000 shares of outstanding common stock of the pre-merger public shell company were cancelled (unadjusted for our July 8, 2015 reverse stock split). This cancellation has been retroactively accounted for as of the inception of Ener-Core Power, Inc. on November 12, 2012. Accordingly, Ener-Core Power, Inc. was deemed to be the accounting acquirer in the transaction and, consequently, the transaction was treated as a recapitalization of Ener-Core Power, Inc. Accordingly, the assets and liabilities and the historical operations that are reflected in the condensed consolidated financial statements are those of Ener-Core Power, Inc. and are recorded at the historical cost basis of Ener-Core Power, Inc. Our assets, liabilities and results of operations were de minimis at the time of the reverse merger.

Reverse Stock Split

The convertible senior secured promissory notes that we originally issued in April and May 2015 included three covenants, one of which was a requirement that we enter into a reverse stock split in order to increase our share price above $5.00 in anticipation of an underwritten public offering. Our board of directors approved a reverse stock split of our authorized, issued and outstanding shares of common stock, as well as our authorized shares of preferred stock, par value $0.0001 per share, of which no shares are issued and outstanding, at a ratio of 1-for-50, or our Reverse Stock Split. On July 8, 2015, the Reverse Stock Split became effective and the total number of shares of common stock held by each stockholder of the Company converted automatically into the number of shares of common stock equal to: (i) the number of issued and outstanding shares of common stock held by each such stockholder immediately prior to the Reverse Stock Split divided by (ii) 50. We issued one whole share of the post-Reverse Stock Split common stock to any stockholder who otherwise would have received a fractional share as a result of the Reverse Stock Split, determined at the beneficial owner level by share certificate. As a result, no fractional shares were issued in connection with the Reverse Stock Split and no cash or other consideration was paid in connection with any fractional shares that would otherwise have resulted from the Reverse Stock Split. All share and per share amounts have been adjusted to reflect the reverse stock split.

Also on the effective date, all of our options, warrants and other convertible securities outstanding immediately prior to the Reverse Stock Split were adjusted by dividing the number of shares of common stock into which the options, warrants and other convertible securities are exercisable or convertible by 50 and multiplying the exercise or conversion price thereof by 50, all in accordance with the terms of the plans, agreements or arrangements governing such options, warrants and other convertible securities and subject to rounding to the nearest whole share. Such proportional adjustments were also made to the number of shares and restricted stock units issued and issuable under our equity compensation plans. The condensed consolidated financial statements and notes to the condensed consolidated financial statements included elsewhere in this report give retroactive effect to the Reverse Stock Split for all periods presented.

Reincorporation

Effective as of September 3, 2015, we changed our state of incorporation from the State of Nevada to the State of Delaware (the “Reincorporation”) pursuant to a plan of conversion dated September 2, 2015, following approval by our stockholders of the Reincorporation at our 2015 Annual Meeting of Stockholders held on August 28, 2015. In connection with the Reincorporation, we filed articles of conversion with the State of Nevada and a certificate of conversion with the State of Delaware. Upon effectiveness of the Reincorporation, the rights of our stockholders became governed by the Delaware General Corporation Law, the certificate of incorporation filed in Delaware and newly adopted bylaws. As a Delaware corporation following the Reincorporation, which we refer to as Ener-Core Delaware, we are deemed to be the same continuing entity as the Nevada corporation prior to the Reincorporation, which we refer to as Ener-Core Nevada. As such, Ener-Core Delaware continues to possess all of the rights, privileges and powers of Ener-Core Nevada, all of the properties of Ener-Core Nevada and all of the debts, liabilities and obligations of Ener-Core Nevada, including all contractual obligations, and continues with the same name, business, assets, liabilities, headquarters, officers and directors as immediately prior to the Reincorporation. Upon effectiveness of the Reincorporation, all of the issued and outstanding shares of common stock of Ener-Core Nevada automatically converted into issued and outstanding shares of common stock of Ener-Core Delaware without any action on the part of our stockholders.

Financing Activities

On January 25, 2018, the Company and certain investors agreed to further amend and restate the securities purchase agreement under which such investors purchased unregistered convertible senior secured promissory notes in September, November and December 2017 in aggregate principal amount of approximately $1,555,556 (the “2017 Senior Notes”), pursuant to which the Company agreed to issue to certain accredited investors, pursuant to a series of joinder agreements, additional unregistered convertible senior secured promissory notes in aggregate principal amount of approximately $555,556 (the “2018 Senior Notes”) and five-year warrants to purchase an aggregate of 222,219 shares of common stock at an exercise price of $1.50 per share, with aggregate gross cash proceeds to the Company of $465,000 and cancellation of indebtedness of approximately $35,000 consisting primarily of unpaid and past due interest on the Company’s backstop security in lieu of cash payment. The first closing of the 2018 Senior Notes financing occurred on January 25, 2018.

On March 26, 2018, the Company and certain investors agreed to further amend and restate the securities purchase agreement under which such investors purchased the 2017 Senior Notes and 2018 Senior Notes, pursuant to which the Company agreed to issue to certain accredited investors, pursuant to a series of joinder agreements, additional 2018 Senior Notes in principal amount of approximately $333,335 and five-year warrants to purchase an aggregate of 133,332 shares of common stock at an exercise price of $1.50 per share, with aggregate cash gross proceeds to the Company of approximately $200,000 and cancellation of indebtedness of approximately $100,000, which consists of earned and unpaid salary due to certain employees of the Company who elected to receive payment in the form of 2018 Senior Notes in lieu of cash. The second closing of the 2018 Senior Notes financing occurred on March 26, 2018.

On June 5, 2018, we entered into a securities purchase agreement pursuant to which we issued convertible senior secured promissory notes in the aggregate principal amount of approximately $439,444 (the “June 2018 Senior Notes”) and related warrants to purchase an aggregate of 878,889 shares of common stock at an exercise price of $0.30 per share, with aggregate cash gross proceeds to us of approximately $394,500. The June 2018 Senior Notes are convertible into shares of common stock at a price of $0.25 per share. The June 2018 Senior Notes rank pari passu with the 2018 Senior Notes, 2017 Senior Notes, 2016 Senior Notes (as defined below) and 2015 Senior Notes (as defined below). The closing of the June 2018 Senior Notes financing occurred on June 5, 2018.

Concurrent with the June 5, 2018 third closing, all previously outstanding convertible senior secured promissory notes, or Senior Notes, and convertible unsecured notes, or Convertible Unsecured Notes had the conversion price reset from $2.50 per share to $0.25 per share.

Critical Accounting Policies and Estimates

Basis of Presentation

The accompanying condensed consolidated financial statements include our accounts and our wholly-owned subsidiary, Ener-Core Power, Inc. All significant intercompany transactions and accounts have been eliminated in consolidation. All monetary amounts are rounded to the nearest $000, except certain per share amounts.

The accompanying financial statements have been prepared in accordance with GAAP. In the opinion of management, all adjustments which are necessary for a fair statement of the results for interim periods have been included.

Segments

We operate in one segment. All of our operations are located domestically.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Significant items subject to such estimates and assumptions include but are not limited to: collectability of receivables; the valuation of certain assets, useful lives, judgement on potential asset impairment and carrying amounts of property and equipment, equity instruments and share-based compensation; provision for contract losses; valuation allowances for deferred income tax assets; and exposure to warranty and other contingent liabilities. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Foreign Currency Adjustments

At September 30, 2018 and December 31, 2017, we did not hold any foreign currency asset or liability amounts. Gains and losses resulting from foreign currency transactions are reported as other income in the period they occurred.

Concentrations of Credit Risk

Cash and Cash Equivalents

We maintain our non-interest bearing transactional cash accounts at financial institutions for which the Federal Deposit Insurance Corporation, or FDIC, provides insurance coverage of up to $250,000. For interest bearing cash accounts, from time to time, balances exceed the amount insured by the FDIC. We have not experienced any losses in such accounts and believe we are not exposed to any significant credit risk related to these deposits. At September 30, 2018, we had $0 in excess of the FDIC limit.

We consider all highly liquid investments available for current use with an initial maturity of three months or less and are not restricted to be cash equivalents. We invest our cash in short-term money market accounts.

Accounts Receivable

Our accounts receivable are typically from credit worthy customers or, for international customers are supported by guarantees or letters of credit. For those customers to whom we extend credit, we perform periodic evaluations of them and maintain allowances for potential credit losses as deemed necessary. We generally do not require collateral to secure accounts receivable. We have a policy of reserving for uncollectible accounts based on our best estimate of the amount of probable credit losses in existing accounts receivable. We periodically review our accounts receivable to determine whether an allowance is necessary based on an analysis of past due accounts and other factors that may indicate that the realization of an account may be in doubt. Account balances deemed to be uncollectible are charged to the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. As of September 30, 2018 and December 31, 2017, two customers accounted for 100% of our accounts receivable.

Accounts Payable

As of September 30, 2018 and December 31, 2017, five vendors collectively accounted for approximately 56% and 53% of our total accounts payable, respectively.

Inventory

Inventory, which consists of raw materials and work-in-progress, is stated at the lower of cost or net realizable value, with cost being determined by the average-cost method, which approximates the first-in, first-out method. At each balance sheet date, we evaluate our ending inventory for excess quantities and obsolescence. This evaluation primarily includes an analysis of forecasted demand in relation to the inventory on hand, among consideration of other factors. Based upon the evaluation, provisions are made to reduce excess or obsolete inventories to their estimated net realizable values. Once established, write-downs are considered permanent adjustments to the cost basis of the respective inventories. At September 30, 2018 and December 31, 2017, we did not have a reserve for slow-moving or obsolete inventory.

Property and Equipment

Property and equipment are stated at cost, and are being depreciated using the straight-line method over the estimated useful lives of the related assets, ranging from three to ten years. Maintenance and repairs that do not improve or extend the lives of the respective assets are expensed. At the time property and equipment are retired or otherwise disposed of, the cost and related accumulated depreciation accounts are relieved of the applicable amounts. Gains or losses from retirements or sales are reflected in the condensed consolidated statements of operations.

Deposits

Deposits primarily consist of amounts incurred or paid in advance of the receipt of fixed assets or are deposits for rent and insurance.

Accrued Warranties

Accrued warranties represent the estimated costs that will be incurred during the warranty period of our products. We make an estimate of expected costs that will be incurred by us during the warranty period and charge that expense to the condensed consolidated statement of operations at the date of sale. We also reevaluate the estimate at each balance sheet date and if the estimate is changed, the effect is reflected in the condensed consolidated statement of operations. We had no warranty accrual at December 31, 2017 or September 30, 2018. We expect that most terms for future warranties of our Powerstations and Oxidizers will be one to two years depending on the warranties provided and the products sold. Accrued warranties for expected expenditures within one year are classified as current liabilities and as non-current liabilities for expected expenditures for time periods beyond one year.

Intangible Assets

Our intangible assets represent intellectual property acquired during the reverse merger. We amortize our intangible assets with finite lives over their estimated useful lives.

Impairment of Long-Lived Assets

We account for our long-lived assets in accordance with the accounting standards which require that long-lived assets be reviewed for impairment whenever events or changes in circumstances indicate that the historical carrying value of an asset may no longer be appropriate. We consider the carrying value of assets may not be recoverable based upon our review of the following events or changes in circumstances: the asset's ability to continue to generate income from operations and positive cash flow in future periods; loss of legal ownership or title to the assets; significant changes in our strategic business objectives and utilization of the asset; or significant negative industry or economic trends. An impairment loss would be recognized when estimated future cash flows expected to result from the use of the asset are less than its carrying amount. As of September 30, 2018 and December 31, 2017, we do not believe there have been any impairments of our long-lived assets. There can be no assurance, however, that market conditions will not change or demand for our products will continue, which could result in impairment of long-lived assets in the future.

Fair Value of Financial Instruments

Our financial instruments consist primarily of cash and cash equivalents, accounts receivable, accounts payable, and capital lease liabilities. Fair value estimates discussed herein are based upon certain market assumptions and pertinent information available to management as of September 30, 2018 and December 31, 2017. The carrying amounts of short-term financial instruments are reasonable estimates of their fair values due to their short-term nature or proximity to market rates for similar items.

We determine the fair value of our financial instruments based on a three-level hierarchy established for fair value measurements under which these assets and liabilities must be grouped, based on significant levels of observable or unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect management's market assumptions. This hierarchy requires the use of observable market data when available. These two types of inputs have created the following fair-value hierarchy:

- Level 1: Valuations based on unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities. Currently, we classify our cash and cash equivalents as Level 1 financial instruments.

- Level 2: Valuations based on observable inputs (other than Level 1 prices), such as quoted prices for similar assets at the measurement date quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability. We do not currently have any accounts under Level 2.

- Level 3: Valuations based on inputs that require inputs that are both significant to the fair value measurement and unobservable and involve management judgment (i.e., supported by little or no market activity). Currently, we classify our warrants and conversion options accounted for as derivative liabilities as Level 3 financial instruments.

If the inputs used to measure fair value fall in different levels of the fair value hierarchy, a financial security's hierarchy level is based upon the lowest level of input that is significant to the fair value measurement.

Revenue Recognition

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2014-09 (Topic 606) "Revenue from Contracts with Customers," which supersedes the revenue recognition requirements in Topic 605 "Revenue Recognition" (Topic 605). Topic 606 requires entities to recognize revenue when control of the promised goods or services is transferred to customers. The amount of revenue recognized must reflect the consideration the entity expects to be entitled to receive in exchange for those goods or services. We adopted Topic 606 as of January 1, 2018 using the modified retrospective transition method. See Note 13 of the accompanying notes to our condensed consolidated financial statements for further details.

Research and Development Costs

Research and development costs are expensed as incurred. Research and development costs were $429,000 and $452,000 for the three months ended September 30, 2018 and 2017, respectively, and were $1,280,000 and $1,634,000 for the nine months ended September 30, 2018 and 2017, respectively.

Share-Based Compensation

We maintain an equity incentive plan and record expenses attributable to the awards granted under the equity incentive plan. We amortize share-based compensation from the date of grant on a weighted average basis over the requisite service (vesting) period for the entire award.

We account for equity instruments issued to consultants and vendors in exchange for goods and services at fair value. The measurement date for the fair value of the equity instruments issued is determined at the earlier of (i) the date at which a commitment for performance by the consultant or vendor is reached or (ii) the date at which the consultant's or vendor's performance is complete. In the case of equity instruments issued to consultants, the fair value of the equity instrument is recognized over the term of the consulting agreement.

In accordance with the accounting standards, an asset acquired in exchange for the issuance of fully vested, non-forfeitable equity instruments should not be presented or classified as an offset to equity on the grantor's balance sheet once the equity instrument is granted for accounting purposes. Accordingly, we record the fair value of the fully vested, non-forfeitable common stock issued for future consulting services as prepaid expense in our condensed consolidated balance sheets.

Income Taxes

We account for income taxes under FASB Accounting Standards Codification, or ASC, 740 "Income Taxes." Under the asset and liability method of FASB ASC 740, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under FASB ASC 740, the effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period the enactment occurs. A valuation allowance is provided for certain deferred tax assets if it is more likely than not that we will not realize tax assets through future operations.

Earnings (Loss) per Share

Basic loss per share is computed by dividing net loss attributable to common stockholders by the weighted average number of shares of common stock assumed to be outstanding during the period of computation. Diluted loss per share is computed similar to basic loss per share except that the denominator is increased to include the number of additional shares of common stock that would have been outstanding if the potential shares had been issued and if the additional shares of common stock were dilutive. Approximately 60.9 million and 9.8 million shares of common stock issuable upon full exercise of all options and warrants and all shares potentially issuable in the future under the terms of the convertible senior secured notes payable were excluded from the computation of diluted loss per share due to the anti-dilutive effect on the net loss per share at September 30, 2018 and 2017, respectively.

All share and per share amounts in the table below have been adjusted to reflect the 1-for-50 reverse split of our issued and outstanding common stock on July 8, 2015, retroactively.

	Three Months Ended September 30,		**Nine Months Ended September 30,**	
	2018	**2017**	**2018**	**2017**
Net loss	$ (4,368,000)	$ (2,435,000)	$ (8,407,000)	$ (8,896,000)
Weighted average number of common shares outstanding:				
Basic and diluted	4,167,806	4,063,660	4,121,045	4,026,726
Net loss attributable to common stockholders per share:				
Basic and diluted	$ (1.05)	$ (0.60)	$ (2.04)	$ (2.21)

Comprehensive Income (Loss)

We have no items of other comprehensive income (loss) in any period presented. Therefore, net loss as presented in our condensed consolidated statements of operations equals comprehensive loss.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-2, Leases (Topic 842). ASU 2016-2 affects any entity entering into a lease and changes the accounting for operating leases to require companies to record an operating lease liability and a corresponding right-of-use lease asset, with limited exceptions. ASU 2016-2 is effective for fiscal years beginning after December 15, 2018. Early adoption is allowed. We have not yet assessed the impact ASU 2016-2 will have upon adoption.

In July 2017, the FASB issued ASU 2017-11, Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception. The amendments in Part I of this ASU change the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features. The amendments in Part II of this ASU recharacterize the indefinite deferral of certain provisions of Topic 480 that now are presented as pending content in the Codification, to a scope exception. Those amendments do not have an accounting effect. Amendments in Part I of this ASU are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The amendments in Part II of the ASU do not require any transition guidance because those amendments do not have an accounting effect. Early adoption is permitted for all entities, including adoption in an interim period. If an entity early adopts the amendments in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period. We have not yet assessed the impact ASU 2017-11 will have upon adoption.

RESULTS OF OPERATIONS FOR THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2018, COMPARED TO THE THREE AND NINE MONTHS ENDED SEPTEMBER 30, 2017

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	**2017**	**2018**	**2017**
Revenues	$ —	$ —	$ 1,100,000	$ —
Cost of goods sold	—	—	—	—
Gross profit	—	—	1,100,000	—
Operating expenses:				
Selling, general, and administrative	397,000	650,000	1,539,000	2,686,000
Research and development	429,000	452,000	1,280,000	1,634,000
Total operating expenses	826,000	1,102,000	2,819,000	4,320,000
Operating loss	(826,000)	(1,102,000)	(1,719,000)	(4,320,000)
Other expenses:				
Interest expense	(38,000)	(77,000)	(174,000)	(417,000)
Amortization of debt discount	(3,493,000)	(1,256,000)	(6,503,000)	(3,969,000)
Loss on disposition of assets	—	—	—	(137,000)
Loss on debt extinguishment	—	—	—	(10,000)
Loss on modification of convertible debt	—	—	—	(43,000)
Loss on conversion of convertible debt	(11,000)	—	(11,000)	—
Total other expenses	(3,542,000)	(1,333,000)	(6,688,000)	(4,576,000)
Loss before provision for income taxes	(4,368,000)	(2,435,000)	(8,407,000)	(8,896,000)
Provision for income taxes	—	—	—	—
Net loss	$ (4,368,000)	$ (2,435,000)	$ (8,407,000)	$ (8,896,000)
Loss per share—basic and diluted	$ (1.05)	$ (0.60)	$ (2.04)	$ (2.21)
Weighted average common shares—basic and diluted	4,167,806	4,063,660	4,121,045	4,026,726

Revenue, Cost of Goods Sold and Gross Profit (Loss)

For the three months ended September 30, 2018, we recognized no revenues. For the nine months ended September 30, 2018, we recognized $1.1 million of license fee revenues. There were no revenues for the three or nine months ended September 30, 2017.

We recorded no direct costs associated with the license revenues recognized for the technology transfer to Dresser-Rand during the nine months ended September 30, 2018. Costs associated with the technology transfer were incurred prior to the nine months ended September 30, 2018 and consisted of engineering and development costs incurred in prior periods and expensed as incurred to research and development expenses.

Estimated costs to construct and commission the initial two Power Oxidizers sold to Dresser-Rand that exceed collected billings are recorded as a contract loss provision to cost of goods sold in prior reporting periods. No such loss provisions were recorded to cost of goods sold in either of the three months ended September 30, 2018 or 2017.

Operating Expenses

Total operating expenses decreased by $276,000, or 25.0%, to $826,000 for the three months ended September 30, 2018 from $1,102,000 for the same period in the prior year. The reduction is primarily due to the results of cost savings efforts from reduced headcount costs, lower facilities costs associated with our headquarters move, lower contractor and professional fees, and lower stock-based compensation expenses.

Total operating expenses decreased by $1,501,000, or 34.8%, to $2,819,000 for the nine months ended September 30, 2018 from $4,320,000 for the same period in the prior year. The reduction is primarily due to the results of cost savings efforts begun in April 2016 and continuing throughout 2018, primarily driven by lower employee headcount as well as reduced lower facilities costs associated with our headquarters move, lower contractor and professional fees, and lower stock-based compensation expenses.

Selling, General and Administrative Expenses

Selling, general and administrative expenses include officer compensation, salaries and benefits, stock-based compensation expense, consulting fees, legal expenses, intellectual property costs, accounting and auditing fees, investor relations costs, insurance, public company reporting costs and listing fees, and corporate overhead related costs. Total selling, general and administrative expenses for the three months ended September 30, 2018 decreased $253,000, or 38.9%, to $397,000 from $650,000 for the same period of the prior year. The decrease was primarily due to $147,000 in lower employee and officer salaries and stock-based compensation expenses, $80,000 less in legal and professional expenses, and a $26,000 reduction in travel and facilities expenses and certain other cost savings.

Total selling, general and administrative expenses for the nine months ended September 30, 2018 decreased $1,147,000, or 42.7%, to $1,539,000 from $2,686,000 for the same period of the prior year. The decrease was primarily due to reductions of $349,000 in salaries and benefits due to headcount reductions and officer resignations, $330,000 less in stock-based compensation expenses, $287,000 less in legal and professional services, $97,000 less in occupancy costs resulting from our facilities move in 2017, a reduction of $38,000 for travel-related costs, $45,000 less in non-recurring charges relating to financing costs and a reduction of $30,000 in other expenses.

Research and Development

Research and development costs include development expenses for the Power Oxidizer and integration expenses related to our Power Oxidizer products with other partners such as Dresser-Rand and include salaries and benefits, consultant fees, cost of supplies and materials for samples and prototypes, depreciation, as well as outside services costs. Research and development expense for the three months ended September 30, 2018 decreased $23,000, or 5.1%, to $429,000 from $452,000 for the same period of the prior year. The decrease is primarily due to decreased engineering headcount and stock-based compensation expense of $41,000, offset by a $15,000 increase in overhead.

Research and development expense for the nine months ended September 30, 2018 decreased $354,000, or 21.7%, to $1,280,000 from $1,634,000 for the same period of the prior year. The decrease is primarily due to a $124,000 decrease in employee compensation due to headcount reductions, $118,000 less in stock-based compensation expenses and a $74,000 decrease in rent and allocated overhead due to our move to a smaller headquarters facility, offset by $25,000 in contracted research and development expense, and $8,000 in patent-related legal expense.

Other Expenses:

Other expenses for the three and nine months ended September 30, 2018 consisted of primarily non-cash interest on the outstanding Senior Notes and cash interest on outstanding Convertible Unsecured Notes and for the Company's backstop security, which expired.

Other expenses for the three and nine months ended September 30, 2018 consisted primarily of amortization of discount and deferred financing costs on the $9.6 million convertible senior secured notes issued in April and May 2015, December 2016 and September 2017 (the "Senior Notes"), cash and non-cash interest on the convertible unsecured notes issued in September 2017 (the "Convertible Unsecured Notes"), cash payments on the Backstop Security collateral, and losses on conversions of Senior Notes principal resulting from acceleration of unamortized note discount related to the converted Senior Notes.

Net Loss

For the three months ended September 30, 2018, our net loss was approximately $4.4 million, primarily from selling, general and administrative expenses of $0.4 million, research and development costs of $0.4 million and $3.6 million of other expenses consisting of interest expense, primarily non-cash interest expense resulting from the amortization of debt discount associated with the conversion feature of our Senior Notes and Convertible Unsecured Notes. For the three months ended September 30, 2017, our net loss was approximately $2.4 million, primarily from selling, general and administrative expenses of $0.6 million, research and development costs of $0.5 million, and $1.3 million of other expenses consisting primarily of interest expense, of which $1.2 million is non-cash interest.

For the nine months ended September 30, 2018, our net loss was approximately $8.4 million, primarily from selling, general and administrative expenses of $1.5 million, research and development costs of $1.3 million, and offset by $1.1 million of gross margin resulting from the recognition of $1.1 million of license revenue in January 2018 and $6.7 million of other expenses consisting primarily interest expense, of which $6.5 million is non-cash interest expense. For the nine months ended September 30, 2017, our net loss was approximately $8.9 million, primarily from selling, general and administrative expenses of $2.7 million, research and development costs of $1.6 million, and $4.6 million of other expenses consisting primarily of $4.4 million of interest expense, of which $4.0 million is non-cash interest expense and other expenses of $0.2 million including a non-recurring $0.1 million loss on disposition of assets related to our facilities move in March 2017.

Liquidity

The following table sets forth our cash flow information as follows:

	Nine Months Ended September 30,		
	2018	**2017**	**$ Change**
Operating activities	$ (1,249,000)	$ (1,674,000)	$ 425,000
Investing activities	—	67,000	67,000
Financing activities	$ 1,051,000	491,000	560,000

Cash Flows used in Operating Activities

Our cash used in operating activities was approximately $1.2 million and $1.7 million for the nine months ended September 30, 2018 and 2017, respectively. Cash used in operating activities for the nine months ended September 30, 2018 of $1.2 million resulted from a net loss of approximately $8.4 million, reduced by net non-cash charges of $7.0 million for stock-based compensation, non-cash interest expense due to amortization of debt discount and deferred financing charges, and depreciation, and a change of $0.2 million in working capital, primarily due to a $0.7 million decrease in deferred revenues, a $0.3 million increase in inventory and prepaid expenses, offset by a $1.0 million increase in accounts payable and accrued expenses.

Cash used in operating activities for the nine months ended September 30, 2017 resulted from a net loss of approximately $8.9 million, reduced by net non-cash charges of $5.4 million for stock-based compensation, non-cash interest expense due to amortization of debt discount and deferred financing charges, and depreciation, and a change of $1.8 million in working capital, primarily due to a $2.2 million increase in deferred revenue and accounts payable and a $0.1 million decrease in restricted cash and prepaid expenses, offset by a $0.4 million increase in accounts receivable and inventory.

Cash Flows from Investing Activities

We had no cash flows from investing activities for the nine months ended September 30, 2018. Cash provided by investing activities of $0.1 million for the nine months ended September 30, 2017 was attributable to miscellaneous equipment and inventory sold during our facilities move.

Cash Flows from Financing Activities

Cash provided by financing activities for the nine months ended September 30, 2018 consisted of $1,051,000 of cash proceeds from the issuance of additional Senior Notes, reduced by $9,000 for the repayment of capital leases. Cash provided by financing activities for the nine months ended September 30, 2017 of $491,000 consisted of cash proceeds from the issuance of additional Senior Notes, reduced by $9,000 for the repayment of existing capital leases for office equipment.

Capital Resources

Our principal capital requirements are to fund our working capital requirements, invest in research and development and capital equipment and fund the continued costs of public company compliance requirements. We have historically funded our operations through debt and equity financings.

From our inception, we have incurred losses from operations. For the nine months ended September 30, 2018, we had operating loss of $0.8 million and had a net loss of approximately $4.4 million. As of September 30, 2018, we had an accumulated deficit of approximately $60.7 million. For the nine months ended September 30, 2018, we used cash in operations of approximately $1.2 million, which raises substantial doubt about our ability to continue as a going concern.

We expect to continue to incur substantial additional operating losses from costs related to the continuation of product and technology marketing and administrative activities. Our cash on hand at September 30, 2018 was approximately $10,000.

Our sales cycle can exceed 24 months and while we expect to receive additional license fees from our customers and additional cash payments on Powerstation orders, we do not expect to generate sufficient revenue or customer deposits in the next twelve months to cover our operating costs. We anticipate that we will pursue raising additional debt or equity financing to fund new product development and execute on the commercialization of our product plans.

Until we achieve our product commercialization plans and are able to generate sales to realize the benefits of the strategy and sufficiently increase cash flow from operations, we will require additional capital to meet our working capital requirements, research and development, capital requirements and compliance requirements and will continue to pursue raising additional equity and/or debt financing.

Our principal sources of liquidity are cash and receivables. As of September 30, 2018, cash and cash equivalents were $10,000, or 0.2% of total assets, compared to $0.2 million, or 3.3% of total assets, at December 31, 2017. The decrease in cash and cash equivalents was primarily attributable to cash used in operating activities of $1.3 million offset by cash proceeds from Senior Notes of $1.1 million.

We have not yet achieved profitable operations and have yet to establish an ongoing source of revenue to cover operating costs and meet our ongoing obligations. Our cash needs for the next 12 months are projected to be in excess of $5 million, which includes the following:

- Employee, occupancy and related costs: $2.1 million
- Professional fees and business development costs: $0.6 million
- Research and development programs: $0.3 million
- Corporate filings: $0.5 million
- Working capital: $1.5 million

Off-Balance Sheet Arrangements

We have not entered into any other financial guarantees or other commitments to guarantee the payment obligations of any third parties. We have not entered into any derivative contracts that are indexed to our shares and classified as stockholders' equity that are not reflected in our financial statements. Furthermore, we do not have any retained or contingent interest in assets transferred to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. We do not have any variable interest in any unconsolidated entity that provides financing, liquidity, market risk or credit support to us or engages in leasing, hedging or research and development services with us.

Inflation

We believe that inflation has not had a material effect on our operations to date.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Pursuant to Item 305(e) of Regulation S-K, we are not required to provide the information required by this Item 3.

Item 4. Controls and Procedures.

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, and that such information is accumulated and communicated to our management, including our Principal Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As of September 30, 2018, the end of the quarterly period covered by this report, our management, under the supervision and with the participation of our Principal Executive Officer and Chief Financial Officer, has performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act.

Based on the evaluation, our Principal Executive Officer and Chief Financial Officer concluded that, as of September 30, 2018, our disclosure controls and procedures were ineffective at the reasonable assurance level. Such conclusion is due to the presence of material weaknesses in internal control over financial reporting. Management anticipates that our disclosure controls and procedures will remain ineffective until such material weaknesses are remediated.

Changes in Internal Control over Financial Reporting

Remediation of Material Weaknesses

To address our material weaknesses, management performed additional analyses and other procedures to ensure that the financial statements included herein fairly present, in all material respects, our financial position, results of operations and cash flows for the periods presented.

We are attempting to remediate the material weaknesses in our disclosure controls and procedures and internal controls over financial reporting identified above by refining our internal procedures (see below). During the nine months ended September 30, 2018, we initiated the following corrective actions, which management believes are reasonably likely to materially affect our financial reporting, as they are designed to remediate the material weaknesses as described above:

- We have begun the process of further documenting our internal control structure.
- We have begun an executive search for a new Chief Executive Officer.
- We are in the process of further enhancing the supervisory procedures to include additional levels of analysis and quality control reviews within the accounting and financial reporting functions.
- We are developing and implementing inventory control procedures.
- We are evaluating our information technology internal control designs and we are developing and implementing systems and upgrades to our information technology systems.

We do not expect to have fully remediated these material weaknesses until management has tested those internal controls and found them to have been remediated. We expect to complete this process during our annual testing for the fiscal year ending December 31, 2018.

Limitations on Controls

Management does not expect that our disclosure controls and procedures or internal control over financial reporting will prevent or detect all errors and fraud. Any control system, no matter how well designed and operated, is based upon certain assumptions and can provide only reasonable, not absolute, assurance that its objectives will be met. Further, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings.

We know of no material, existing or pending, legal proceedings against our Company, nor are we involved as a plaintiff in any material proceeding or pending litigation. There are no proceedings in which any of our directors, officers or affiliates, or any registered or beneficial stockholder, is an adverse party or has a material interest adverse to our interest.

Item 1A. Risk Factors.

As a smaller reporting company, we are not required to provide the information required by this Item 1A.

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

No sales that were not previously reported on a Current Report on Form 8-K.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits.

A list of exhibits is set forth on the Exhibit Index immediately following the signature page of this Quarterly Report on Form 10-Q, and is incorporated herein by reference.

SIGNATURES

Pursuant to the 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.

Date: November 20, 2018

ENER-CORE, INC.
(Registrant)

By: */s/ Domonic J. Carney*
Domonic J. Carney
Principal Executive Officer and
Chief Financial Officer

EXHIBIT INDEX

Exhibit Number	Description of Exhibit	Incorporated by Reference: Form	File No.	Filing Date	Exhibit	Filed Herewith
31.1	Certification of Principal Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1#	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.2#	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase					X
101.LAB	XBRL Taxonomy Extension Label Linkbase					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase					X

The information in Exhibits 32.1 and 32.2 shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall they be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act (including this report), unless the Registrant specifically incorporates the foregoing information into those documents by reference.

Exhibit 31.1

**CERTIFICATION PURSUANT TO
RULES 13A-14(A) AND 15D-14(A) OF THE
SECURITIES EXCHANGE ACT OF 1934**

I, Domonic J. Carney, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ener-Core, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 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(s) 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 20, 2018

By: */s/ Domonic J. Carney*
Domonic J. Carney
Principal Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULE 13a-14(a) OR RULE 15d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934

I, Domonic J. Carney, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ener-Core, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 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(s) 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 20, 2018

By: */s/ Domonic J. Carney*
Domonic J. Carney
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
RULE 13a-14(b) OR RULE 15d-14(b) OF THE
SECURITIES EXCHANGE ACT OF 1934
AND 18 U.S.C. SECTION 1350

In connection with the Quarterly Report of Ener-Core, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Domonic J. Carney, Principal Executive Officer of the Company, hereby certify as of the date hereof, solely for purposes of Title 18, Chapter 63, Section 1350 of the United States Code, that to the best of my knowledge:

(i) the Report fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 20, 2018

By: *<u>/s/ Domonic J. Carney</u>*
Name: Domonic J. Carney
Title: Principal Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by 18 U.S.C. Section 1350 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request. This certification will not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that Section. This certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Company specifically incorporates it by reference.

Exhibit 32.2

**CERTIFICATION PURSUANT TO
RULE 13a-14(b) OR RULE 15d-14(b) OF THE
SECURITIES EXCHANGE ACT OF 1934
AND 18 U.S.C. SECTION 1350**

In connection with the Quarterly Report of Ener-Core, Inc. (the “Company”) on Form 10-Q for the period ended September 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Domonic J. Carney, Chief Financial Officer of the Company, hereby certify as of the date hereof, solely for purposes of Title 18, Chapter 63, Section 1350 of the United States Code, that to the best of my knowledge:

(i) the Report fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 20, 2018

By: */s/ Domonic J. Carney*
Domonic J. Carney
Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by 18 U.S.C. Section 1350 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request. This certification will not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that Section. This certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Company specifically incorporates it by reference.