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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **January 18, 2019**

ENER-CORE, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction
of incorporation)

001-37642

(Commission File Number)

45-0525350

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

**30100 Town Center Dr, Suite O-209
Laguna Niguel, California 92677**

(Address of principal executive offices) (Zip Code)

(949) 732-4400

(Registrant's telephone number, including area code)

Not Applicable

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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.

Item 1.01 Entry into a Material Definitive Agreement.

January 2019 Financing

On January 18, 2019, Ener-Core, Inc. (the “Company”) entered into a securities purchase agreement (the “Purchase Agreement”), pursuant to which it issued to 4 accredited investors (each, an “Investor”) unregistered convertible senior secured promissory notes in principal amount of approximately \$966,667 (the “Convertible Senior Notes”) and five-year warrants (each, a “Warrant”) to purchase an aggregate of 1,933,334 shares of the Company’s common stock, par value \$0.0001 per share (“Common Stock”), at an exercise price of \$0.10 per share (the “Warrant Shares”), with aggregate gross proceeds to the Company of \$230,000 and forgiveness of certain indebtedness of \$640,000 (the “January 2019 Financing”). The closing of the January 2019 Financing occurred on January 18, 2019.

Purchase Agreement

Pursuant to the terms of the Purchase Agreement, the Company agreed to sell and issue the Convertible Senior Notes and Warrants (collectively, the “Securities”) to the Investors with each Convertible Senior Note to be issued at a 10% original issue discount and with associated Warrants to purchase 2,000 shares of Common Stock for each \$1,000 of principal amount of Convertible Senior Notes purchased by such Investor. The Purchase Agreement contains representations, warranties and covenants of the Investors and the Company that are typical for transactions of this type. The Company agreed to use the proceeds from the sale of the Securities for working capital and general corporate purposes.

Convertible Senior Notes

The Convertible Senior Notes will bear no ordinary interest, as the principal amount of the Convertible Senior Notes includes an original issue discount. Upon an Event of Default (as defined in the Convertible Senior Notes), however, the Convertible Senior Notes will bear interest at a rate of 10% per annum. The Convertible Senior Notes will mature on January 31, 2019; provided that, effective upon the issuance by the Company of Convertible Senior Notes for aggregate gross proceeds of at least \$2,000,000 pursuant to the Purchase Agreement, the maturity date of the Convertible Senior Notes shall be December 31, 2020. The Convertible Senior Notes will rank *pari passu* with the outstanding convertible senior secured promissory notes of the Company issued in April 2015, May 2015, December 2016, September 2017, November 2017, December 2017, January 2018, March 2018 and June 2018, and rank senior to the convertible unsecured promissory notes of the Company issued in September 2016 (the “Convertible Junior Notes”), as more fully set forth in the Subordination Agreement (as defined below), as amended to date. The Convertible Senior Notes will be convertible at the option of the holder into Common Stock at an exercise price of \$0.10 (as subject to adjustment therein) and will automatically convert into shares of Common Stock on the fifth trading day immediately following the issuance date of the Convertible Senior Notes on which (i) the Weighted Average Price (as defined in the Convertible Senior Notes) of the 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 Convertible Senior Notes) has occurred. In addition, the Convertible Senior Notes will be convertible, via approved exchange in lieu of cash consideration in connection with a subsequent issuance by the Company of equity securities for cash consideration (a “Next Equity Financing”), into the securities of the Company to be issued in such Next Equity Financing, provided the Lead Investor (as defined in the Convertible Senior Notes) elects to participate in such Next Equity Financing. The Convertible 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 to be determined by the holder prior to issuance, of the shares of Common Stock outstanding immediately after giving effect to such conversion.

Upon an Event of Default and delivery to the holder of the Convertible Senior Note of notice thereof, such holder may require the Company to redeem all or any portion of its Convertible Senior Note at a price equal to 115% of the Conversion Amount (as defined in the Convertible Senior Notes) being redeemed. Additionally, upon a Change of Control (as defined in the Convertible Senior Notes) and delivery to the holder of the Convertible Senior Note of notice thereof, such holder may also require the Company to redeem all or any portion of its Convertible Senior Note at a price equal to 115% of the Conversion Amount being redeemed.

At any time after the issuance date of the Convertible 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 Convertible Senior Notes must be at least \$500,000, or such lesser amount as is then outstanding. The portion of the Convertible 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 Convertible 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 Convertible Senior Notes) of the shares of 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 Convertible Senior Notes) in effect during such period.

The Convertible Senior Notes contain a provision that prevents the Company from entering into or becoming party to a Fundamental Transaction (as defined in the Convertible Senior Notes) unless the Company's successor entity assumes all of the Company's obligations under the Convertible Secured 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 Convertible Senior Notes.

The Convertible Senior Notes are further governed by a side letter agreement that provides that each holder of the Convertible Senior Notes may require the Company to apply its pro rata percentage of up to 25% of the Company's total monthly receipts of cash from one or more third party customers in connection with the delivery of product, installation of product, or servicing of product or as a result of technology transfer licensing or royalty-based licensing for sales of units under license to prepay all or a portion of the outstanding principal, interest and late charges under such holder's Convertible Senior Notes. Notwithstanding the foregoing, if the Company receives less than \$50,000 in cash that may be applied pursuant to the foregoing term of the side letter agreement, such monthly amount will not be distributable and will be aggregated with the following month's receipts for potential future distribution.

In connection with the execution of the Purchase Agreement and issuance of the Convertible Senior Notes, Ener-Core Power, Inc., the Company's wholly-owned subsidiary (the "Subsidiary"), entered into a Third Amendment to Guaranty, which amends that certain Guaranty, dated as of November 23, 2016, as amended to date, pursuant to which the Subsidiary has agreed to guarantee all of the obligations of the Company under the Purchase Agreement, the Convertible Senior Notes and the Transaction Documents.

Warrants

Each Warrant will be exercisable immediately in exchange for cash. In addition, unless all of the Warrant Shares that are subject to an exercise notice with respect to any Warrant are registered for resale pursuant to an effective registration statement and are issuable without any restrictive legend, such Warrant may also be exercised by way of a cashless exercise. The Warrants will also provide that the exercise price of each Warrant will be adjusted upon the occurrence of certain events such as stock dividends, stock splits and other similar events. The Warrants will include a blocker provision that prevents the Company from effecting any exercise 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 to be determined by the holder prior to issuance, of the shares of Common Stock outstanding immediately after giving effect to such exercise.

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

The Securities issued to the Investors and the underlying shares of Common Stock have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), or the securities laws of any state, and were offered and will be sold and issued in reliance on the exemption from registration under the Securities Act provided by Section 4(a)(2) of the Securities Act and/or Rule 506 of Regulation D promulgated thereunder ("Regulation D"). The shares of Common Stock issuable to Investors upon conversion of the Convertible Senior Notes and the shares of Common Stock issuable to Investors upon exercise of the Warrants were not registered under the Securities Act, or the securities laws of any state, and were offered in reliance on the exemption from registration under the Securities Act provided by Section 4(a)(2) of the Securities Act and/or Rule 506 of Regulation D and may be sold upon exercise pursuant to an available exemption, including Section 4(a)(2) and Section 3(a)(9) of the Securities Act. Each Investor was an accredited investor (as defined in Rule 501 of Regulation D under the Securities Act) at the time of the January 2019 Financing.

Fourth Amendment to Subordination and Intercreditor Agreement (September 2016)

On January 18, 2019, the Company entered into a Fourth Amendment to Subordination and Intercreditor Agreement (the “Fourth Amendment to Subordination Agreement”), which amends that certain Subordination and Intercreditor Agreement, dated as of September 1, 2016, as amended to date (the “Subordination Agreement”), to provide that the Convertible Senior Notes issued pursuant to the Purchase Agreement, the convertible senior notes (the “2015 Notes”) issued pursuant to that certain securities purchase agreement dated as of April 22, 2015 and that certain securities purchase agreement dated as of May 7, 2015, as amended and/or restated to date, the convertible senior notes (the “2016 Notes”) issued pursuant to that certain securities purchase agreement dated as of November 23, 2016, as amended to date, the convertible senior notes (the “June 2018 Notes”) issued pursuant to that certain securities purchase agreement dated as of June 5, 2018 and the convertible senior notes (the “Bridge Notes”) issued pursuant to that certain securities purchase agreement dated as of September 19, 2017, as amended and/or restated to date, will rank *pari passu* as “Senior Note Debt” (as defined in the Subordination Agreement).

Fifth Amendment to Pledge and Security Agreement

On January 18, 2019, the Company entered into a Fifth Amendment to Pledge and Security Agreement (the “Security Amendment Agreement”), which amends that certain Pledge and Security Agreement dated as of April 23, 2015, as amended to date (the “Security Agreement”), to provide for the grant by the Company and the Subsidiary (collectively, the “Grantors”) to the Investors of a security interest in all personal property (subject to certain exceptions specified therein) of the Grantors to secure all of the Company’s obligations to such Investors, such that the Investors and the holders of the 2015 Notes, 2016 Notes, June 2018 Notes and Bridge Notes will each have a first priority perfected security interest in all of the current and future assets of the Company and direct and indirect subsidiaries of the Company, except for the Excluded Assets (as defined in the Security Agreement).

Fourth Amendments to Convertible Junior Notes

On January 18, 2019, the Company and certain investors holding Convertible Junior Notes executed Fourth Amendments to such Convertible Junior Notes (the “Convertible Junior Notes Amendments”) to adjust certain definitions to allow for issuance of the Convertible Senior Notes. The Convertible Junior Notes Amendments are binding upon the holders of all of the issued Convertible Junior Notes pursuant to the terms thereof.

The forms of Purchase Agreement, Fourth Amendment to Subordination Agreement and Security Amendment Agreement are attached as Exhibits 10.1, 10.2 and 10.3, respectively, to this Current Report on Form 8-K and are incorporated herein by reference. The forms of Convertible Senior Note, Warrant and Convertible Junior Notes Amendment are attached as Exhibits 4.1, 4.2 and 4.3, respectively, to this Current Report on Form 8-K and are also incorporated herein by reference. The foregoing descriptions of these agreements and instruments do not purport to be complete and are qualified in their entirety by reference to such exhibits.

Item 3.02 Unregistered Sales of Equity Securities.

As more fully described in Item 1.01 above, which disclosure regarding the Convertible Senior Notes and Warrants is incorporated by reference herein, on January 18, 2019, the Company agreed to issue the Convertible Senior Notes and the Warrants to the Investors pursuant to the Purchase Agreement. The issuance of the Convertible Senior Notes is, and upon conversion of the Convertible Senior Notes in accordance with their terms, the issuance of the shares of Common Stock issuable upon conversion of the Convertible Senior Notes will be, and the issuance of the Warrants is, and upon exercise of the Warrants in accordance with their terms, the issuance and sale of the Warrant Shares will be, exempt from registration pursuant to an exemption afforded by Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D, based on representations of the Investors, which included, in pertinent part, that each recipient is an “accredited investor” as that term is defined in Rule 501 of Regulation D, who is acquiring such Convertible Senior Note and Warrant for investment purposes for its own account and not as nominee or agent, and not with a view to the resale or distribution thereof, and that such investor understands that the Convertible Senior Note and Warrant may not be sold or otherwise disposed of without registration under the Securities Act or an applicable exemption therefrom.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
4.1	<u>Form of Convertible Senior Secured Promissory Note</u>
4.2	<u>Form of Warrant</u>
4.3	<u>Form of Fourth Amendment to Convertible Unsecured Promissory Notes issued in September 2016, effective as of January 18, 2019</u>
10.1	<u>Form of Securities Purchase Agreement, dated January 18, 2019, by and among Ener-Core, Inc. and certain investors set forth therein, including the form of Guaranty of Ener-Core Power, Inc.</u>
10.2	<u>Form of Fourth Amendment to Subordination and Intercreditor Agreement, dated September 1, 2016, by and among Ener-Core, Inc., Ener-Core Power, Inc., Longboard Capital Advisors LLC, Anthony Tang and Empery Tax Efficient, LP, effective as of January 18, 2019</u>
10.3	<u>Form of Fifth Amendment to Pledge and Security Agreement, dated April 23, 2015, by and among Ener-Core, Inc., Ener-Core Power, Inc. and Empery Tax Efficient, LP, effective as of January 18, 2019</u>

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 hereunto duly authorized.

ENER-CORE, INC.

Dated: January 25, 2019

By: /s/ Domonic J. Carney
Domonic J. Carney
Chief Financial Officer

EXHIBIT INDEX

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[FORM OF SENIOR SECURED NOTE]

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES MAY BE CONVERTIBLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL, IN FORM AND SUBSTANCE REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT, OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES. ANY TRANSFEREE OF THIS NOTE SHOULD CAREFULLY REVIEW THE TERMS OF THIS NOTE, INCLUDING SECTIONS 3(c)(iii) AND 17(a) HEREOF. THE PRINCIPAL AMOUNT REPRESENTED BY THIS NOTE AND, ACCORDINGLY, THE SECURITIES ISSUABLE UPON CONVERSION HEREOF MAY BE LESS THAN THE AMOUNTS SET FORTH ON THE FACE HEREOF PURSUANT TO SECTION 3(c)(iii) OF THIS NOTE.

Ener-Core, Inc.

SENIOR SECURED NOTE

Issuance Date: January 18, 2019

Original Principal Amount: U.S. \$[]

FOR VALUE RECEIVED, Ener-Core, Inc., a Delaware corporation (the “**Company**”), hereby promises to pay to [BUYER] or registered assigns (the “**Holder**”) in cash and/or in shares of Common Stock (as defined below) the amount set out above as the Original Principal Amount (as reduced pursuant to the terms hereof pursuant to redemption, conversion or otherwise, the “**Principal**”) when due, whether upon the Maturity Date (as defined below), acceleration, redemption or otherwise (in each case in accordance with the terms hereof) and to pay interest (“**Interest**”) on any outstanding Principal at the applicable Interest Rate from the date set out above as the Issuance Date (the “**Issuance Date**”) until the same becomes due and payable, whether upon an Interest Date (as defined below), the Maturity Date, acceleration, conversion, redemption or otherwise (in each case in accordance with the terms hereof). This Senior Secured Note (including all Senior Secured Notes issued in exchange, transfer or replacement hereof, this “**Note**”) is one of a series of Senior Secured Notes issued pursuant to the Agreement on the Initial Closing Date and the Subsequent Closing Dates (collectively, the “**Notes**” and such other Senior Secured Notes, the “**Other Notes**”). Certain capitalized terms used herein are defined in Section 30.

(1) ORIGINAL ISSUE DISCOUNT; PAYMENTS OF PRINCIPAL; PREPAYMENT. The Company acknowledges and agrees that this Note was issued at an original issue discount. On the Maturity Date, the Company shall pay to the Holder an amount in cash representing all outstanding Principal, accrued and unpaid Interest and accrued and unpaid Late Charges (as defined in Section 23(b)) on such Principal and Interest. The “**Maturity Date**” shall be December 31, 2020; provided that the Maturity Date may be extended at the option of the Holder (i) in the event that, and for so long as, an Event of Default (as defined in Section 4(a)) shall have occurred and be continuing on the Maturity Date (as may be extended pursuant to this Section 1) or any event shall have occurred and be continuing on the Maturity Date (as may be extended pursuant to this Section 1) that with the passage of time and the failure to cure would result in an Event of Default and (ii) through the date that is ten (10) Business Days after the consummation of a Change of Control in the event that a Change of Control is publicly announced or a Change of Control Notice (as defined in Section 5(b)) is delivered prior to the Maturity Date. Other than as specifically permitted by this Note, the Company may not prepay any portion of the outstanding Principal, accrued and unpaid Interest or accrued and unpaid Late Charges on Principal and Interest, if any.

(2) **DEFAULT INTEREST.** This Note shall not bear any ordinary interest as this principal amount of this Note includes an original issue discount. Interest on this Note shall commence accruing immediately upon the occurrence of, and shall continue accruing during the continuance of, an Event of Default, at ten percent (10.0%) per annum (the “**Default Rate**”) and shall be computed on the basis of a 360-day year of twelve 30-day months and shall be payable, if applicable, in arrears for each calendar month on the first (1st) Business Day of each calendar month after any such Interest accrues after an Event of Default (each, an “**Interest Date**”). Interest, if any, shall be payable on each Interest Date, to the record holder of this Note on the applicable Interest Date in cash by wire transfer of immediately available funds pursuant to wire instruction provided by the Holder in writing to the Company. Prior to the payment of Interest on an Interest Date, Interest on this Note shall accrue at the Default Rate and be payable by way of inclusion of the Interest in the Conversion Amount (as defined in Section 3(b)(i)) on each Conversion Date (as defined in Section 3(c)(i)) in accordance with Section 3(c)(i) and on each Redemption Date. In the event that such Event of Default is subsequently cured, Interest shall no longer accrue as of the date of such cure; provided, that for the purpose of this Section 2, such Event of Default shall not be deemed cured unless and until any accrued and unpaid Interest shall be paid to the Holder.

(3) **CONVERSION OF NOTES.** At any time or times after the Issuance Date, this Note shall be convertible, at the Holder’s option, into shares of the Company’s common stock, par value \$0.0001 per share (including any capital stock into which such common stock shall have been changed or any capital stock resulting from a reclassification of such common stock, the “**Common Stock**”) or, solely as to Section 3(c)(vi), Equity Securities (as defined below), on the terms and conditions set forth in this Section 3.

(a) **Conversion Right.** Subject to the provisions of Section 3(d), at any time or times on or after the Issuance Date, the Holder shall be entitled to convert any portion of the outstanding and unpaid Conversion Amount into fully paid and nonassessable shares of Common Stock in accordance with Section 3(c), at the Conversion Rate (as defined below). The Company shall not issue any fraction of a share of Common Stock upon any conversion. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up to the nearest whole share. The Company shall pay any and all transfer, stamp and similar taxes that may be payable with respect to the issuance and delivery of Common Stock upon conversion of any Conversion Amount.

(b) **Conversion Rate.** The number of shares of Common Stock issuable upon conversion of any Conversion Amount pursuant to Section 3(a) shall be determined by dividing (x) such Conversion Amount by (y) the Conversion Price (the “**Conversion Rate**”).

(i) “**Conversion Amount**” means the sum of (A) the portion of the Principal to be converted, redeemed or otherwise with respect to which this determination is being made, (B) accrued and unpaid Interest with respect to such Principal, if any, and (C) accrued and unpaid Late Charges, if any, with respect to such Principal and Interest.

(ii) “**Conversion Price**” means, as of any Conversion Date or other applicable date of determination, \$0.10 per share, subject to adjustment as provided herein.

(c) Mechanics of Conversion.

(i) Optional Conversion. To convert any Conversion Amount into shares of Common Stock on any date (a “**Conversion Date**”), the Holder shall (A) transmit by facsimile or electronic mail (or otherwise deliver), for receipt on or prior to 11:59 p.m., New York time, on such date, a copy of an executed notice of conversion in the form attached hereto as Exhibit I (the “**Conversion Notice**”) to the Company and (B) if required by Section 3(c)(iii), surrender this Note to a common carrier for delivery to the Company as soon as practicable on or following such date (or an indemnification undertaking with respect to this Note in the case of its loss, theft or destruction). On or before the first (1st) Business Day following the date of receipt of a Conversion Notice, the Company shall transmit by facsimile or electronic mail a confirmation of receipt of such Conversion Notice to the Holder and the Company’s transfer agent (the “**Transfer Agent**”). On or before the earlier of (i) the third (3rd) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period, in each case, following the date on which the Holder delivers the Conversion Notice (such earlier date, the “**Share Delivery Date**”), the Company shall (x) provided that the Transfer Agent is participating in the Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program, credit such aggregate number of shares of Common Stock to which the Holder shall be entitled to the Holder’s or its designee’s balance account with DTC through its Deposit Withdrawal At Custodian system or (y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and deliver to the address as specified in the Conversion Notice, a certificate, registered in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder shall be entitled. If this Note is physically surrendered for conversion as required by Section 3(c)(iii) and the outstanding Principal of this Note is greater than the Principal portion of the Conversion Amount being converted, then the Company shall as soon as practicable and in no event later than three (3) Business Days after receipt of this Note and at its own expense, issue and deliver to the Holder a new Note (in accordance with Section 17(d)) representing the outstanding Principal not converted. The Person or Persons entitled to receive the shares of Common Stock issuable upon a conversion of this Note shall be treated for all purposes as the record holder or holders of such shares of Common Stock on the Conversion Date, irrespective of the date such Conversion Shares are credited to the Holder’s account with DTC or the date of delivery of the certificates evidencing such Conversion Shares, as the case may be.

(ii) Company's Failure to Timely Convert. If the Company shall fail on or prior to the Share Delivery Date to issue and deliver a certificate to the Holder, if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or credit the Holder's balance account with DTC, if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion of any Conversion Amount (a "**Conversion Failure**"), then (A) the Company shall pay damages to the Holder for each Trading Day of such Conversion Failure in an amount equal to 1.5% of the product of (1) the sum of the number of shares of Common Stock not issued to the Holder on or prior to the Share Delivery Date and to which the Holder is entitled, and (2) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the applicable Conversion Date and ending on the applicable Share Delivery Date and (B) the Holder, upon written notice to the Company, may void its Conversion Notice with respect to, and retain or have returned, as the case may be, any portion of this Note that has not been converted pursuant to such Conversion Notice; provided that the voiding of a Conversion Notice shall not affect the Company's obligations to make any payments which have accrued prior to the date of such notice pursuant to this Section 3(c) (ii) or otherwise. In addition to the foregoing, if the Company shall fail on or prior to the Share Delivery Date to issue and deliver a certificate to the Holder, if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, or credit the Holder's balance account with DTC, if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, for the number of shares of Common Stock to which the Holder is entitled upon the Holder's conversion of any Conversion Amount or on any date of the Company's obligation to deliver shares of Common Stock as contemplated pursuant to clause (y) below, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) Common Stock to deliver in satisfaction of a sale by the Holder of Common Stock issuable upon such conversion that the Holder anticipated receiving from the Company (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Holder's request and in the Holder's discretion, either (x) pay cash to the Holder in an amount equal to the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the "**Buy-In Price**"), at which point the Company's obligation to issue and deliver such certificate or credit the Holder's balance account with DTC for the shares of Common Stock to which the Holder is entitled upon the Holder's conversion of the applicable Conversion Amount shall terminate, or (y) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the Holder's balance account with DTC for such shares of Common Stock and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the applicable Conversion Date and ending on the date the Company makes all payments provided for in this sentence.

(iii) Registration; Book-Entry. The Company shall maintain a register (the "**Register**") for the recordation of the names and addresses of the holders of each Note and the Principal amount of the Notes (and stated interest thereon) held by such holders (the "**Registered Notes**"). The entries in the Register shall be conclusive and binding for all purposes absent manifest error. The Company and the holders of the Notes shall treat each Person whose name is recorded in the Register as the owner of a Note for all purposes, including, without limitation, the right to receive payments of Principal and Interest, if any, hereunder, notwithstanding notice to the contrary. A Registered Note may be assigned or sold in whole or in part only by registration of such assignment or sale on the Register. Upon its receipt of a request to assign or sell all or part of any Registered Note by a Holder, the Company shall record the information contained therein in the Register and issue one or more new Registered Notes in the same aggregate Principal amount as the Principal amount of the surrendered Registered Note to the designated assignee or transferee pursuant to Section 17. Notwithstanding anything to the contrary in this Section 3(c)(iii), a Holder may assign any Note or any portion thereof to an Affiliate of such Holder or a Related Fund of such Holder without delivering a request to assign or sell such Note to the Company and the recordation of such assignment or sale in the Register (a "**Related Party Assignment**"); provided, that (x) the Company may continue to deal solely with such assigning or selling Holder unless and until such Holder has delivered a request to assign or sell such Note or portion thereof to the Company for recordation in the Register; (y) the failure of such assigning or selling Holder to deliver a request to assign or sell such Note or portion thereof to the Company shall not affect the legality, validity, or binding effect of such assignment or sale and (z) such assigning or selling Holder shall, acting solely for this purpose as a non-fiduciary agent of the Company, maintain a register (the "**Related Party Register**") comparable to the Register on behalf of the Company, and any such assignment or sale shall be effective upon recordation of such assignment or sale in the Related Party Register. Notwithstanding anything to the contrary set forth herein, upon conversion of any portion of this Note in accordance with the terms hereof, the Holder shall not be required to physically surrender this Note to the Company unless (A) the full Conversion Amount represented by this Note is being converted in which case the Holder shall then deliver this Note to the Company as promptly as reasonable practicable after the date it receives the Conversion Shares related to the applicable conversion or (B) the Holder has provided the Company with prior written notice (which notice may be included in a Conversion Notice) requesting reissuance of this Note upon physical surrender of this Note in which case the Holder shall then deliver this Note to the Company as promptly as reasonable practicable after the date it receives the Conversion Shares related to the applicable conversion. The Holder and the Company shall maintain records showing the Principal, Interest and Late Charges, if any, converted and the dates of such conversions or shall use such other method, reasonably satisfactory to the Holder and the Company, so as not to require physical surrender of this Note upon conversion.

(iv) Pro Rata Conversion; Disputes. In the event that the Company receives a Conversion Notice from this Note and one or more holder of Other Notes for the same Conversion Date and the Company can convert some, but not all, of such portions of this Note and the Other Notes submitted for conversion, the Company, subject to Section 3(d), shall convert from the Holder and each holder of Other Notes electing to have this Note or the Other Notes converted on such date a pro rata amount of such holder's portion of the Note and its Other Notes submitted for conversion based on the Principal amount of this Note and the Other Notes submitted for conversion on such date by such holder relative to the aggregate Principal amount of this Note and all Other Notes submitted for conversion on such date. In the event of a dispute as to the number of shares of Common Stock issuable to the Holder in connection with a conversion of this Note, the Company shall issue to the Holder the number of shares of Common Stock not in dispute and resolve such dispute in accordance with Section 22.

(v) Automatic Conversion. The Conversion Amount shall be automatically converted into shares of Common Stock based on the then-effective applicable Conversion Price (an "**Automatic Conversion**") on the fifth (5th) Trading Day immediately following the first Trading Day after the Issuance Date (the "**Automatic Conversion Date**") on which (i) the Weighted Average Price of the Common Stock for each Trading Day during a consecutive twenty (20) Trading Day period (the "**Automatic Conversion Measuring Period**") equals or exceeds \$5.00 (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the Subscription Date) and (ii) no Equity Conditions Failure has occurred. The Company shall deliver within two (2) Trading Days following the end of such Automatic Conversion Measuring Period a written notice thereof by facsimile or electronic mail and overnight courier to all, but not less than all, of the holders of Notes and the Transfer Agent (the "**Automatic Conversion Notice**" and the date the Holder and all the holders of the Other Notes receive such notice is referred to as the "**Automatic Conversion Notice Date**"). The Automatic Conversion Notice shall (i) state (a) the Automatic Conversion Date, (b) the aggregate Conversion Amount of the Notes which shall be subject to Automatic Conversion from the Holder and all of the holders of the Other Notes pursuant to this Section 3(c)(v) (and analogous provisions under the Other Notes) and (c) the number of shares of Common Stock to be issued to the Holder on the Automatic Conversion Date and (ii) certify that there has been no Equity Conditions Failure on any day during the period beginning on the first day of the Equity Conditions Measuring Period relating to the first date of the Automatic Conversion Measuring Period and ending on, and including, the Automatic Conversion Date. This Note and all of the outstanding Other Notes shall be converted automatically on the Automatic Conversion Date without any further action by the Holder and the holders of such Other Notes and whether or not this Note or the Other Notes are surrendered to the Company or its Transfer Agent. Upon the occurrence of such Automatic Conversion of this Note and the Other Notes, including, without limitation, the delivery of the applicable Conversion Shares, this Note will be deemed converted in full on the Automatic Conversion Date, and the Holder and the holders of the Other Notes shall be deemed to have surrendered such Notes to the Company. Notwithstanding anything to the contrary in this Section 3(c)(v), until the Automatic Conversion has occurred, the Conversion Amount subject to the Automatic Conversion may be converted, in whole or in part, by the Holder into shares of Common Stock pursuant to Sections 3(c)(i). All Conversion Amounts converted by the Holder after the Automatic Conversion Notice Date shall reduce the Conversion Amount of this Note to be converted on the Automatic Conversion Date.

(vi) Conversion Upon Next Equity Financing. If the Company authorizes and consummates an issuance of equity securities for cash and/or other consideration (a “**Next Equity Financing**,” and the securities to be issued in such Next Equity Financing, the “**Equity Securities**”), the Holder of this Note and the Holders of the Other Notes shall have the right to participate in the Next Equity Financing and may make payment for Equity Securities in the Next Equity Financing, in lieu of payment of cash or other consideration, by exchange of this Note and the Other Notes. A portion of the purchase price for the Next Equity Financing may be made by the payment of cash and a portion may be made by exchange of this Note and the Other Notes into the Equity Securities. The Company and the Holder hereby acknowledge and agree that if the Lead Investor elects to convert its Note into the Equity Securities that the Holder’s Note shall be deemed to have been converted into the same Equity Securities on the same terms and conditions. At least five (5) Trading Days prior to the closing of the Next Equity Financing, the Company will notify the Holder in writing of the terms of the Equity Securities that are expected to be issued in such financing and provide copies of the purchase agreement and any ancillary documents governing the rights and obligations of the Equity Securities in the same form as required from the other investors in the Next Equity Financing, which, if and only if the Lead Investor has executed such documents, the Holder shall be required to execute in support of the conversion (the “**Required Documents**”). The issuance of Equity Securities pursuant to such conversion of this Note will be on, and subject to, the same terms and conditions applicable to the Equity Securities issued in the Next Equity Financing including the per security purchase price (the “**Next Equity Financing Price**”) and applicable warrant coverage, if any. The number of Equity Securities the Company issues upon such Next Equity Financing will equal the quotient (rounded down to the nearest whole share) obtained by dividing (x) the outstanding principal balance and any unpaid accrued interest under this Note on the date that is no more than one (1) Trading Day prior to the closing of the Next Equity Financing by (y) the Next Equity Financing Price, plus the issuance of any applicable warrant coverage under the terms of the Next Equity Financing, provided, that the Company shall not be required to deliver the Equity Securities issuable in the Next Equity Financing until the Holder has surrendered this Note to the Company and the Holder has executed the Required Documents in the same form as required from investors in the Next Equity Financing and as executed by the Lead Investor (except that reimbursement for legal expenses may differ). Such conversion shall be contingent upon the closing of the Next Equity Financing. Notwithstanding anything to the contrary in this Section 3(c)(vi), until the date of consummation of the Next Equity Financing, the Conversion Amount subject to the Next Equity Financing Conversion may be converted, in whole or in part, by the Holder into shares of Common Stock pursuant to Section 3(c)(i).

(d) Limitations on Conversions. The Company shall not effect the conversion of any portion of this Note, and the Holder shall not have the right to convert any portion of this Note, to the extent that after giving effect to such conversion, the Holder together with the other Attribution Parties collectively would beneficially own in excess of [4.99/9.99%]¹ (the “**Maximum Percentage**”) of the shares of Common Stock outstanding immediately after giving effect to such conversion. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon conversion of this Note with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (i) conversion of the remaining, nonconverted portion of this Note beneficially owned by the Holder or any of the other Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the Other Notes and Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 3(d). For purposes of this Section 3(d), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. For purposes of determining the number of outstanding shares of Common Stock the Holder may acquire upon the conversion of the Note without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (i) the Company’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the SEC, as the case may be, (ii) a more recent public announcement by the Company or (iii) any other written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the “**Reported Outstanding Share Number**”). If the Company receives a Conversion Notice from a Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Conversion Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 3(d), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of shares of Common Stock to be issued pursuant to such Conversion Notice. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Trading Day confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Note, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon conversion of this Note results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the Exchange Act), the number of shares so issued by which the Holder’s and the other Attribution Parties’ aggregate beneficial ownership exceeds the Maximum Percentage (the “**Excess Shares**”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of Notes that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Note in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 3(d) to the extent necessary to correct this paragraph (or any portion of this paragraph) which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 3(d) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Note.

¹ At the Holder’s election.

(4) RIGHTS UPON EVENT OF DEFAULT.

(a) Event of Default. Each of the following events shall constitute an “**Event of Default**”:

(i) [Intentionally omitted.];

(ii) the suspension of the Common Stock from trading for a period of five (5) or more consecutive Trading Days or for more than an aggregate of ten (10) Trading Days in any 365 day period or the failure of the Common Stock to be listed on an Eligible Market;

(iii) the Company’s (A) failure to cure a Conversion Failure by delivery of the required number of shares of Common Stock within five (5) Business Days after the applicable Conversion Date or (B) notice, written or oral, to the Holder or any holder of the Other Notes, including by way of public announcement or through any of its agents, at any time, of its intention not to comply with a request for conversion of this Note or any Other Notes into shares of Common Stock that is tendered in accordance with the provisions of this Note or the Other Notes, other than pursuant to Section 3(d) (and analogous provisions under the Other Notes);

(iv) at any time following the fifth (5th) consecutive Business Day that the Holder’s Authorized Share Allocation is less than the sum of (A) the number of shares of Common Stock that the Holder would be entitled to receive upon a conversion of the full Conversion Amount of this Note (without regard to any limitations on conversion set forth in Section 3(d) or otherwise) calculated using the initial Conversion Price of \$0.10 (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the Subscription Date) and (B) the number of shares of Common Stock that the Holder would be entitled to receive upon exercise in full of the Holder’s Warrants (without regard to any limitations on exercise set forth in the Warrants) (the “**Initial Conversion Price**”);

(v) the Company’s failure to pay to the Holder any amount of Principal, Interest, Late Charges or other amounts when and as due under this Note (including, without limitation, the Company’s failure to pay any Redemption Price) or any other Transaction Document (as defined in the Agreement) or any other agreement, document, certificate or other instrument delivered in connection with the transactions contemplated hereby and thereby to which the Holder is a party if such failure continues for a period of at least an aggregate of five (5) Business Days;

(vi) any default under, redemption of or acceleration prior to maturity of an aggregate principal amount of \$100,000 or more of Indebtedness of the Company and/or any of its Subsidiaries (as defined in Section 3(a) of the Agreement) other than with respect to this Note or any Other Notes;

(vii) the Company or any of its Subsidiaries, pursuant to or within the meaning of Title 11, U.S. Code, or any similar Federal, foreign or state law for the relief of debtors (collectively, “**Bankruptcy Law**”), (A) commences a voluntary case, (B) consents to the entry of an order for relief against it in an involuntary case, (C) consents to the appointment of a receiver, trustee, assignee, liquidator or similar official (a “**Custodian**”), (D) makes a general assignment for the benefit of its creditors or (E) admits in writing that it is generally unable to pay its debts as they become due;

(viii) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that (A) is for relief against the Company or any of its Subsidiaries in an involuntary case, (B) appoints a Custodian of the Company or any of its Subsidiaries or (C) orders the liquidation of the Company or any of its Subsidiaries;

(ix) a final judgment or judgments for the payment of money aggregating in excess of \$100,000 are rendered against the Company or any of its Subsidiaries and which judgments are not, within sixty (60) days after the entry thereof, bonded, discharged or stayed pending appeal, or are not discharged within sixty (60) days after the expiration of such stay; provided, however, that any judgment which is covered by insurance or an indemnity from a credit worthy party shall not be included in calculating the \$100,000 amount set forth above so long as the Company provides the Holder a written statement from such insurer or indemnity provider (which written statement shall be reasonably satisfactory to the Holder) to the effect that such judgment is covered by insurance or an indemnity and the Company will receive the proceeds of such insurance or indemnity within thirty (30) days of the issuance of such judgment;

(x) other than as specifically set forth in another clause of this Section 4(a), the Company or any of its Subsidiaries breaches in any material respect any representation, warranty, covenant or other term or condition of any Transaction Document, except, in the case of a breach of a covenant or other term or condition of any Transaction Document which is curable, only if such breach continues for a period of at least an aggregate of five (5) Business Days;

(xi) any breach or failure in any material respect to comply with Section 14 of this Note, except, in the case of a breach of a covenant or other term or condition of such section which is curable, only if such breach or failure continues for a period of at least an aggregate of five (5) Business Days;

(xii) the Company or any Subsidiary shall fail in any material respect to perform or comply with any covenant or agreement contained in the Security Agreement (as defined in the Agreement) to which it is a party;

(xiii) any material provision of any Security Document (as defined in the Agreement) (as determined by the Collateral Agent (as defined in the Agreement)) shall at any time for any reason (other than pursuant to the express terms thereof) cease to be valid and binding on or enforceable against the Company or any Subsidiary intended to be a party thereto, or the validity or enforceability thereof shall be contested by any party thereto, or a proceeding shall be commenced by the Company or any Subsidiary or any governmental authority having jurisdiction over any of them, seeking to establish the invalidity or unenforceability thereof, or the Company or any Subsidiary shall deny in writing that it has any liability or obligation purported to be created under any Security Document, except, in the case of any such event which is curable, only if such event continues for a period of at least an aggregate of ten (10) Business Days.

(xiv) any Security Document or any other security document, after delivery thereof pursuant hereto, shall for any reason fail or cease to create a valid and perfected and, except to the extent permitted by the terms hereof or thereof, first priority Lien (as defined in Section 14(c)) in favor of the Collateral Agent for the benefit of the holders of the Notes on any Collateral (as defined in the Security Documents) purported to be covered thereby, except, in the case of any such event which is curable, only if such event continues for a period of at least an aggregate of ten (10) Business Days;

(xv) any material damage to, or loss, theft or destruction of, any Collateral or a material amount of property of the Company, whether or not insured, or any strike, lockout, labor dispute, embargo, condemnation, act of God or public enemy, or other casualty which causes, for more than fifteen (15) consecutive days, the cessation or substantial curtailment of revenue producing activities at any facility of the Company or any Subsidiary, if any such event or circumstance could reasonably be expected to have a Material Adverse Effect (as defined in the Agreement);

(xvi) a false or inaccurate certification as to whether any Event of Default has occurred;

(xvii) the Company's failure for any reason after the date that is six (6) months immediately following the Issuance Date to satisfy the current public information requirement under Rule 144(c), which failure continues for more than an aggregate of ten (10) Trading Days in any 365-day period; or

(xviii) any Event of Default (as defined in the Other Notes) occurs with respect to any Other Notes.

(b) **Redemption Right.** Upon the occurrence of an Event of Default with respect to this Note or any Other Note, the Company shall within two (2) Business Days deliver written notice thereof via facsimile or electronic mail and overnight courier (an "**Event of Default Notice**") to the Holder. At any time after the earlier of the Holder's receipt of an Event of Default Notice and the Holder becoming aware of an Event of Default, the Holder may require the Company to redeem (an "**Event of Default Redemption**") all or any portion of this Note by delivering written notice thereof (the "**Event of Default Redemption Notice**") to the Company, which Event of Default Redemption Notice shall indicate the portion of this Note the Holder is electing to require the Company to redeem. Each portion of this Note subject to redemption by the Company pursuant to this Section 4(b) shall be redeemed by the Company in cash by wire transfer of immediately available funds at a price equal to 115% of the Conversion Amount being redeemed (the "**Event of Default Redemption Price**"). Redemptions required by this Section 4(b) shall be made in accordance with the provisions of Section 11. To the extent redemptions required by this Section 4(b) are deemed or determined by a court of competent jurisdiction to be prepayments of the Note by the Company, such redemptions shall be deemed to be voluntary prepayments. Notwithstanding anything to the contrary in this Section 4, but subject to Section 3(d), until the Event of Default Redemption Price (together with any interest thereon) is paid in full, the Conversion Amount submitted for redemption under this Section 4(b) (together with any interest thereon) may be converted, in whole or in part, by the Holder into Common Stock pursuant to Section 3. The parties hereto agree that in the event of the Company's redemption of any portion of the Note under this Section 4(b), the Holder's damages would be uncertain and difficult to estimate because of the parties' inability to predict future interest rates and the uncertainty of the availability of a suitable substitute investment opportunity for the Holder. Accordingly, any Event of Default redemption premium due under this Section 4(b) is intended by the parties to be, and shall be deemed, a reasonable estimate of the Holder's actual loss of its investment opportunity and not as a penalty.

(5) RIGHTS UPON FUNDAMENTAL TRANSACTION AND CHANGE OF CONTROL.

(a) Assumption. The Company shall not enter into or be party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Note and the other Transaction Documents in accordance with the provisions of this Section 5(a) pursuant to written agreements in form and substance satisfactory to the Required Holders and approved by the Required Holders prior to such Fundamental Transaction, including agreements, if so requested by the Holder, to deliver to each holder of Notes in exchange for such Notes a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Notes, including, without limitation, having a principal amount and interest rate equal to the Principal amounts and the Default Rate of the Notes then outstanding held by such holder, having similar conversion rights and having similar ranking and security to the Notes, and satisfactory to the Required Holders. No later than (i) thirty (30) days prior to the occurrence or consummation of any Fundamental Transaction or (ii) if later, the first Trading Day following the date the Company first becomes aware of the occurrence or potential occurrence of a Fundamental Transaction, the Company shall deliver written notice thereof via facsimile or electronic mail and overnight courier to the Holder. Upon the occurrence or consummation of any Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of any Fundamental Transaction that, the Company and the Successor Entity or Successor Entities, jointly and severally, shall succeed to, and the Company shall cause any Successor Entity or Successor Entities to jointly and severally succeed to, and be added to the term "Company" under this Note (so that from and after the date of such Fundamental Transaction, each and every provision of this Note referring to the "Company" shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Company and the Successor Entity or Successor Entities, jointly and severally, may exercise every right and power of the Company prior thereto and shall assume all of the obligations of the Company prior thereto under this Note with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company in this Note, and, solely at the request of the Holder, if the Successor Entity and/or Successor Entities is a publicly traded corporation whose common capital stock is quoted on or listed for trading on an Eligible Market, shall deliver (in addition to and without limiting any right under this Note) to the Holder in exchange for this Note a security of the Successor Entity and/or Successor Entities evidenced by a written instrument substantially similar in form and substance to this Note and convertible for a corresponding number of shares of capital stock of the Successor Entity and/or Successor Entities (the "**Successor Capital Stock**") equivalent (as set forth below) to the shares of Common Stock acquirable and receivable upon conversion of this Note (determined using the Initial Conversion Price as the Conversion Price and determined without regard to any limitations on the conversion of this Note) prior to such Fundamental Transaction (such corresponding number of shares of Successor Capital Stock to be delivered to the Holder shall equal the greater of (I) the quotient of (A) the aggregate dollar value of all consideration (including cash consideration and any consideration other than cash ("**Non-Cash Consideration**"), in such Fundamental Transaction, as such values are set forth in any definitive agreement for the Fundamental Transaction that has been executed at the time of the first public announcement of the Fundamental Transaction or, if no such value is determinable from such definitive agreement, as determined in accordance with Section 22 with the term "Non-Cash Consideration" being substituted for the term "Conversion Price") that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Note been converted immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (determined using the Initial Conversion Price as the Conversion Price and determined without regard to any limitations on the conversion of this Note) (the "**Aggregate Consideration**") divided by (B) the per share Closing Sale Price of such corresponding Successor Capital Stock on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (II) the product of (A) the Aggregate Consideration and (B) the highest exchange ratio pursuant to which any stockholder of the Company may exchange Common Stock for Successor Capital Stock) (provided, however, to the extent that the Holder's right to receive any such shares of publicly traded common stock (or their equivalent) of the Successor Entity would result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, if applicable, then the Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held in abeyance for the Holder until such time or times, as its right thereto would not result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be delivered such shares to the extent as if there had been no such limitation), and such security shall be satisfactory to the Holder, and with an identical conversion price to the Conversion Price hereunder (such adjustments to the number of shares of capital stock and such conversion price being for the purpose of protecting after the consummation or occurrence of such Fundamental Transaction the economic value of this Note that was in effect immediately prior to the consummation or occurrence of such Fundamental Transaction, as elected by the Holder solely at its option). Upon occurrence or consummation of the Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities shall deliver to the Holder confirmation that there shall be issued upon conversion of this Note at any time after the occurrence or consummation of the Fundamental Transaction, as elected by the Holder solely at its option, shares of Common Stock, Successor Capital Stock or, in lieu of the shares of Common Stock or Successor Capital Stock (or other securities, cash, assets or other property purchasable upon the conversion of this Note prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), which for purposes of clarification may continue to be shares of Common Stock, if any, that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Note been converted immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (determined using the Initial Conversion Price as the Conversion Price and determined without regard to any limitations on the conversion of this Note), as adjusted in accordance with the provisions of this Note. The provisions of this Section 5(a) shall apply similarly and equally to successive Fundamental Transactions.

(b) Redemption Right. No sooner than twenty-five (25) days nor later than twenty (20) days prior to the consummation of a Change of Control, but not prior to the public announcement of such Change of Control, the Company shall deliver written notice thereof via facsimile or electronic mail and overnight courier to the Holder (a “**Change of Control Notice**”). At any time during the period beginning on the earlier to occur of (x) any oral or written agreement by the Company or any of its Subsidiaries to consummate a transaction that would reasonably be expected to result in a Change of Control, (y) the Holder becoming aware of a Change of Control and (z) the Holder’s receipt of a Change of Control Notice, and ending twenty-five (25) Trading Days after the date of the consummation of such Change of Control, the Holder may require the Company to redeem (a “**Change of Control Redemption**”) all or any portion of this Note by delivering written notice thereof (“**Change of Control Redemption Notice**”) to the Company, which Change of Control Redemption Notice shall indicate the Conversion Amount the Holder is electing to require the Company to redeem. The portion of this Note subject to redemption pursuant to this Section 5(b) shall be redeemed by the Company in cash by wire transfer of immediately available funds at a price equal to 115% of the Conversion Amount being redeemed (the “**Change of Control Redemption Price**”). Redemptions pursuant to this Section 5 shall be made in accordance with the provisions of Section 11 and shall have priority to payments to stockholders in connection with a Change of Control. To the extent redemptions required by this Section 5(b) are deemed or determined by a court of competent jurisdiction to be prepayments of the Note by the Company, such redemptions shall be deemed to be voluntary prepayments. Notwithstanding anything to the contrary in this Section 5, but subject to Section 3(d), until the Change of Control Redemption Price (together with any interest thereon) is paid in full, the Conversion Amount submitted for redemption under this Section 5(b) (together with any interest thereon) may be converted, in whole or in part, by the Holder into Common Stock pursuant to Section 3. The parties hereto agree that in the event of the Company’s redemption of any portion of the Note under this Section 5(b), the Holder’s damages would be uncertain and difficult to estimate because of the parties’ inability to predict future interest rates and the uncertainty of the availability of a suitable substitute investment opportunity for the Holder. Accordingly, any Change of Control redemption premium due under this Section 5(b) is intended by the parties to be, and shall be deemed, a reasonable estimate of the Holder’s actual loss of its investment opportunity and not as a penalty.

(6) RIGHTS UPON ISSUANCE OF OTHER SECURITIES.

(a) Adjustment of Conversion Price upon Subdivision or Combination of Common Stock. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Conversion Price in effect immediately prior to such subdivision will be proportionately reduced. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Conversion Price in effect immediately prior to such combination will be proportionately increased.

(b) Voluntary Adjustment by Company. The Company may at any time during the term of this Note, with the prior written consent of the Required Holders, reduce the then current Conversion Price to any amount and for any period of time deemed appropriate by the Board of Directors of the Company.

(7) [Intentionally omitted.]

(8) OPTIONAL REDEMPTION AT THE COMPANY'S ELECTION.

(a) General. At any time after the Issuance Date, the Company shall have the right to redeem all or any portion of the Conversion Amount then remaining under this Note and the Other Notes (the "**Company Optional Redemption Amount**") as designated in the Company Optional Redemption Notice on the Company Optional Redemption Date (each as defined below) (a "**Company Optional Redemption**"); provided, that the aggregate Conversion Amount under this Note and the Other Notes being redeemed pursuant to this Section 8 (and analogous provisions under the Other Notes) shall be at least \$500,000, or such lesser amount that is then outstanding under this Note and the Other Notes, in the aggregate. The portion of this Note and the Other Notes subject to redemption pursuant to this Section 8(a) shall be redeemed by the Company on the Company Optional Redemption Date (as defined below) in cash by wire transfer of immediately available funds pursuant to wire instructions provided by the Holder in writing to the Company at a price equal to the greater of (x) 110% of the Conversion Amount of this Note to be redeemed and (y) the product of (A) the Conversion Amount being redeemed and (B) the quotient determined by dividing (I) the greatest Weighted Average Price of the shares of Common Stock during the period beginning on the date immediately preceding the Company Optional Redemption Notice Date (as defined below) and ending on the Company Optional Redemption Date (as defined below), by (II) the lowest Conversion Price in effect during such period (the "**Company Optional Redemption Price**"). The Company may exercise its right to require redemption under this Section 8 by delivering prior written notice thereof fifteen (15) days prior to the Company Optional Redemption Date (as defined below) by facsimile or electronic mail and overnight courier to the Holder and all, but not less than all, of the holders of the Other Notes (the "**Company Optional Redemption Notice**" and the date all of the holders of the Notes received such notice is referred to as the "**Company Optional Redemption Notice Date**"). The Company Optional Redemption Notice shall be irrevocable. The Company Optional Redemption Notice shall (i) state the date on which the Company Optional Redemption shall occur (the "**Company Optional Redemption Date**"), which date shall be fifteen (15) days following the Company Optional Redemption Notice Date or, if such date falls on a Holiday, the next day that is not a Holiday and (ii) state the aggregate Conversion Amount of the Notes which the Company has elected to be subject to Company Optional Redemption from the Holder and all of the holders of the Other Notes pursuant to this Section 8(a) (and analogous provisions under the Other Notes) on the Company Optional Redemption Date and (iii) certify that there is no Event of Default that is continuing as of the applicable Company Optional Redemption Notice Date. If the Company confirmed that there was no such Event of Default continuing as of the applicable Company Optional Redemption Notice Date but an Event of Default occurs between the applicable Company Optional Redemption Notice Date and any time through the applicable Company Optional Redemption Date (the "**Company Optional Redemption Interim Period**"), the Company shall provide the Holder a subsequent notice to that effect. If there is an Event of Default that is continuing (which is not waived in writing by the Holder) during such Company Optional Redemption Interim Period, then the Company Optional Redemption shall be null and void with respect to all or any part designated by the Holder of the unconverted Company Optional Redemption Amount and the Holder shall be entitled to all the rights of a holder of this Note with respect to such amount of the Company Optional Redemption Amount. Notwithstanding anything to the contrary in this Section 8, until the Company Optional Redemption Price is paid in full, the Company Optional Redemption Amount may be converted, in whole or in part, by the Holder into shares of Common Stock pursuant to Section 3. All Conversion Amounts converted by the Holder after the Company Optional Redemption Notice Date shall reduce the Company Optional Redemption Amount of this Note required to be redeemed on the Company Optional Redemption Date, unless the Holder otherwise indicates in the applicable Conversion Notice. Company Optional Redemptions made pursuant to this Section 8 shall be made in accordance with Section 11. To the extent redemptions required by this Section 8 are deemed or determined by a court of competent jurisdiction to be prepayments of the Note by the Company, such redemptions shall be deemed to be voluntary prepayments.

(b) Pro Rata Redemption Requirement. If the Company elects to cause a Company Optional Redemption pursuant to Section 8(a), then it must simultaneously take the same action in the same proportion with respect to the Other Notes. If the Company elects to cause a Company Optional Redemption pursuant to Section 8(a) (or similar provisions under the Other Notes) with respect to less than all of the Conversion Amounts of the Notes then outstanding, then the Company shall require redemption of a Conversion Amount from each of the holders of the Notes equal to the product of (i) the aggregate Company Optional Redemption Amount of Notes which the Company has elected to cause to be redeemed pursuant to Section 8(a), multiplied by (ii) the fraction, the numerator of which is the sum of the aggregate Original Principal Amount of the Notes purchased by such holder of outstanding Notes and the denominator of which is the sum of the aggregate Original Principal Amount of the Notes purchased by all holders holding outstanding Notes (such fraction with respect to each holder is referred to as its "**Company Optional Redemption Allocation Percentage**", and such amount with respect to each holder is referred to as its "**Pro Rata Company Optional Redemption Amount**"); provided, however that in the event that any holder's Pro Rata Company Optional Redemption Amount exceeds the outstanding Principal amount of such holder's Note, then such excess Pro Rata Company Optional Redemption Amount shall be allocated amongst the remaining holders of Notes in accordance with the foregoing formula. In the event that the initial holder of any Notes shall sell or otherwise transfer any of such holder's Notes, the transferee shall be allocated a pro rata portion of such holder's Company Optional Redemption Allocation Percentage and Pro Rata Company Optional Redemption Amount.

(9) NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation, Bylaws or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Note, and will at all times in good faith carry out all of the provisions of this Note and take all action as may be required to protect the rights of the Holder of this Note.

(10) RESERVATION OF AUTHORIZED SHARES.

(a) Reservation. The Company shall initially reserve out of its authorized and unissued shares of Common Stock a number of shares of Common Stock for each of this Note and the Other Notes equal to the Conversion Rate determined using the Initial Conversion Price as the Conversion Price, with respect to the Conversion Amount of each such Note as of the Issuance Date. So long as any of this Note and the Other Notes are outstanding, the Company shall take all action necessary to reserve and keep available out of its authorized and unissued Common Stock, solely for the purpose of effecting the conversion of this Note and the Other Notes, the number of shares of Common Stock specified above in this Section 10(a) as shall from time to time be necessary to effect the conversion of all of the Notes then outstanding; provided, that at no time shall the number of shares of Common Stock so reserved be less than the number of shares required to be reserved pursuant hereto (in each case, determined using the Initial Conversion Price as the Conversion Price and determined without regard to any limitations on conversions) (the “**Required Reserve Amount**”). The initial number of shares of Common Stock reserved for conversions of this Note and the Other Notes and each increase in the number of shares so reserved shall be allocated pro rata among the Holder and the holders of the Other Notes based on the Principal amount of this Note and the Other Notes held by each holder at the Closing (as defined in the Agreement) or increase in the number of reserved shares, as the case may be (the “**Authorized Share Allocation**”). In the event that a holder shall sell or otherwise transfer this Note or any of such holder’s Other Notes, each transferee shall be allocated a pro rata portion of such holder’s Authorized Share Allocation. Any shares of Common Stock reserved and allocated to any Person which ceases to hold any Notes shall be allocated to the Holder and the remaining holders of Other Notes, pro rata based on the Principal amount of this Note and the Other Notes then held by such holders.

(b) Insufficient Authorized Shares. If at any time while any of the Notes remain outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon conversion of the Notes at least a number of shares of Common Stock equal to the Required Reserve Amount (an “**Authorized Share Failure**”), then the Company shall immediately take all action necessary to increase the Company’s authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for the Notes then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall either (x) obtain the written consent of its stockholders for the approval of an increase in the number of authorized shares of Common Stock and provide each stockholder with an information statement with respect thereto or (y) hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders’ approval of such increase in authorized shares of Common Stock and to cause its Board of Directors to recommend to the stockholders that they approve such proposal.

(11) REDEMPTIONS.

(a) Mechanics. The Company shall deliver the applicable Event of Default Redemption Price to the Holder within three (3) Business Days after the Company's receipt of the Holder's Event of Default Redemption Notice (the "**Event of Default Redemption Date**"). If the Holder has submitted a Change of Control Redemption Notice in accordance with Section 5(b), the Company shall deliver the applicable Change of Control Redemption Price to the Holder (i) concurrently with the consummation of such Change of Control if such notice is received prior to the consummation of such Change of Control and (ii) within three (3) Business Days after the Company's receipt of such notice otherwise (such date, the "**Change of Control Redemption Date**"). The Company shall deliver the applicable Company Optional Redemption Price on the applicable Company Optional Redemption Date. The Company shall pay the applicable Redemption Price to the Holder in cash by wire transfer of immediately available funds pursuant to wire instruction provided by the holder in writing to the Company on the applicable due date. In the event of a redemption of less than all of the Conversion Amount of this Note, the Company shall promptly cause to be issued and delivered to the Holder a new Note (in accordance with Section 17(d)) representing the outstanding Principal which has not been redeemed and any accrued Interest on such Principal which shall be calculated as if no Redemption Notice has been delivered. In the event that the Company does not pay the applicable Redemption Price to the Holder within the time period required, at any time thereafter and until the Company pays such unpaid Redemption Price in full, the Holder shall have the option, in lieu of redemption, to require the Company to promptly return to the Holder all or any portion of this Note representing the Conversion Amount that was submitted for redemption and for which the applicable Redemption Price (together with any Late Charges thereon) has not been paid. Upon the Company's receipt of such notice, (x) the applicable Redemption Notice shall be null and void with respect to such Conversion Amount and (y) the Company shall immediately return this Note, or issue a new Note (in accordance with Section 17(d)) to the Holder representing such Conversion Amount to be redeemed. The Holder's delivery of a notice voiding a Redemption Notice and exercise of its rights following such notice shall not affect the Company's obligations to make any payments of Late Charges which have accrued prior to the date of such notice with respect to the Conversion Amount subject to such notice.

(b) Redemption by Other Holders. Upon the Company's receipt of notice from any of the holders of the Other Notes for redemption or repayment as a result of an event or occurrence substantially similar to the events or occurrences described in Section 4(b), Section 5(b) or Section 7 or pursuant to equivalent provisions set forth in the Other Notes (each, an "**Other Redemption Notice**"), the Company shall immediately, but no later than one (1) Business Day of its receipt thereof, forward to the Holder by facsimile or electronic mail a copy of such notice. If the Company receives a Redemption Notice and one or more Other Redemption Notices, during the seven (7) Business Day period beginning on and including the date which is three (3) Business Days prior to the Company's receipt of the Holder's Redemption Notice and ending on and including the date which is three (3) Business Days after the Company's receipt of the Holder's Redemption Notice and the Company is unable to redeem all principal, interest and other amounts designated in such Redemption Notice and such Other Redemption Notices received during such seven (7) Business Day period, then the Company shall redeem a pro rata amount from the Holder and each holder of the Other Notes (including the Holder) based on the Principal amount of this Note and the Other Notes submitted for redemption pursuant to such Redemption Notice and such Other Redemption Notices received by the Company during such seven Business Day period.

(12) VOTING RIGHTS. The Holder shall have no voting rights as the holder of this Note, except as required by law and as expressly provided in this Note.

(13) SECURITY. This Note and the Other Notes are secured to the extent and in the manner set forth in the Security Documents.

(14) COVENANTS.

(a) Rank. All payments due under this Note (a) shall rank *pari passu* with all Other Notes and Additional Notes and (b) shall be senior to all other Indebtedness of the Company and its Subsidiaries.

(b) Incurrence of Indebtedness. So long as this Note is outstanding, the Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, incur or guarantee, assume or suffer to exist any Indebtedness, other than Permitted Indebtedness.

(c) Existence of Liens. So long as this Note is outstanding, without the prior written consent of the Collateral Agent (as defined in the Agreement), the Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, allow or suffer to exist any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by the Company or any of its Subsidiaries (collectively, "**Liens**") other than Permitted Liens.

(d) Restricted Payments.

(i) The Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, redeem, defease, repurchase, repay or make any payments in respect of, by the payment of cash or cash equivalents (in whole or in part, whether by way of open market purchases, tender offers, private transactions or otherwise), all or any portion of any Indebtedness (other than this Note and the Other Notes), whether by way of payment in respect of principal of (or premium, if any) or interest on, such Indebtedness if at the time such payment is due or is otherwise made or, after giving effect to such payment, an event constituting, or that with the passage of time and without being cured would constitute, an Event of Default has occurred and is continuing.

(ii) Except for payments in the ordinary course of business, the Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, redeem, defease, repurchase, repay or make any payments in respect of, by the payment of cash or cash equivalents (in whole or in part, whether by way of open market purchases, tender offers, private transactions or otherwise), all or any portion of any Indebtedness (including, without limitation Permitted Indebtedness other than this Note and the Other Notes), by way of payment in respect of principal of (or premium, if any) such Indebtedness. For clarity, such restriction shall not preclude the payment of regularly scheduled interest payments which may accrue under such Permitted Indebtedness.

(e) Restriction on Redemption and Cash Dividends. Until all of the Notes have been converted, redeemed or otherwise satisfied in accordance with their terms, the Company shall not, and the Company shall not permit any of its Subsidiaries to, directly or indirectly, redeem or repurchase its Equity Interest, or permit any Subsidiary to redeem or repurchase its Equity Interests (except on a pro rata basis among all holders thereof) or declare or pay any cash dividend or distribution on any Equity Interest of the Company or of its Subsidiaries without in each case the prior express written consent of the Required Holders.

(f) Change in Nature of Business. The Company shall not make, or permit any of its Subsidiaries to make, any change in the nature of its business as described in the Company's most recent Annual Report filed on Form 10-K with the SEC. Without the prior written consent of the Required Holders, the Company shall not modify its corporate structure or purpose.

(g) Intellectual Property. The Company shall not, and the Company shall not permit any of its Subsidiaries, directly or indirectly, to encumber or allow any Liens on, any of its copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work, whether published or unpublished, any patents, patent applications and like protections, including improvements, divisions, continuations, renewals, reissues, extensions, and continuations-in-part of the same, trademarks, service marks and, to the extent permitted under applicable law, any applications therefor, whether registered or not, and the goodwill of the business of the Company and its Subsidiaries connected with and symbolized thereby, know-how, operating manuals, trade secret rights, rights to unpatented inventions, and any claims for damage by way of any past, present, or future infringement of any of the foregoing, other than Permitted Liens.

(h) Preservation of Existence, Etc. The Company shall maintain and preserve, and cause each of its Subsidiaries to maintain and preserve, its existence, rights and privileges, and become or remain, and cause each of its Subsidiaries to become or remain, duly qualified and in good standing in each jurisdiction in which the character of the properties owned or leased by it or in which the transaction of its business makes such qualification necessary.

(i) Maintenance of Properties, Etc. The Company shall maintain and preserve, and cause each of its Subsidiaries to maintain and preserve, all of its properties which are necessary or useful in the proper conduct of its business in good working order and condition, ordinary wear and tear excepted, and comply, and cause each of its Subsidiaries to comply, at all times with the provisions of all leases to which it is a party as lessee or under which it occupies property, so as to prevent any loss or forfeiture thereof or thereunder.

(j) Maintenance of Insurance. The Company shall maintain, and cause each of its Subsidiaries to maintain, insurance with responsible and reputable insurance companies or associations (including, without limitation, comprehensive general liability, hazard, rent and business interruption insurance) with respect to its properties (including all real properties leased or owned by it) and business, in such amounts and covering such risks as is required by any governmental authority having jurisdiction with respect thereto or as is carried generally in accordance with sound business practice by companies in similar businesses similarly situated.

(k) Transactions with Affiliates. The Company shall not, nor shall it permit any of its Subsidiaries to, enter into, renew, extend or be a party to, any transaction or series of related transactions (including, without limitation, the purchase, sale, lease, transfer or exchange of property or assets of any kind or the rendering of services of any kind) with any Affiliate, except in the ordinary course of business in a manner and to an extent consistent with past practice and necessary or desirable for the prudent operation of its business, for fair consideration and on terms no less favorable to it or its Subsidiaries than would be obtainable in a comparable arm's length transaction with a Person that is not an Affiliate thereof.

(15) VOTE TO ISSUE, OR CHANGE THE TERMS OF, NOTES. The affirmative vote at a meeting duly called for such purpose or the written consent without a meeting of the Required Holders shall be required for any change or amendment or waiver of any provision to this Note or any of the Other Notes; provided that any such amendment or waiver that complies with the foregoing but that disproportionately, materially and adversely affects the rights and obligations of any Holder relative to the comparable rights and obligations of the other Holders shall require the prior written consent of such adversely affected Holder. Any change, amendment or waiver by the Company and the Required Holders shall be binding on the Holder of this Note and all holders of the Other Notes.

(16) TRANSFER. This Note and any shares of Common Stock issued upon conversion of this Note may be offered, sold, assigned or transferred by the Holder without the consent of the Company, subject only to the provisions of Section 2(f) of the Agreement.

(17) REISSUANCE OF THIS NOTE.

(a) Transfer. If this Note is to be transferred, the Holder shall surrender this Note to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Note (in accordance with Section 17(d) and subject to Section 3(c)(iii)), registered as the Holder may request, representing the outstanding Principal being transferred by the Holder and, if less than the entire outstanding Principal is being transferred, a new Note (in accordance with Section 17(d)) to the Holder representing the outstanding Principal not being transferred. The Holder and any assignee, by acceptance of this Note, acknowledge and agree that, by reason of the provisions of Section 3(c)(iii) following conversion or redemption of any portion of this Note, the outstanding Principal represented by this Note may be less than the Principal stated on the face of this Note.

(b) Lost, Stolen or Mutilated Note. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Note, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Note, the Company shall execute and deliver to the Holder a new Note (in accordance with Section 17(d)) representing the outstanding Principal.

(c) Note Exchangeable for Different Denominations. This Note is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Note or Notes (in accordance with Section 17(d) and in Principal amounts of at least \$100,000) representing in the aggregate the outstanding Principal of this Note, and each such new Note will represent such portion of such outstanding Principal as is designated by the Holder at the time of such surrender.

(d) Issuance of New Notes. Whenever the Company is required to issue a new Note pursuant to the terms of this Note, such new Note (i) shall be of like tenor with this Note, (ii) shall represent, as indicated on the face of such new Note, the Principal remaining outstanding (or in the case of a new Note being issued pursuant to Section 17(a) or Section 17(c), the Principal designated by the Holder which, when added to the principal represented by the other new Notes issued in connection with such issuance, does not exceed the Principal remaining outstanding under this Note immediately prior to such issuance of new Notes), (iii) shall have an issuance date, as indicated on the face of such new Note, which is the same as the Issuance Date of this Note, (iv) shall have the same rights and conditions as this Note, and (v) shall represent accrued and unpaid Interest and Late Charges, if any, on the Principal and Interest of this Note, from the Issuance Date.

(18) REMEDIES, CHARACTERIZATIONS, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF.

The remedies provided in this Note shall be cumulative and in addition to all other remedies available under this Note and any of the other Transaction Documents at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the Holder's right to pursue actual and consequential damages for any failure by the Company to comply with the terms of this Note. Amounts set forth or provided for herein with respect to payments, conversion and the like (and the computation thereof) shall be the amounts to be received by the Holder and shall not, except as expressly provided herein, be subject to any other obligation of the Company (or the performance thereof). The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the Holder shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

(19) PAYMENT OF COLLECTION, ENFORCEMENT AND OTHER COSTS. If (a) this Note is placed in the hands of an attorney for collection or enforcement or is collected or enforced through any legal proceeding or the Holder otherwise takes action to collect amounts due under this Note or to enforce the provisions of this Note or (b) there occurs any bankruptcy, reorganization, receivership of the Company or other proceedings affecting Company creditors' rights and involving a claim under this Note, then the Company shall pay the costs incurred by the Holder for such collection, enforcement or action or in connection with such bankruptcy, reorganization, receivership or other proceeding, including, but not limited to, attorneys' fees and disbursements.

(20) CONSTRUCTION; HEADINGS. This Note shall be deemed to be jointly drafted by the Company and all the purchasers of the Notes pursuant to the Agreement (the "**Purchasers**") and shall not be construed against any person as the drafter hereof. The headings of this Note are for convenience of reference and shall not form part of, or affect the interpretation of, this Note.

(21) FAILURE OR INDULGENCE NOT WAIVER. No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

(22) DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Closing Bid Price, the Closing Sale Price or the Weighted Average Price or the arithmetic calculation of the Conversion Rate, the Conversion Price or any Redemption Price, the Company shall submit the disputed determinations or arithmetic calculations via facsimile or electronic mail within one (1) Business Day of receipt, or deemed receipt, of the Conversion Notice or Redemption Notice or other event giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation within one (1) Business Day of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within one Business Day submit via facsimile or electronic mail (a) the disputed determination of the Closing Bid Price, the Closing Sale Price or the Weighted Average Price to an independent, reputable investment bank selected by the Holder and approved by the Company, such approval not to be unreasonably withheld or delayed, or (b) the disputed arithmetic calculation of the Conversion Rate, Conversion Price or any Redemption Price to an independent, outside accountant, selected by the Holder and approved by the Company, such approval not to be unreasonably withheld or delayed. The Company, at the Company's expense, shall cause the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than five (5) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

(23) NOTICES; PAYMENTS.

(a) Notices. Whenever notice is required to be given under this Note, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Note, including in reasonable detail a description of such action and the reason therefore. Without limiting the generality of the foregoing, the Company shall give written notice to the Holder (i) immediately upon any adjustment of the Conversion Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least twenty (20) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Stock, (B) with respect to any pro rata subscription offer to holders of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation, provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder.

(b) Payments. Whenever any payment of cash is to be made by the Company to any Person pursuant to this Note, such payment shall be made in lawful money of the United States of America by a check drawn on the account of the Company and sent via overnight courier service to such Person at such address as previously provided to the Company in writing (which address, in the case of each of the Purchasers, shall initially be as set forth on the Schedule of Buyers attached to the Agreement); provided, that the Holder may elect to receive a payment of cash via wire transfer of immediately available funds by providing the Company with prior written notice setting out such request and the Holder's wire transfer instructions. Whenever any amount expressed to be due by the terms of this Note is due on any day which is not a Business Day, the same shall instead be due on the next succeeding day which is a Business Day. Any amount of Principal or other amounts due under the Transaction Documents which is not paid when due shall result in a late charge being incurred and payable by the Company in an amount equal to interest on such amount at the rate of eighteen percent (18.0%) per annum from the date such amount was due until the same is paid in full ("**Late Charge**").

(24) CANCELLATION. After all Principal, accrued Interest and other amounts at any time owed on this Note have been paid in full, this Note shall automatically be deemed canceled, shall be surrendered to the Company for cancellation and shall not be reissued.

(25) WAIVER OF NOTICE. To the extent permitted by law, the Company hereby waives demand, notice, protest and all other demands and notices in connection with the delivery, acceptance, performance, default or enforcement of this Note and the Agreement.

(26) GOVERNING LAW; JURISDICTION; JURY TRIAL. This Note shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Note shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address it set forth on the signature page hereto and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS NOTE OR ANY TRANSACTION CONTEMPLATED HEREBY.**

(27) SEVERABILITY. If any provision of this Note is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Note so long as this Note as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

(28) DISCLOSURE. Upon receipt or delivery by the Company of any notice in accordance with the terms of this Note, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries, the Company shall within one (1) Business Day after any such receipt or delivery publicly disclose such material, nonpublic information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its Subsidiaries, the Company so shall indicate to such Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries.

(29) [Intentionally omitted.]

(30) CERTAIN DEFINITIONS. For purposes of this Note, the following terms shall have the following meanings:

(a) “**Additional Notes**” means (i) those certain senior secured convertible notes issued by the Company pursuant to that certain Securities Purchase Agreement, dated as of April 22, 2015 by and among the Company and the investors listed on the signature pages attached thereto, as amended to date, and that certain Securities Purchase Agreement, dated as of May 7, 2015 by and among the Company and the investors listed on the signature pages attached thereto, as amended to date, which senior secured convertible notes have been amended and restated pursuant to those certain amendment agreements dated November 23, 2016, as further amended to date, (ii) those certain senior secured convertible notes, as amended to date, issued by the Company pursuant to that certain Securities Purchase Agreement, dated as of November 23, 2016 by and among the Company and the investors listed on the signature pages attached thereto, as amended to date, (iii) those certain senior secured convertible notes issued by the Company pursuant to that certain Securities Purchase Agreement, dated as of September 19, 2017 by and among the Company and the investors listed on the signature pages attached thereto, as subsequently amended, restated or modified thereafter, and (iv) those certain senior secured convertible notes issued by the Company pursuant to that certain Securities Purchase Agreement, dated as of June 5, 2018 by and among the Company and the investors listed on the signature pages attached thereto, as subsequently amended, restated or modified thereafter.

(b) “**Affiliate**” means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that “control” of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) “**Agreement**” means that certain securities purchase agreement dated as of the Subscription Date by and among the Company and the Purchasers of the Notes pursuant to which the Company issued the Notes and Warrants, as amended, restated, modified or joined from time to time.

(d) “**Attribution Parties**” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the Exchange Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(e) [Intentionally omitted.]

(f) “**Bloomberg**” means Bloomberg Financial Markets.

(g) “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(h) “**Change of Control**” means any Fundamental Transaction other than (i) any reorganization, recapitalization or reclassification of the Common Stock in which holders of the Company’s voting power immediately prior to such reorganization, recapitalization or reclassification continue after such reorganization, recapitalization or reclassification to hold publicly traded securities and, directly or indirectly, are, in all material respect, the holders of the voting power of the surviving entity (or entities with the authority or voting power to elect the members of the board of directors (or their equivalent if other than a corporation) of such entity or entities) after such reorganization, recapitalization or reclassification or (ii) pursuant to a migratory merger effected solely for the purpose of changing the jurisdiction of incorporation of the Company.

(i) “**Closing Bid Price**” and “**Closing Sale Price**” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or last trade price, respectively, of such security prior to 4:00:00 p.m., New York Time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the OTC Link or “pink sheets” by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 22. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction during the applicable calculation period.

(j) “**Contingent Obligation**” means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any Indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto.

(k) “**Conversion Shares**” means shares of Common Stock issuable by the Company pursuant to the terms of any of the Notes, including, without limitation, any related Interest and Late Charges, if any, so converted or redeemed.

(l) “**Eligible Market**” means The New York Stock Exchange, The NASDAQ Global Market, The NASDAQ Global Select Market, The NASDAQ Capital Market, the NYSE American or the Principal Market.

(m) “**Equity Conditions**” means each of the following conditions: (i) on each day during an Equity Conditions Measuring Period, all Conversion Shares issuable pursuant to the terms of this Note and the Other Notes and the Warrant Shares issuable upon exercise of the Warrants, including the shares of Common Stock issuable upon conversion of the Conversion Amount that is subject to the Automatic Conversion, shall be eligible for sale without restriction pursuant to Rule 144 and without the need for registration under any applicable federal or state securities laws; (ii) on each day during the Equity Conditions Measuring Period, the Common Stock is designated for quotation on the Principal Market or any other Eligible Market and shall not have been suspended from trading on such exchange or market (other than suspensions of not more than two (2) days and occurring prior to the applicable date of determination due to business announcements by the Company) nor shall delisting or suspension by such exchange or market been threatened, commenced or pending either (A) in writing by such exchange or market or (B) as a result of the Company’s failure to meet the then effective minimum requirements for continued listing on such exchange or market; (iii) during the Equity Conditions Measuring Period, in the event of an Automatic Conversion or the transmission to the Company of a Conversion Notice pursuant to Section 3(c)(i), the Company shall have delivered Conversion Shares pursuant to the terms of this Note and the Other Notes and Warrant Shares upon exercise of the Warrants to the holders on a timely basis as set forth in Section 3(c) hereof (and analogous provisions under the Other Notes) and Section 1(a) of the Warrants; (iv) the shares of Common Stock issuable upon conversion of the Conversion Amount that is subject to the Automatic Conversion requiring the satisfaction of the Equity Conditions may be issued in full without violating Section 3(d) hereof and the rules or regulations of the Principal Market or any other applicable Eligible Market; (v) during the Equity Conditions Measuring Period, the Company shall not have failed to timely make any payments within five (5) Business Days of when such payment is due pursuant to any Transaction Document; (vi) during the Equity Conditions Measuring Period, there shall not have occurred either (A) the public announcement of a pending, proposed or intended Fundamental Transaction which has not been abandoned, terminated or consummated, (B) an Event of Default or (C) an event that with the passage of time or giving of notice would constitute an Event of Default; (vii) the Company shall have no knowledge of any fact that would cause any shares of Common Stock issuable pursuant to the terms of this Note and the Other Notes, and shares of Common Stock issuable upon exercise of the Warrants, including the shares of Common Stock issuable upon conversion of the Conversion Amount that is subject to the Automatic Conversion requiring the satisfaction of the Equity Conditions, not to be eligible for sale without restriction pursuant to Rule 144 and without the requirement to be in compliance with Rule 144(c)(1) (or any successor thereto) promulgated under the Securities Act and any applicable state securities laws; (viii) during the Equity Conditions Measuring Period, the Company otherwise shall have been in compliance with and shall not have breached any provision, covenant, representation or warranty of any Transaction Document; (ix) the Holder shall not be in possession of any material, nonpublic information received from the Company, any Subsidiary or its respective agent or affiliates; and (x) the shares of Common Stock issuable upon conversion of the Conversion Amount that is subject to the Automatic Conversion requiring the satisfaction of the Equity Conditions are duly authorized and listed and eligible for trading without restriction on an Eligible Market.

(n) **“Equity Conditions Failure”** means that on any day during the applicable Equity Conditions Measuring Period, the Equity Conditions have not each been satisfied (or waived in writing by the Holder).

(o) **“Equity Conditions Measuring Period”** means each day during the period beginning twenty (20) Trading Days prior to the applicable date of determination and ending on and including the applicable date of determination.

(p) **“Equity Interests”** means (a) all shares of capital stock (whether denominated as common capital stock or preferred capital stock), equity interests, beneficial, partnership or membership interests, joint venture interests, participations or other ownership or profit interests in or equivalents (regardless of how designated) of or in a Person (other than an individual), whether voting or non-voting and (b) all securities convertible into or exchangeable for any of the foregoing and all warrants, options or other rights to purchase, subscribe for or otherwise acquire any of the foregoing, whether or not presently convertible, exchangeable or exercisable.

(q) **“Exchange Act”** means the Securities Exchange Act of 1934, as amended.

(r) “**Fundamental Transaction**” means (A) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the Exchange Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its Common Stock, (B) that any Subject Entity individually or the Subject Entities in the aggregate is or shall become the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the date of this Note calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(s) “**GAAP**” means United States generally accepted accounting principles, consistently applied.

(t) “**Group**” means a “group” as that term is used in Section 13(d) of the Exchange Act and as defined in Rule 13d-5 thereunder.

(u) “**Guaranty Agreements**” means (A) that certain Guaranty Agreement dated as of April 23, 2015, made by Ener-Core Power, Inc. in favor of the buyers that are party to that certain Securities Purchase Agreement, dated as of April 22, 2015 by and among the Company and the investors listed on the signature pages thereto, as amended from time to time and (B) that certain Guaranty Agreement dated as of November 23, 2016 made by Ener-Core Power, Inc. in favor of the buyers that are party to that certain Securities Purchase Agreement, dated as of November 23, 2016 by and among the Company and the investors listed on the signature pages thereto, as amended by the Guaranty Amendment (as defined in the Agreement) dated as of the Subscription Date, and as amended from time to time.

(v) “**Holiday**” means a day other than a Business Day or on which trading does not take place on the Principal Market.

(w) “**Indebtedness**” of any Person means, without duplication (i) all indebtedness for borrowed money, (ii) all obligations issued, undertaken or assumed as the deferred purchase price of property or services, including (without limitation) “capital leases” in accordance with GAAP (other than trade payables entered into in the ordinary course of business), (iii) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (iv) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (v) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (vi) all monetary obligations under any leasing or similar arrangement which, in connection with GAAP, consistently applied for the periods covered thereby, is classified as a capital lease, (vii) all indebtedness referred to in clauses (i) through (vi) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (viii) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (i) through (vii) above.

(x) “**Initial Closing Date**” means January 18, 2019.

(y) “**Lead Investor**” means Empery Asset Master, Ltd.

(z) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person, including such entity whose common capital stock or equivalent equity security is quoted or listed on an Eligible Market (or, if so elected by the Required Holders, any other market, exchange or quotation system), or, if there is more than one such Person or such entity, the Person or entity designated by the Required Holders or in the absence of such designation, such Person or entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(aa) “**Permitted Indebtedness**” means (i) Indebtedness evidenced by this Note and the Other Notes, (ii) trade payables incurred in the ordinary course of business consistent with past practice, (iii) Indebtedness incurred by the Company that is made expressly subordinate in right of payment to the Indebtedness evidenced by this Note, as reflected in a written agreement acceptable to the Required Holders and approved by the Required Holders in writing, and which Indebtedness does not provide at any time for (a) the payment, prepayment, repayment, repurchase or defeasance, directly or indirectly, of any principal or premium, if any, thereon until ninety-one (91) days after the Maturity Date or later and (b) total interest and fees at a rate in excess of twelve percent (12.0%) per annum, (iv) Indebtedness secured by Permitted Liens described in clauses (iv) of the definition of Permitted Liens, (v) deemed Indebtedness arising from one or more operating leases, including, without limitation, the leases for one or more test turbines from Dresser-Rand, but only if such lease, if secured, is secured solely by such test turbine, (vi) Indebtedness evidenced by the notes issued pursuant to the Securities Purchase Agreement dated as of September 1, 2016 by and among the Company and the investors thereto, as subsequently amended, restated or modified thereafter), (vii) the Additional Notes as in effect on the Subscription Date, provided that the Indebtedness evidenced by the Additional Notes is not increased, refinanced, amended, changed or modified on or after the Subscription Date and (viii) the guarantees pursuant to the Guaranty Agreements.

(bb) “**Permitted Liens**” means (i) any Lien for taxes not yet due or delinquent or being contested in good faith by appropriate proceedings for which adequate reserves have been established in accordance with GAAP, (ii) any statutory Lien arising in the ordinary course of business by operation of law with respect to a liability that is not yet due or delinquent, (iii) any Lien created by operation of law, such as materialmen’s liens, mechanics’ liens and other similar liens, arising in the ordinary course of business with respect to a liability that is not yet due or delinquent or that are being contested in good faith by appropriate proceedings, (iv) Liens (A) upon or in any equipment acquired or held by the Company or any of its Subsidiaries to secure the purchase price of such equipment or Indebtedness incurred solely for the purpose of financing the acquisition or lease of such equipment, or (B) existing on such equipment at the time of its acquisition, provided that the Lien is confined solely to the property so acquired and improvements thereon, and the proceeds of such equipment, (v) Liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by Liens of the type described in clause (iv) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced does not increase, (vi) leases or subleases and licenses and sublicenses granted to others in the ordinary course of the Company’s business, not interfering in any material respect with the business of the Company and its Subsidiaries taken as a whole, (vii) Liens in favor of customs and revenue authorities arising as a matter of law to secure payments of custom duties in connection with the importation of goods, (viii) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default under Section 4(a)(ix), and (ix) Liens securing Permitted Indebtedness set forth in clause (viii) of such definition.

(cc) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(dd) “**Principal Market**” means the OTCQB.

(ee) “**Redemption Dates**” means, collectively, the Event of Default Redemption Dates, the Change of Control Redemption Dates and the Company Optional Redemption Dates, each of the foregoing, individually, a Redemption Date.

(ff) “**Redemption Notices**” means, collectively, the Event of Default Redemption Notices, the Change of Control Redemption Notices and the Company Optional Redemption Notices, each of the foregoing, individually, a Redemption Notice.

(gg) “**Redemption Prices**” means, collectively, the Event of Default Redemption Prices, the Change of Control Redemption Prices and the Company Optional Redemption Prices, each of the foregoing, individually, a Redemption Price.

(hh) [Intentionally omitted.]

(ii) [Intentionally omitted.]

(jj) “**Related Fund**” means, with respect to any Person, a fund or account managed by such Person or an Affiliate of such Person.

(kk) “**Required Holders**” means (i) the Lead Investor so long as the Lead Investor or any of its Affiliates holds any Notes and (ii) the Collateral Agent.

(ll) “**SEC**” means the United States Securities and Exchange Commission.

(mm) “**Securities Act**” means the Securities Act of 1933, as amended.

(nn) “**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, on the Company’s principal Eligible Market with respect to the Common Stock that is in effect on the date of receipt of an applicable Conversion Notice.

(oo) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(pp) “**Subscription Date**” means January 18, 2019.

(qq) “**Subsequent Closing Dates**” has the meaning ascribed to such term in the Agreement.

(rr) “**Successor Entity**” means one or more Person or Persons (or, if so elected by the Holder, the Company or Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or one or more Person or Persons (or, if so elected by the Holder, the Company or the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(ss) “**Trading Day**” means any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded.

(tt) “**Warrants**” has the meaning ascribed to such term in the Agreement, and shall include all warrants issued in exchange therefor or replacement thereof.

(uu) “**Weighted Average Price**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York Time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York Time (or such other time as the Principal Market publicly announces is the official close of trading) as reported by Bloomberg through its “Volume at Price” functions, or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York Time (or such other time as such market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York Time (or such other time as such market publicly announces is the official close of trading) as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported in the OTC Link or “pink sheets” by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 22. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction during the applicable calculation period.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Note to be duly executed as of the Issuance Date set out above.

Ener-Core, Inc.

By: _____
Name: Domonic J. Carney
Title: Chief Financial Officer

EXHIBIT I

ENER-CORE, INC.

CONVERSION NOTICE

Reference is made to the Senior Secured Note (the “**Note**”) issued to the undersigned by Ener-Core, Inc., a Delaware corporation (the “**Company**”). In accordance with and pursuant to the Note, the undersigned hereby elects to convert the Conversion Amount (as defined in the Note) of the Note indicated below into shares of Common Stock par value \$0.0001 per share (the “**Common Stock**”) of the Company, as of the date specified below.

Date of Conversion: _____

Aggregate Conversion Amount to be converted: _____

Please confirm the following information:

Conversion Price: _____

Number of shares of Common Stock to be issued: _____

Please issue the Common Stock into which the Note is being converted in the following name and to the following address:

Issue to: _____

Facsimile Number and Electronic Mail: _____

Authorization: _____

By: _____

Title: _____

Dated: _____

Account Number:
(if electronic book entry transfer) _____

Transaction Code Number:
(if electronic book entry transfer) _____

ACKNOWLEDGMENT

The Company hereby acknowledges this Conversion Notice and hereby directs VStock Transfer, LLC to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated January 18, 2019 from the Company and acknowledged and agreed to by VStock Transfer, LLC.

Ener-Core, Inc.

By: _____
Name:
Title:

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL SELECTED BY THE HOLDER, IN FORM AND SUBSTANCE REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

ENER-CORE, INC.

Warrant To Purchase Common Stock

Warrant No.: _____
 Number of Shares of Common Stock: _____
 Date of Issuance: December [], 2018 (“**Issuance Date**”)

Ener-Core, Inc., a Delaware corporation (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [BUYER], the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, at any time or times on or after the Issuance Date, but not after 11:59 p.m., New York time, on the Expiration Date, (as defined below), _____ () fully paid nonassessable shares of Common Stock, subject to adjustment as provided herein (the “**Warrant Shares**”). Except as otherwise defined herein, capitalized terms in this Warrant to Purchase Common Stock (including any Warrants to Purchase Common Stock issued in exchange, transfer or replacement hereof, this “**Warrant**”), shall have the meanings set forth in Section 17. This Warrant is one of the Warrants to purchase Common Stock (the “**SPA Warrants**”) issued pursuant to Section 1 of that certain Securities Purchase Agreement, dated as of December [], 2018 (the “**Subscription Date**”), by and among the Company and the investors (the “**Buyers**”) referred to therein (as amended, restated, modified or joined from time to time, the “**Securities Purchase Agreement**”). Capitalized terms used herein and not otherwise defined shall have the definitions ascribed to such terms in the Securities Purchase Agreement.

1. EXERCISE OF WARRANT.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder at any time or times on or after the Issuance Date, in whole or in part, by (i) delivery of a written notice, in the form attached hereto as Exhibit A (the “**Exercise Notice**”), of the Holder’s election to exercise this Warrant and (ii) (A) payment to the Company of an amount equal to the applicable Exercise Price multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the “**Aggregate Exercise Price**”) in cash by wire transfer of immediately available funds or (B) by notifying the Company that this Warrant is being exercised pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. On or before the first (1st) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by facsimile or electronic mail an acknowledgment of confirmation of receipt of the Exercise Notice to the Holder and the Company’s transfer agent (the “**Transfer Agent**”). On or before the earlier of (i) the third (3rd) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period, in each case, following the date on which the Holder has delivered the Exercise Notice, so long as the Holder delivers the Aggregate Exercise Price (or notice of a Cashless Exercise) on or prior to the second (2nd) Trading Day following the date on which the Company has received the Exercise Notice (such earlier date, the “**Share Delivery Date**”) (provided that if the Aggregate Exercise Price has not been delivered by such date, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Exercise Price (or notice of a Cashless Exercise) is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the issuance of Warrant Shares via DTC, if any. Upon delivery of the Exercise Notice, the Holder shall be deemed for purposes of Rule 200(b) of Regulation SHO to have become the owner of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder’s DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be, provided that the Holder delivers the Aggregate Exercise Price (or a duly executed notice of a Cashless Exercise) on or prior to the second (2nd) Trading Day following the date on which the Exercise Notice has been delivered to the Company. If this Warrant is physically delivered to the Company in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three (3) Trading Days after any exercise and at its own expense, issue to the Holder (or its designee) a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares issuable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional Warrant Shares are to be issued upon the exercise of this Warrant, but rather the number of Warrant Shares to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. The Company’s obligations to issue and

deliver Warrant Shares in accordance with the terms and subject to the conditions hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination; provided, however, that the Company shall not be required to deliver Warrant Shares with respect to an exercise prior to the Holder's delivery of the Aggregate Exercise Price (or notice of a Cashless Exercise) with respect to such exercise.

(b) Exercise Price. For purposes of this Warrant, “**Exercise Price**” means \$0.10, subject to adjustment as provided herein.

(c) Company’s Failure to Timely Deliver Securities. If the Company shall fail for any reason or for no reason to issue to the Holder on or prior to the Share Delivery Date, if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program, a certificate for the number of shares of Common Stock to which the Holder is entitled and register such shares of Common Stock on the Company’s share register or if the Transfer Agent is participating in the DTC Fast Automated Securities Transfer Program, to credit the Holder’s balance account with DTC, for such number of shares of Common Stock to which the Holder is entitled upon the Holder’s exercise of this Warrant (an “**Exercise Failure**”), then, in addition to all other remedies available to the Holder, and if on or after such Trading Day the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of shares of Common Stock issuable upon such exercise that the Holder anticipated receiving from the Company (a “**Buy-In**”), then the Company shall, within three (3) Trading Days after the Holder’s request and in the Holder’s discretion, either (i) pay cash to the Holder in an amount equal to the Holder’s total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (the “**Buy-In Price**”), at which point the Company’s obligation to deliver such certificate (and to issue such shares of Common Stock) or credit such Holder’s balance account with DTC for such shares of Common Stock shall terminate, or (ii) promptly honor its obligation to deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit such Holder’s balance account with DTC, as applicable, and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock, times (B) any trading price of the Common Stock selected by the Holder in writing as in effect at any time during the period beginning on the applicable Exercise Date and ending on the applicable Share Delivery Date. Nothing shall limit the Holder’s right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver certificates representing shares of Common Stock (or to electronically deliver such shares of Common Stock) upon the exercise of this Warrant as required pursuant to the terms hereof.

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Registration Statement covering the resale of the Warrant Shares that are the subject of the Exercise Notice (the “**Unavailable Warrant Shares**”) is not available for the resale of such Unavailable Warrant Shares, the Holder may, in its sole discretion, elect to exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the “Net Number” of shares of Common Stock determined according to the following formula (a “**Cashless Exercise**”):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{D}$$

For purposes of the foregoing formula:

- A= the total number of shares with respect to which this Warrant is then being exercised.
- B= the arithmetic average of the Closing Sale Prices of the Common Stock for the five (5) consecutive Trading Days ending on the date immediately preceding the date of the Exercise Notice.
- C= the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.
- D= the Closing Sale Price of the Common Stock on the date of the Exercise Notice.

For purposes of Rule 144(d) promulgated under the 1933 Act, as in effect on the date hereof, it is intended that the Warrant Shares issued in a Cashless Exercise shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued pursuant to the Securities Purchase Agreement.

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 12.

(f) Beneficial Ownership. Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of [4.99%/9.99%]¹ (the “**Maximum Percentage**”) of the number of shares of Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and the other Attribution Parties shall include the number of shares of Common Stock held by the Holder and all other Attribution Parties plus the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the other SPA Warrants) beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f). For purposes of this Section 1(f), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the “**1934 Act**”). For purposes of this Warrant, in determining the number of outstanding shares of Common Stock the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company’s most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, Current Report on Form 8-K or other public filing with the Securities and Exchange Commission (the “**SEC**”), as the case may be, (y) a more recent public announcement by the Company or (3) any other written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding (the “**Reported Outstanding Share Number**”). If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding shares of Common Stock is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of shares of Common Stock then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 1(f), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the “**Reduction Shares**”) and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Business Day confirm orally and in writing or by electronic mail to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of shares of Common Stock to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding shares of Common Stock (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder’s and the other Attribution Parties’ aggregate beneficial ownership exceeds the Maximum Percentage (the “**Excess Shares**”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of SPA Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the shares of Common Stock issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

¹ At the Holder’s election.

(g) Insufficient Authorized Shares. If at any time while this Warrant remains outstanding the Company does not have a sufficient number of authorized and unreserved shares of Common Stock to satisfy its obligation to reserve for issuance upon exercise of this Warrant at least a number of shares of Common Stock equal to 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of all of this Warrant then outstanding (the “**Required Reserve Amount**” and the failure to have such sufficient number of authorized and unreserved shares of Common Stock, an “**Authorized Share Failure**”), then the Company shall immediately take all action necessary to increase the Company’s authorized shares of Common Stock to an amount sufficient to allow the Company to reserve the Required Reserve Amount for this Warrant then outstanding. Without limiting the generality of the foregoing sentence, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its stockholders for the approval of an increase in the number of authorized shares of Common Stock. In connection with such meeting, the Company shall provide each stockholder with a proxy statement and shall use its best efforts to solicit its stockholders’ approval of such increase in authorized shares of Common Stock and to cause its board of directors to recommend to the stockholders that they approve such proposal. Notwithstanding the foregoing, if any such time of an Authorized Share Failure, the Company is able to obtain the written consent of a majority of the shares of its issued and outstanding Common Stock to approve the increase in the number of authorized shares of Common Stock, the Company may satisfy this obligation by obtaining such consent and submitting for filing with the SEC an Information Statement on Schedule 14C. In the event that upon any exercise of this Warrant, the Company does not have sufficient authorized shares to deliver in satisfaction of such exercise, then unless the Holder elects to void such attempted exercise, the Holder may require the Company to pay to the Holder within three (3) Trading Days of the applicable exercise, cash in an amount equal to the product of (i) the quotient determined by dividing (x) the number of Warrant Shares that the Company is unable to deliver pursuant to this Section 1(g), by (y) the total number of Warrant Shares issuable upon exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant) and (ii) the Black Scholes Value; provided, that (x) references to “the day immediately following the public announcement of the applicable Fundamental Transaction” in the definition of “Black Scholes Value” shall instead refer to “the date the Holder exercises this Warrant and the Company cannot deliver the required number of Warrant Shares because of an Authorized Share Failure” and (y) clause (iii) of the definition of “Black Scholes Value” shall instead refer to “the underlying price per share used in such calculation shall be the highest Weighted Average Price during the period beginning on the date of the applicable date of exercise and the date that the Company makes the applicable cash payment.”

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and the number of Warrant Shares shall be adjusted from time to time as follows:

(a) Voluntary Adjustment By Company. The Company may at any time during the term of this Warrant, with the prior written consent of the Required Holders, reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the Board of Directors of the Company.

(b) Adjustment Upon Subdivision or Combination of Shares of Common Stock. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding shares of Common Stock into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding shares of Common Stock into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased. Any adjustment under this Section 2(b) shall become effective at the close of business on the date the subdivision or combination becomes effective.

3. RIGHTS UPON DISTRIBUTION OF ASSETS. If the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a “**Distribution**”), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that to the extent that the Holder’s right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Distribution (and beneficial ownership) to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

4. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. In addition to any adjustments pursuant to Section 2 above, if at any time on or after the Subscription Date and on or prior to the Expiration Date, the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the "**Purchase Rights**"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such shares of Common Stock as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) Fundamental Transactions. The Company shall not enter into or be party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance satisfactory to the Required Holders and approved by the Required Holders prior to such Fundamental Transaction, including agreements, if so requested by the Holder, to deliver to each holder of the SPA Warrants in exchange for such SPA Warrants a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, an adjusted exercise price equal to the value for the shares of Common Stock reflected by the terms of such Fundamental Transaction, and exercisable for a corresponding number of shares of capital stock equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and satisfactory to the Required Holders, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the occurrence or consummation of such Fundamental Transaction). Upon the occurrence or consummation of any Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of any Fundamental Transaction that, the Company and the Successor Entity or Successor Entities, jointly and severally, shall succeed to, and the Company shall cause any Successor Entity or Successor Entities to jointly and severally succeed to, and be added to the term "Company" under this Warrant (so that from and after the date of such Fundamental Transaction, each and every provision of this Warrant referring to the "Company" shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Company and the Successor Entity or Successor Entities, jointly and severally, may exercise every right and power of the Company prior thereto and shall assume all of the obligations of the Company prior thereto under this Warrant with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company in this Warrant, and, solely at the request of the Holder, if the Successor Entity and/or Successor Entities is/are a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market, shall deliver (in addition to and without limiting any right under this Warrant) to the Holder in exchange for this Warrant a security of the Successor Entity and/or Successor Entities evidenced by a written instrument substantially similar in form and substance to this Warrant and exercisable for a corresponding number of shares of capital stock of the Successor Entity and/or Successor Entities (the "**Successor Capital Stock**") equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction (such corresponding number of shares of Successor Capital Stock to be delivered to the Holder shall be equal to the greater of (A) the quotient of (i) the aggregate dollar value of all consideration (including cash consideration and any consideration other than cash ("**Non-Cash Consideration**"), in such Fundamental Transaction, as such values are set forth in any definitive agreement for the Fundamental Transaction that has been executed at the time of the first public announcement of the Fundamental Transaction or, if no such value is determinable from such definitive agreement, as determined in accordance with Section 12 with the term "Non-Cash Consideration" being substituted for the term "Exercise Price") that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant) (the "**Aggregate Consideration**") divided by (ii) the per share Closing Sale Price of such Successor Capital Stock on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (B) the product of (i) the Aggregate Consideration and (ii) the highest exchange ratio pursuant to which any stockholder of the Company may exchange Common Stock for Successor Capital Stock) (provided, however, to the extent that the Holder's right to receive any such shares of publicly traded common stock (or their equivalent) of the Successor Entity would result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, if applicable, then the Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held in abeyance for the Holder until such time or times, as its right thereto would not result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be delivered such shares to the extent as if there had been no such limitation), and such security shall be satisfactory to the Holder, and with an identical exercise price to the Exercise Price hereunder (such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting after the consummation or occurrence of such Fundamental Transaction the economic value of this Warrant that was in effect immediately prior to the consummation or occurrence of such Fundamental Transaction, as elected by the Holder solely at its option). Upon occurrence or consummation of the Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the occurrence or consummation of the Fundamental Transaction, as elected by the Holder solely at its option, shares of Common Stock, Successor Capital Stock or, in lieu of the shares of Common Stock or Successor Capital Stock (or other securities, cash, assets or other property purchasable upon the exercise of this Warrant prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), which for purposes of clarification may continue to be shares of Common Stock, if any, that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the occurrence or consummation of any Fundamental Transaction pursuant to which holders of shares of Common Stock are entitled to receive securities, cash, assets or other property with respect to or in exchange for shares of Common Stock (a "**Corporate Event**"), the Company shall make appropriate provision to insure that, and any applicable Successor Entity or Successor Entities shall ensure that, and it shall be a required condition to the occurrence or consummation of such Corporate Event that, the Holder will thereafter have the right to receive upon exercise of this Warrant at any time after the occurrence or consummation of the Corporate Event, shares of Common Stock or Successor Capital Stock or, if so elected by the Holder, in lieu of the shares of Common Stock (or other securities, cash, assets or other property) purchasable upon the exercise of this Warrant prior to such Corporate Event (but not in lieu of such items still issuable under Sections 3 and 4(a), which shall continue to be receivable on the Common Stock or on such shares of stock, securities, cash, assets or any other property otherwise receivable with respect to or in exchange for shares of Common Stock), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or

subscription rights and any shares of Common Stock) which the Holder would have been entitled to receive upon the occurrence or consummation of such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event, had this Warrant been exercised immediately prior to such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event (without regard to any limitations on exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder. The provisions of this Section 4(b) shall apply similarly and equally to successive Fundamental Transactions and Corporate Events.

(c) Notwithstanding the foregoing, in the event of a Fundamental Transaction, at the request of the Holder delivered before the thirtieth (30th) day after the occurrence or consummation of such Fundamental Transaction, the Company (or the Successor Entity) shall purchase this Warrant from the Holder by paying to the Holder, within ten (10) Business Days after such request (or, if later, on the effective date of the Fundamental Transaction), at the option of the Company, either (x) Common Stock (or corresponding consideration payable as provided in the third-to-last sentence of Section 4(b) in connection with a Corporate Event, as applicable) valued at the value of the consideration received by the shareholders in such Fundamental Transaction or (y) cash, in each case, in an amount equal to the Black Scholes Value of the remaining unexercised portion of this Warrant on the effective date of such Fundamental Transaction.

5. NONCIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Certificate of Incorporation or Bylaws, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all of the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any shares of Common Stock receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable shares of Common Stock upon the exercise of this Warrant, and (iii) shall, so long as any of the SPA Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued shares of Common Stock, solely for the purpose of effecting the exercise of the SPA Warrants, 100% of the number of shares of Common Stock as shall from time to time be necessary to effect the exercise of the SPA Warrants then outstanding (without regard to any limitations on exercise).

6. WARRANT HOLDER NOT DEEMED A STOCKHOLDER. Except as otherwise specifically provided herein, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of capital stock of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide the Holder with copies of the same notices and other information given to the stockholders of the Company generally, contemporaneously with the giving thereof to the stockholders.

7. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, that no SPA Warrants for fractional Warrant Shares shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of shares of Common Stock underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

8. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the shares of Common Stock, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of shares of Common Stock or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation; provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder. It is expressly understood and agreed that the time of exercise specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended or waived and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Required Holders.

10. GOVERNING LAW; JURISDICTION; JURY TRIAL. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at the address set forth in Section 9(f) of the Securities Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

11. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and all the Buyers and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile or electronic mail within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) Business Days submit via facsimile or electronic mail (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

14. TRANSFER; LEGENDS. This Warrant and the Warrant Shares may be offered for sale, sold, transferred, pledged or assigned without the consent of the Company, except as may otherwise be required by Section 2(f) of the Securities Purchase Agreement, and the Warrants and Warrant Shares shall bear any legends required by Section 2(g) of the Securities Purchase Agreement.

15. SEVERABILITY. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

16. DISCLOSURE. Upon receipt or delivery by the Company of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries (as defined in the Securities Purchase Agreement), the Company shall within one (1) Business Day after any such receipt or delivery publicly disclose such material, nonpublic information on a Current Report on Form 8-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its Subsidiaries, the Company so shall indicate to such Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries.

17. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) “**1933 Act**” means the Securities Act of 1933, as amended.

(b) “**Affiliate**” means, with respect to any Person, any other Person that directly or indirectly controls, is controlled by, or is under common control with, such Person, it being understood for purposes of this definition that “control” of a Person means the power directly or indirectly either to vote 10% or more of the stock having ordinary voting power for the election of directors of such Person or direct or cause the direction of the management and policies of such Person whether by contract or otherwise.

(c) “**Attribution Parties**” means, collectively, the following Persons and entities: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Company’s Common Stock would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(d) “**Black Scholes Value**” means the value of this Warrant based on the Black-Scholes Option Pricing Model obtained from the “OV” function on Bloomberg determined as of the day immediately following the public announcement of the applicable Fundamental Transaction, or, if the Fundamental Transaction is not publicly announced, the date the Fundamental Transaction is consummated, for pricing purposes and reflecting (i) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of this Warrant as of such date of request, (ii) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the day immediately following the public announcement of the applicable Fundamental Transaction, or, if the Fundamental Transaction is not publicly announced, the date the Fundamental Transaction is consummated, (iii) the underlying price per share used in such calculation shall be the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in the Fundamental Transaction, (iv) a zero cost of borrow and (v) a 360 day annualization factor.

(e) “**Bloomberg**” means Bloomberg Financial Markets.

(f) “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(g) “**Closing Bid Price**” and “**Closing Sale Price**” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the OTC Link or “pink sheets” by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(h) “**Common Stock**” means (i) the Company’s shares of common stock, par value \$0.0001 per share, and (ii) any capital stock into which such common stock shall have been changed or any capital stock resulting from a reclassification of such common stock.

(i) “**Convertible Securities**” means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock.

(j) “**Eligible Market**” means the Principal Market, the NYSE American LLC, The NASDAQ Global Market, The NASDAQ Global Select Market, The NASDAQ Capital Market or The New York Stock Exchange, Inc.

(k) “**Expiration Date**” means the date sixty (60) months after the Issuance Date or, if such date falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a “**Holiday**”), the next day that is not a Holiday.

(l) **“Fundamental Transaction”** means (A) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Stock be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least either (x) 50% of the outstanding shares of Common Stock, (y) 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of shares of Common Stock such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding shares of Common Stock, (y) at least 50% of the outstanding shares of Common Stock calculated as if any shares of Common Stock held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of shares of Common Stock such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding shares of Common Stock, or (v) reorganize, recapitalize or reclassify its shares of Common Stock, (B) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding shares of Common Stock, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Stock not held by all such Subject Entities as of the Subscription Date calculated as if any shares of Common Stock held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding shares of Common Stock or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other stockholders of the Company to surrender their shares of Common Stock without approval of the stockholders of the Company or (C) directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(m) **“Group”** means a “group” as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(n) **“Lead Investor”** means Empery Asset Master, Ltd.

(o) **“Options”** means any rights, warrants or options to subscribe for or purchase shares of Common Stock or Convertible Securities.

(p) **“Parent Entity”** of a Person means an entity that, directly or indirectly, controls the applicable Person, including such entity whose common shares or common stock or equivalent equity security is quoted or listed on an Eligible Market (or, if so elected by the Required Holders, any other market, exchange or quotation system), or, if there is more than one such Person or such entity, the Person or such entity designated by the Required Holders or in the absence of such designation, such Person or entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(q) **“Person”** means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(r) **“Principal Market”** means the OTCQB.

(s) [Reserved].

(t) “**Required Holders**” means the holders of the SPA Warrants representing at least a majority of the shares of Common Stock underlying the SPA Warrants then outstanding and shall include the Lead Investor so long as the Lead Investor or any of its Affiliates holds any SPA Warrants.

(u) “**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, on the Company’s principal Eligible Market with respect to the Common Stock that is in effect on the date of receipt of an applicable Exercise Notice.

(v) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(w) “**Successor Entity**” means one or more Person or Persons (or, if so elected by the Holder, the Company or Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or one or more Person or Persons (or, if so elected by the Holder, the Company or the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(x) “**Trading Day**” means any day on which the Common Stock is traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded.

(y) “**Weighted Average Price**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as the Principal Market publicly announces is the official close of trading), as reported by Bloomberg through its “Volume at Price” function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time (or such other time as such market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as such market publicly announces is the official close of trading), as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest Closing Bid Price and the lowest closing ask price of any of the market makers for such security as reported in the OTC Link or “pink sheets” by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12 with the term “Weighted Average Price” being substituted for the term “Exercise Price.” All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Stock to be duly executed as of the Issuance Date set out above.

ENER-CORE, INC.

By: _____
Name: Domonic J. Carney
Title: Chief Financial Officer

EXERCISE NOTICE

TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK

ENER-CORE, INC.

The undersigned holder hereby exercises the right to purchase _____ of the shares of Common Stock (“**Warrant Shares**”) of Ener-Core, Inc., a Delaware corporation (the “**Company**”), evidenced by the attached Warrant to Purchase Common Stock (the “**Warrant**”). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as:

_____ a “Cash Exercise” with respect to _____ Warrant Shares; and/or

_____ a “Cashless Exercise” with respect to _____ Warrant Shares.

2. Payment of Exercise Price. In the event that the holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the holder shall pay the Aggregate Exercise Price in the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to the holder _____ Warrant Shares in accordance with the terms of the Warrant.

Date: _____, _____

Name of Registered Holder

By: _____

Name:

Title:

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs VStock Transfer, LLC to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated December [], 2018 from the Company and acknowledged and agreed to by VStock Transfer, LLC.

ENER-CORE, INC.

By: _____
Name: _____
Title: _____

**FOURTH AMENDMENT TO
CONVERTIBLE UNSECURED NOTES**

THIS FOURTH AMENDMENT TO CONVERTIBLE UNSECURED NOTES (this “**Amendment**”) is made and entered into as of December [], 2018 by and among Ener-Core, Inc., a Delaware corporation (the “**Company**”), and the undersigned, and amends those certain Convertible Unsecured Notes dated as of September 1, 2016 (as amended, the “**Notes**”) as issued by the Company pursuant to that certain Securities Purchase Agreement, dated September 1, 2016, by and among the Company, the “**Buyers**” identified therein, and the Subordinated Agent identified therein (as amended to date, the “**Agreement**”). Capitalized terms used herein but not otherwise defined herein shall have the meanings ascribed to such terms in the Notes.

RECITALS

WHEREAS, pursuant to Section 13 of the Notes, the written consent of the holders of Notes representing at least a majority of the aggregate principal amount of the Notes then outstanding (the “**Required Holders**”) shall be required for any change or amendment or waiver of any provision of the Notes, provided that any such amendment or waiver does not disproportionately, materially and adversely affect the rights and obligations of any Holder relative to the comparable rights and obligations of the other Holders;

WHEREAS, any amendment effected in accordance with Section 13 of the Notes is binding upon all holders of Notes; and

WHEREAS, the parties hereto wish to amend the Notes as set forth below in order to facilitate the Company’s efforts to consummate financing activities to support working capital needs.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties, intending to be legally bound, agree as follows:

**ARTICLE I
AMENDMENTS TO THE NOTES**

Section 1.1 Legend. The second paragraph on the first page of the Notes is hereby amended and restated as follows:

“THIS INSTRUMENT AND THE RIGHTS AND OBLIGATIONS EVIDENCED HEREBY ARE SUBORDINATE IN THE MANNER AND TO THE EXTENT SET FORTH IN THAT CERTAIN SUBORDINATION AND INTERCREDITOR AGREEMENT, DATED AS OF SEPTEMBER 1, 2016 (AS THE SAME MAY BE AMENDED OR OTHERWISE MODIFIED FROM TIME TO TIME PURSUANT TO THE TERMS THEREOF, THE “SUBORDINATION AGREEMENT”), BY AND AMONG LONGBOARD CAPITAL ADVISORS LLC (THE “SUBORDINATED AGENT”), THE COMPANY (AS “BORROWER”), ENER-CORE POWER, INC., A DELAWARE CORPORATION (THE “GUARANTOR”), ANTHONY TANG, AS A SENIOR LENDER (AS DEFINED THEREIN) (THE “SENIOR L/C LENDER”), AND EMPERY TAX EFFICIENT, LP IN ITS CAPACITY AS COLLATERAL AGENT (“COLLATERAL AGENT”) FOR THE SENIOR NOTE LENDERS (AS DEFINED THEREIN) (TOGETHER WITH ITS SUCCESSORS AND ASSIGNS, THE “AGENT”), TO THE INDEBTEDNESS (INCLUDING INTEREST) OWED BY THE CREDIT PARTIES (AS DEFINED THEREIN) PURSUANT TO THAT CERTAIN (A)(I) SECURITIES PURCHASE AGREEMENT DATED AS OF APRIL 22, 2015, (II) SECURITIES PURCHASE AGREEMENT DATED AS OF MAY 7, 2015, (III) SECURITIES PURCHASE AGREEMENT DATED AS OF NOVEMBER 23, 2016, (IV) SECURITIES PURCHASE AGREEMENT DATED AS OF SEPTEMBER 19, 2017, (V) SECURITIES PURCHASE AGREEMENT DATED AS OF JUNE 5, 2018 AND (VI) SECURITIES PURCHASE AGREEMENT DATED AS OF DECEMBER [], 2018, IN EACH CASE OF CLAUSES (I), (II), (III), (IV), (V) AND (VI), BY AND AMONG BORROWER, AGENT AND THE SENIOR NOTE LENDERS AND (B) BACKSTOP SECURITY SUPPORT AGREEMENT, DATED AS OF NOVEMBER 2, 2015, BY AND BETWEEN THE BORROWER AND SENIOR L/C LENDER, IN EACH CASE, AS AMENDED, RESTATED, SUPPLEMENTED, REFINANCED OR OTHERWISE MODIFIED FROM TIME TO TIME; AND EACH HOLDER OF THIS INSTRUMENT, BY ITS ACCEPTANCE HEREOF, IRREVOCABLY AGREES TO BE BOUND BY THE PROVISIONS OF THE SUBORDINATION AGREEMENT.”

Section 1.2 Senior Secured Notes. Section 26(z) of the Notes is hereby amended and restated as follows:

“**Senior Secured Notes**” means (A) those certain senior secured notes issued pursuant to the Securities Purchase Agreement, dated as of April 22, 2015 by and among the Company and the investors listed on the signature pages thereto, as amended from time to time, (B) those certain senior secured notes issued pursuant to the Securities Purchase Agreement, dated as of May 7, 2015 by and among the Company and the investors listed on the signature pages thereto, as amended from time to time, (C) those certain senior secured notes issued pursuant to the Securities Purchase Agreement, dated as of November 23, 2016 by and among the Company and the investors listed on the signature pages thereto, as amended or joined from time to time, (D) those certain senior secured notes issued pursuant to the Securities Purchase Agreement, dated as of September 19, 2017 by and among the Company and the investors listed on the signature pages thereto, as amended from time to time, (E) those certain senior secured notes issued pursuant to the Securities Purchase Agreement, dated as of June 5, 2018 by and among the Company and the investors listed on the signature pages thereto, as amended from time to time, and (F) those certain senior secured notes issued pursuant to the Securities Purchase Agreement, dated as of January [] 2019 by and among the Company and the investors listed on the signature pages thereto, as amended from time to time.”

ARTICLE II MISCELLANEOUS

Section 2.1 Effect of this Amendment. This Amendment shall form a part of the Agreement for all purposes, and each party thereto and hereto shall be bound hereby. This Amendment shall only be deemed to be in full force and effect from and after both the execution of this Amendment by the parties hereto and the execution of agreements substantially identical to this Amendment by the Company and “Buyers” holding a sufficient number of Conversion Shares and Warrant Shares issued or issuable under the Notes (calculated using the Assumed Conversion Price) and Warrants (without regard to any limitation on conversion or exercise set forth therein) (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the date thereof) that, together with undersigned, constitute the Required Holders. From and after such effectiveness, any reference to the Agreement shall be deemed to be a reference to the Agreement, as amended hereby. Except as specifically amended as set forth herein, each term and condition of the Agreement shall continue in full force and effect.

Section 2.2 Entire Agreement. This Amendment, together with the Agreement, contains the entire agreement of the parties and supersedes any prior or contemporaneous written or oral agreements between them concerning the subject matter of this Amendment.

Section 2.3 Governing Law. This Amendment shall be governed by the internal law of the State of New York.

Section 2.4 Counterparts. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument; signature pages may be detached from multiple separate counterparts and attached to a single counterpart so that all signature pages are physically attached to the same document. This Amendment may be executed by fax or electronic mail, in PDF format, and no party hereto may contest this Amendment’s validity solely because a signature was faxed or otherwise sent electronically.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have executed this Fourth Amendment to Convertible Unsecured Notes as of the date first written above.

COMPANY:

ENER-CORE, INC.

By: _____
Name: Domonic J. Carney
Title: Chief Financial Officer

Signature Page to Fourth Amendment to Convertible Unsecured Notes—September 2016

IN WITNESS WHEREOF, the parties hereto have executed this Fourth Amendment to Convertible Unsecured Notes as of the date first written above.

HOLDER:

EMPERY ASSET MASTER, LTD.

By: Empery Asset Management, LP, its authorized agent

By: _____

Name: Brett Director
Title: General Counsel

HOLDER:

EMPERY TAX EFFICIENT, LP

By: Empery Asset Management, LP, its authorized agent

By: _____

Name: Brett Director
Title: General Counsel

HOLDER:

EMPERY TAX EFFICIENT II, LP

By: Empery Asset Management, LP, its authorized agent

By: _____

Name: Brett Director
Title: General Counsel

Signature Page to Fourth Amendment to Convertible Unsecured Notes—September 2016

IN WITNESS WHEREOF, the parties hereto have executed this Fourth Amendment to Convertible Unsecured Notes as of the date first written above.

HOLDER:

BLUE EARTH FUND, LP

By: _____
Name: Brett Conrad
Title: Managing Member

Signature Page to Fourth Amendment to Convertible Unsecured Notes—September 2016

SECURITIES PURCHASE AGREEMENT

This **SECURITIES PURCHASE AGREEMENT** (the “**Agreement**”), is made as of January 18, 2019, by and among Ener-Core, Inc., a Delaware corporation, with headquarters located at 30100 Town Center Dr., Suite O-209, Laguna Niguel, California 92677 (the “**Company**”), and the investors listed on the Schedule of Buyers attached hereto (each individually, an “**Initial Buyer**” and collectively, the “**Initial Buyers**”).

WHEREAS:

A. The Company and each Initial Buyer is executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “**1933 Act**”), and Rule 506(b) of Regulation D (“**Regulation D**”) as promulgated by the United States Securities and Exchange Commission (the “**SEC**”) under the 1933 Act.

B. The Company authorized the issuance of senior secured notes of the Company, in substantially the form attached hereto as Exhibit A (the “**Notes**”), which Notes are convertible into shares of the Company’s common stock, par value \$0.0001 per share (the “**Common Stock**” and the shares of Common Stock issuable pursuant to the terms of the Notes, including, without limitation, upon conversion or otherwise, collectively, the “**Conversion Shares**”), in accordance with the terms of the Notes.

C. Each Initial Buyer wishes to purchase, and the Company wishes to sell at the Initial Closing (as defined below), upon the terms and conditions stated in this Agreement, (i) that aggregate principal amount of Notes set forth opposite such Initial Buyer’s name in column (3) on the Schedule of Buyers attached hereto (which aggregate principal amount of Notes for all Initial Buyers shall be \$[____]) (the “**Initial Notes**”), and (ii) Warrants, in substantially the form attached hereto as Exhibit B (the “**Warrants**”), representing the right to acquire that number of shares of Common Stock set forth opposite such Initial Buyer’s name in column (4) on the Schedule of Buyers (as exercised, collectively, the “**Warrant Shares**”).

D. The Notes will rank *pari passu* to all of the Company’s outstanding senior debt as of the date of this Agreement, and senior to all other outstanding and future indebtedness of the Company, and its Subsidiaries (as defined below), will be guaranteed by all direct and indirect Subsidiaries (as defined in Section 3(a)) of the Company, currently formed or formed in the future, as evidenced by that certain Third Amendment to Guaranty (the “**Guaranty Amendment**”), substantially in the form attached hereto as Exhibit C, which amends that certain Guaranty dated November 23, 2016, (as amended or modified from time to time in accordance with its terms, the “**Guaranty Agreement**”), and will be secured by a first priority perfected security interest (subject to Permitted Liens under and as defined in the Notes) in all of the current and future assets of the Company and all direct and indirect Subsidiaries of the Company, except for the “**Excluded Assets**” (as such term is defined in the Security Agreement), currently formed or formed in the future, as evidenced by that certain Fifth Amendment to the Pledge and Security Agreement, substantially in the form attached hereto as Exhibit D (as amended or modified from time to time in accordance with its terms, the “**Security Amendment Agreement**”), which further amends that certain Pledge and Security Agreement, dated as of April 23, 2015 by and among the Company and the Collateral Agent attached as Exhibit 10.2 to the Company’s Current Report on Form 8-K filed with the SEC on April 23, 2015 (as amended prior to the date hereof and by the Fifth Amendment to the Pledge and Security Agreement dated as of the date hereof, and as further amended or modified from time to time in accordance with its terms, the “**Security Agreement**” and together with the Guaranty Agreement and any ancillary documents related thereto, collectively, the “**Security Documents**”).

E. The Notes, Conversion Shares, Warrants and Warrant Shares collectively are referred to herein as the “**Securities**”, as applicable.

NOW, THEREFORE, the Company and each Buyer hereby agree as follows:

1. PURCHASE AND SALE OF NOTES AND WARRANTS.

(a) Purchase of Notes and Warrants.

(i) Initial Closing. Upon the satisfaction (or waiver) of the conditions set forth in Sections 6(a) and 7(a) below, the Company shall issue and sell to each Initial Buyer, and each Initial Buyer severally, but not jointly, agrees to purchase from the Company on the Initial Closing Date (as defined below), (x) a principal amount of Initial Notes as is set forth opposite such Initial Buyer’s name in column (3) on the Schedule of Buyers and (y) Warrants to acquire up to that number of Warrant Shares as is set forth opposite such Initial Buyer’s name in column (4) on the Schedule of Buyers (the “**Initial Closing**”).

(ii) Subsequent Closings. After the Initial Closing, subject to the satisfaction (or waiver) of the conditions set forth in Sections 1(c), 6(b) and 7(b) below, the Company may issue and sell, on the same terms and conditions set forth in this Agreement, up to an additional \$[] principal amount of Notes¹ (the “**Subsequent Notes**”) to one or more investors (each individually, a “**Subsequent Buyer**”, and collectively, the “**Subsequent Buyers**” and together with the Initial Buyers, the “**Buyers**”) in one or more subsequent closings (each, a “**Subsequent Closing**” and together with the Initial Closing, each a “**Closing**”); *provided that* each such sale of Subsequent Notes is consummated no later than 30 days after the Initial Closing Date (as defined below).

(b) Initial Closing Date. The date and time of the Initial Closing (the “**Initial Closing Date**”) shall be the Trading Day on which all of the Transaction Documents (as defined below) have been executed and delivered by the applicable parties thereto in connection with the Initial Closing, upon notification of satisfaction (or waiver) of the conditions to the Initial Closing set forth in Sections 6(a) and 7(a) below, or at such other time or on such other date as the Company and each Initial Buyer may mutually agree upon, at the offices of the Company. For purposes of this Agreement, “**Trading Day**” means any day on which the Common Stock is traded on the Principal Market (as defined below), or, if the Principal Market is not the principal trading market for the Common Stock, then on the principal securities exchange or securities market on which the Common Stock is then traded.

(c) Subsequent Closing Dates. The date and time of any Subsequent Closing (each a “**Subsequent Closing Date**”, and together with Initial Closing Date, each a “**Closing Date**” and collectively, the “**Closing Dates**”) shall be at such time and on such date as the Company and each Subsequent Buyer may mutually agree upon, subject to satisfaction (or waiver) of the conditions to the Subsequent Closing set forth in Sections 6(b) and 7(b) and the conditions contained in Section 1(a)(ii) and this Section 1(c), at the offices of the Company. Any Person approved by the Company may become a Subsequent Buyer and may purchase Subsequent Notes by duly executing and delivering a Joinder Agreement, substantially in the form attached hereto as Exhibit E, to the Company. Any Initial Buyer may also purchase, at such Initial Buyer’s option, Subsequent Notes by delivering a Subsequent Closing Notice, substantially in the form attached hereto as Exhibit F, to the Company.

¹ **NTD**: Total principal amount of Notes issuable hereunder to be \$4,444,444.44.

(d) Purchase Price. The aggregate purchase price for the Initial Notes and Warrants purchased by each Initial Buyer at the Initial Closing (the “**Initial Purchase Price**”) shall be the amount set forth opposite each Initial Buyer’s name in column (5) of the Schedule of Buyers. The aggregate purchase price for the Subsequent Notes to be purchased by each Subsequent Buyer at the applicable Subsequent Closing (the “**Subsequent Purchase Price**” and together with the Initial Purchase Price, the “**Purchase Price**”) shall be the amount set forth on the signature page of such Subsequent Buyer attached to such Subsequent Buyer’s Joinder Agreement or in the Subsequent Closing Notice, as applicable. Each Initial Buyer shall pay \$900 for each \$1,000 of principal amount of Initial Notes and related Warrants to be purchased by such Initial Buyer at the Initial Closing. The Initial Buyers and the Company agree that the Initial Notes and the Warrants constitute an “investment unit” for purposes of Section 1273(c)(2) of the Internal Revenue Code of 1986, as amended (the “**Code**”). The Initial Buyers and the Company mutually agree that the allocation of the issue price of such investment unit between the Initial Notes and the Warrants in accordance with Section 1273(c)(2) of the Code and Treasury Regulation Section 1.1273-2(h) shall be \$167 per \$1,000 of Initial Purchase Price to be allocated to the Warrants and the balance of each \$1,000 of Initial Purchase Price to be allocated to the Initial Notes, and neither the Initial Buyers nor the Company shall take any position inconsistent with such allocation in any tax return or in any judicial or administrative proceeding in respect of taxes.

(e) Form of Payment.

(i) Initial Closing. On the Initial Closing Date, (i) each Initial Buyer shall pay its Initial Purchase Price to the Company for the Initial Note and Warrant to be issued and sold to such Initial Buyer at the Initial Closing by wire transfer of immediately available funds in accordance with the Company’s written wire instructions and (ii) the Company shall deliver the Initial Note (allocated in the principal amount requested by such Initial Buyer) and Warrant which such Initial Buyer is purchasing hereunder, in each case duly executed on behalf of the Company and registered in the name of such Initial Buyer or its designee.

(ii) Subsequent Closings. On any Subsequent Closing Date, (i) each Subsequent Buyer shall pay its Subsequent Purchase Price to the Company for the Subsequent Notes to be issued and sold to such Subsequent Buyer at the applicable Subsequent Closing by wire transfer of immediately available funds in accordance with the Company’s written wire instructions and (ii) the Company shall deliver to each Subsequent Buyer the Subsequent Notes which such Subsequent Buyer is then purchasing hereunder, in each case duly executed on behalf of the Company and registered in the name of such Subsequent Buyer or its designee.

2. BUYER’S REPRESENTATIONS AND WARRANTIES. Each Buyer, severally and not jointly, represents and warrants with respect to only itself that:

(a) No Public Sale or Distribution. Such Buyer is acquiring the Securities for its own account and not with a view towards, or for resale in connection with, the public sale or distribution thereof, except pursuant to sales registered or exempted under the 1933 Act; provided, however, that by making the representations herein, such Buyer does not agree to hold any of the Securities for any minimum or other specific term and reserves the right to dispose of the Securities at any time in accordance with or pursuant to a registration statement or an exemption under the 1933 Act. Such Buyer is acquiring the Securities hereunder in the ordinary course of its business. Such Buyer does not presently have any agreement or understanding, directly or indirectly, with any Person (as defined below) to distribute any of the Securities. For purposes of this Agreement, “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.

(b) Accredited Investor Status. Such Buyer is an “accredited investor” as that term is defined in Rule 501(a) of Regulation D. Such Buyer has executed and delivered to the Company a questionnaire (the “**Investor Questionnaire**”), substantially in the form attached hereto as Exhibit G, which such Buyer represents and warrants is true, correct and complete.

(c) Reliance on Exemptions. Such Buyer understands that the Securities are being offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Buyer’s compliance with, the representations, warranties, agreements, acknowledgments and understandings of such Buyer set forth herein in order to determine the availability of such exemptions and the eligibility of such Buyer to acquire the Securities.

(d) Information. Such Buyer and its advisors, if any, have been furnished with all materials relating to the business, finances and operations of the Company, including but not limited to the Company’s filings under the Securities Exchange Act of 1934, as amended (the “**1934 Act**”), and materials relating to the offer and sale of the Securities that have been requested by such Buyer. Such Buyer and its advisors, if any, have been afforded the opportunity to ask questions of the Company. Neither such inquiries nor any other due diligence investigations conducted by such Buyer or its advisors, if any, or its representatives shall modify, amend or affect such Buyer’s right to rely on the Company’s representations and warranties contained herein. Such Buyer understands that its investment in the Securities involves a high degree of risk and is able to afford a complete loss of such investment. Such Buyer has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision with respect to its acquisition of the Securities. Such Buyer confirms and agrees that (i) it has independently evaluated the investment risks and the merits of its decision to purchase the Securities, (ii) it has not relied on the advice of, or any representations by, any other Person, other than the Company and its officers and directors, in making such decision, and (iii) no Person, other than the Company and its officers and directors, has any responsibility with respect to the completeness or accuracy of any information or materials furnished to such Buyer in connection with the transactions contemplated hereby.

(e) No Governmental Review. Such Buyer understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

(f) Transfer or Resale. Such Buyer understands that: (i) the Securities have not been and are not being registered under the 1933 Act or any state securities laws, and may not be offered for sale, sold, assigned or transferred unless (A) subsequently registered thereunder, (B) such Buyer shall have delivered to the Company an opinion of counsel, in form and substance reasonably acceptable to the Company, to the effect that such Securities to be sold, assigned or transferred may be sold, assigned or transferred pursuant to an exemption from such registration, or (C) such Buyer provides the Company with reasonable assurance that such Securities can be sold, assigned or transferred pursuant to Rule 144 promulgated under the 1933 Act (“**Rule 144**”) or Rule 144A promulgated under the 1933 Act, as amended (or successor rules thereto) (collectively, “**Resale Exemptions**”); (ii) any sale of the Securities made in reliance on the Resale Exemptions may be made only in accordance with the terms of Rule 144 or Rule 144A, as applicable, and further, if a Resale Exemption is not applicable, any resale of the Securities under circumstances in which the seller (or the Person) through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the 1933 Act) may require compliance with some other exemption under the 1933 Act or the rules and regulations of the SEC thereunder; and (iii) neither the Company nor any other Person is under any obligation to register the Securities under the 1933 Act or any state securities laws or to comply with the terms and conditions of any exemption thereunder. Notwithstanding the foregoing, the Securities may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the Securities and such pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Buyer effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document (as defined below), including, without limitation, this Section 2(f).

(g) Legends. Such Buyer understands that the certificates or other instruments representing the Notes and Warrants, and any certificates representing the Conversion Shares and Warrant Shares, except as set forth below, shall bear any legend as required by the “blue sky” laws of any state and a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of such stock certificates or other instruments):

[NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES [MAY BE CONVERTIBLE][ARE EXERCISABLE] HAVE BEEN][THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL, IN FORM AND SUBSTANCE REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

The legend set forth above shall be removed and the Company shall issue a certificate or other instrument without such legend to the holder of the Securities upon which it is stamped or issue to such holder by electronic delivery at the applicable balance account at The Depository Trust Company (“**DTC**”), if, unless otherwise required by state securities laws, (i) such Securities are registered for resale under the 1933 Act, (ii) in connection with a sale, assignment or other transfer, such holder provides the Company with an opinion of counsel, in form and substance reasonably acceptable to the Company, to the effect that such sale, assignment or transfer of the Securities may be made without registration under the applicable requirements of the 1933 Act, or (iii) the Securities can be sold, assigned or transferred pursuant to Rule 144 or Rule 144A. The Company shall be responsible for the fees of its transfer agent and all DTC fees associated with such issuance.

(h) Validity; Enforcement. This Agreement has been duly and validly authorized, executed and delivered on behalf of such Buyer and shall constitute the legal, valid and binding obligations of such Buyer enforceable against such Buyer in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

(i) No Conflicts. The execution, delivery and performance by such Buyer of this Agreement and the consummation by such Buyer of the transactions contemplated hereby and thereby will not (i) result in a violation of the organizational documents of such Buyer or (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which such Buyer is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws) applicable to such Buyer, except in the case of clauses (ii) and (iii) above, for such conflicts, defaults, rights or violations which would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the ability of such Buyer to perform its obligations hereunder.

(j) No General Solicitation and Advertising; Prior Relationship. Such Buyer represents and acknowledges, to its knowledge, that it has not been solicited to offer to purchase or to purchase any Securities by means of any general solicitation or advertising within the meaning of Regulation D. The Buyer represents that its interest in the purchase of the Securities is the result of its substantive, pre-existing relationship with the Company.

(k) Rule 506(d) Representation. Such Buyer represents that it is not a person of the type described in Section 506(d) of Regulation D that would disqualify the Company from engaging in a transaction pursuant to Section 506 of Regulation D.

(l) Residency. Such Buyer is a resident of that jurisdiction specified below its address on the Schedule of Buyers.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company represents and warrants to each of the Buyers, as of the date hereof and as of each applicable Closing Date (unless otherwise provided herein), that:

(a) Organization and Qualification. Each of the Company and its “**Subsidiaries**” (which for purposes of this Agreement means any entity in which the Company, directly or indirectly, owns any of the capital stock or holds an equity or similar interest) are entities duly organized and validly existing in good standing under the laws of the jurisdiction in which they are formed, and have the requisite power and authorization to own their properties and to carry on their business as now being conducted. Each of the Company and its Subsidiaries is duly qualified as a foreign entity to do business and is in good standing in every jurisdiction in which its ownership of property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not reasonably be expected to have a Material Adverse Effect. As used in this Agreement, “**Material Adverse Effect**” means any material adverse effect on the business, properties, assets, operations, results of operations, condition (financial or otherwise) or prospects of the Company and its Subsidiaries, taken as a whole, or on the transactions contemplated hereby or on the other Transaction Documents or by the agreements and instruments to be entered into in connection herewith or therewith, or on the authority or ability of the Company to perform its obligations under the Transaction Documents. The Company has no Subsidiaries except as set forth on Schedule 3(a).

(b) Authorization; Enforcement; Validity. The Company has the requisite power and authority to enter into and perform its obligations under this Agreement, the Notes, the Warrants, the Irrevocable Transfer Agent Instructions (as defined below), any Joinder Agreements, any Subsequent Closing Notices and each of the other agreements entered into by the parties hereto in connection with the transactions contemplated by this Agreement (collectively, the “**Transaction Documents**”) and to issue the Securities in accordance with the terms hereof and thereof. The execution and delivery of the Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby, including, without limitation, the issuance of the Notes, the issuance of the Warrants and the reservation for issuance and the issuance of the Conversion Shares and Warrant Shares, have been duly authorized by the Company’s Board of Directors, and (other than the filing with the SEC of a Form D and any other filings as may be required by state securities agencies) no further filing, consent, or authorization is required by the Company, its Board of Directors or its stockholders. This Agreement and the other Transaction Documents have been duly executed and delivered by the Company, and constitute the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies. Each of the Subsidiaries party to any of the Transaction Documents has the requisite power and authority to enter into and perform its obligations under such Transaction Documents., as applicable. The execution and delivery by the Subsidiaries party to any of the Transaction Documents of such Transaction Documents and the consummation by such Subsidiaries of the transactions contemplated thereby have been duly authorized by such Subsidiaries’ respective boards of directors (or other applicable governing body) and (other than filings as may be required by state securities agencies) no further filing, consent, or authorization is required by such Subsidiaries, their respective boards of directors (or other applicable governing body) or stockholders (or other applicable owners of equity of such Subsidiaries). The Transaction Documents to which any of the Subsidiaries are parties have been duly executed and delivered by such Subsidiaries, and constitute the legal, valid and binding obligations of such Subsidiaries, enforceable against them in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

(c) Issuance of Securities. The issuance of the Notes and the Warrants is duly authorized and, upon issuance, the Notes and the Warrants shall be validly issued and free from all taxes, liens and charges with respect to the issue thereof. As of the applicable Closing, a number of shares of Common Stock shall have been duly authorized and reserved for issuance which equals or exceeds (the “**Required Reserved Amount**”) the sum of (i) the maximum number of Conversion Shares issued and issuable pursuant to the Notes to be issued in such Closing based on the initial Conversion Price (as defined in the Notes) of \$0.10 (as adjusted for any stock dividend, stock split, stock combination, reclassification or similar transaction occurring after the date hereof and without taking into account any limitations on the issuance thereof pursuant to the terms of the Notes) (the “**Initial Conversion Price**”) plus (ii) the maximum number of Warrant Shares issued and issuable pursuant to the Warrants to be issued in the Initial Closing, each as of the Trading Day (as defined in the Warrants) immediately preceding the applicable date of determination (without taking into account any limitations on the exercise of the Warrants set forth in the Warrants). As of the date hereof, there are 195,743,607 shares of Common Stock authorized and unissued, of which 63,813,368 are reserved for issuance upon full exercise of all outstanding options and warrants and upon conversion of all convertible promissory notes. Upon conversion of the Notes in accordance with the Notes or exercise of the Warrants in accordance with the Warrants, as the case may be, the Conversion Shares and the Warrant Shares, respectively, will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights, taxes, liens and charges with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. Assuming the accuracy of each of the representations and warranties set forth in Section 2 of this Agreement, the offer and issuance by the Company of the Securities is exempt from registration under the 1933 Act.

(d) No Conflicts. The execution, delivery and performance of the Transaction Documents by the Company and any of its Subsidiaries party to any of the Transaction Documents and the consummation by the Company and any of its Subsidiaries, as applicable, of the transactions contemplated hereby and thereby (including, without limitation, the issuance of the Notes and the Warrants and reservation for issuance and issuance of the Conversion Shares and the Warrant Shares) will not (i) result in a violation of the Certificate of Incorporation (as defined below) or Bylaws (as defined below), any memorandum of association, certificate of incorporation, certificate of formation, bylaws, any certificate of designations or other constituent documents of the Company or any of its Subsidiaries, any capital stock of the Company or any of its Subsidiaries or the articles of association or bylaws of the Company or any of its Subsidiaries or (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) in any respect under, or give to others any rights of termination, amendment, acceleration or cancellation of, any material agreement, indenture or instrument to which the Company or any of its Subsidiaries is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including other foreign, federal and state securities laws and regulations and the rules and regulations of the OTCQB (the “**Principal Market**”) and including all applicable laws of the State of Delaware and any foreign, federal and state laws, rules and regulations) applicable to the Company or any of its Subsidiaries or by which any property or asset of the Company or any of its Subsidiaries is bound or affected.

(e) Consents. Neither the Company nor any of its Subsidiaries is required to obtain any consent, authorization or order of, or make any filing or registration with (other than the filing with the SEC of a Form D and any other filings as may be required by any state securities agencies), any court, governmental agency or any regulatory or self-regulatory agency or any other Person in order for it to execute, deliver or perform any of its obligations under or contemplated by the Transaction Documents, in each case in accordance with the terms hereof or thereof. All consents, authorizations, orders, filings and registrations which the Company or any of its Subsidiaries is required to obtain pursuant to the preceding sentence have been obtained or effected on or prior to the Initial Closing Date, and the Company and its Subsidiaries are unaware of any facts or circumstances that might prevent the Company or any of its Subsidiaries from obtaining or effecting any of the registration, application or filings pursuant to the preceding sentence, other than the filings or registration required by Sections 4(b), 4(f) and 4(j) of this Agreement. The Company is not in violation of the requirements of the Principal Market and has no knowledge of any facts that would reasonably lead to delisting or suspension of the Common Stock in the foreseeable future. The issuance by the Company of the Securities shall not have the effect of delisting or suspending the Common Stock from the Principal Market.

(f) Acknowledgment Regarding Buyer’s Purchase of Securities. The Company acknowledges and agrees that each Buyer is acting solely in the capacity of an arm’s length purchaser with respect to the Transaction Documents and the transactions contemplated hereby and thereby and that, except as set forth in any Schedule 13D or Schedule 13G filed with the SEC regarding the ownership of 10% or more of the shares of Common Stock or as disclosed in Schedule 3(f), no Buyer is (i) an officer or director of the Company or any of its Subsidiaries, (ii) an “affiliate” of the Company or any of its Subsidiaries (as defined in Rule 144) or (iii) to the knowledge of the Company, a “beneficial owner” of more than 10% of the shares of Common Stock (as defined for purposes of Rule 13d-3 of the 1934 Act). The Company further acknowledges that no Buyer is acting as a financial advisor or fiduciary of the Company or any of its Subsidiaries (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby, and any advice given by a Buyer or any of its representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to such Buyer’s purchase of the Securities. The Company further represents to each Buyer that the Company’s decision to enter into the Transaction Documents has been based solely on the independent evaluation by the Company and its representatives.

(g) No General Solicitation; Fees and Commissions. Neither the Company, nor any of its Subsidiaries or affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the Securities. The Company shall be responsible for the payment of any placement agent's fees, financial advisory fees, or brokers' commissions (other than for persons engaged by any Buyer or its investment advisor) relating to or arising out of the transactions contemplated hereby in connection with the sale of the Securities. The Company shall pay, and hold each Buyer harmless against, any liability, loss or expense (including, without limitation, attorney's fees and out-of-pocket expenses) arising in connection with any such claim. Neither the Company nor any of its Subsidiaries has engaged any placement agent or other agent in connection with the sale of the Securities.

(h) No Integrated Offering. None of the Company, its Subsidiaries, any of their affiliates, and any Person acting on their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would require registration of any of the Securities under the 1933 Act, whether through integration with prior offerings or otherwise, or cause this offering of the Securities to require approval of stockholders of the Company for purposes of the 1933 Act or any applicable stockholder approval provisions, including, without limitation, under the rules and regulations of any exchange or automated quotation system on which any of the securities of the Company are listed or designated. None of the Company, its Subsidiaries, their affiliates and any Person acting on their behalf will take any action or steps referred to in the preceding sentence that would require registration of any of the Securities under the 1933 Act or cause the offering of the Securities to be integrated with other offerings for purposes of any such applicable stockholder approval provisions.

(i) Application of Takeover Protections; Rights Agreement. The Company and its board of directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Certificate of Incorporation or the laws of the jurisdiction of its formation which is or could become applicable to any Buyer as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Securities and any Buyer's ownership of the Securities. The Company has not adopted a stockholder rights plan or similar arrangement relating to accumulations of beneficial ownership of Common Stock or a change in control of the Company.

(j) SEC Documents; Financial Statements. Except as disclosed in Schedule 3(j), during the two (2) years prior to the date hereof, the Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the 1934 Act (all of the foregoing filed prior to the date hereof, and all exhibits included therein and financial statements, notes and schedules thereto and documents incorporated by reference therein being hereinafter referred to as the “**SEC Documents**”). The Company has delivered to the Buyers or their respective representatives true, correct and complete copies of the SEC Documents not available on the EDGAR system. As of their respective filing dates, the SEC Documents complied in all material respects with the requirements of the 1934 Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. As of their respective filing dates, the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles, consistently applied, during the periods involved (“GAAP”) (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the financial position of the Company as of the dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments). No other information provided by or on behalf of the Company to the Buyers which is not included in the SEC Documents, including, without limitation, information referred to in Section 2(d) of this Agreement or in the disclosure schedules to this Agreement, contains any untrue statement of a material fact or omits to state any material fact necessary in order to make the statements therein, in the light of the circumstance under which they are or were made, not misleading.

(k) Absence of Certain Changes. Except as disclosed in Schedule 3(k), since December 31, 2017, there has been no event that would reasonably be expected to result in a Material Adverse Effect. Except as disclosed in Schedule 3(k), since December 31, 2017, neither the Company nor any of its Subsidiaries has (i) declared or paid any dividends, (ii) sold any assets, individually or in the aggregate, in excess of \$100,000 outside of the ordinary course of business or (iii) had capital expenditures, individually or in the aggregate, in excess of \$100,000. Neither the Company nor any of its Subsidiaries has taken any steps to seek protection pursuant to any bankruptcy law nor does the Company have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy proceedings or any actual knowledge of any fact that would reasonably lead a creditor to do so.

(l) No Undisclosed Events, Liabilities, Developments or Circumstances. No event, liability, development or circumstance has occurred or exists, or is contemplated to occur with respect to the Company, its Subsidiaries or their respective business, properties, prospects, operations or financial condition, that would be required to be disclosed by the Company under applicable securities laws on a registration statement on Form S-1 filed with the SEC relating to an issuance and sale by the Company of its Common Stock and which has not been publicly announced.

(m) Conduct of Business; Regulatory Permits. Neither the Company nor any of its Subsidiaries is in violation of any term of or in default under any certificate of designations of any outstanding series of preferred stock of the Company (if any), its Certificate of Incorporation or Bylaws or their organizational charter or memorandum of association or certificate of incorporation or articles of association or bylaws, respectively. Neither the Company nor any of its Subsidiaries is in violation of any judgment, decree or order or any statute, ordinance, rule or regulation applicable to the Company or any of its Subsidiaries, and neither the Company nor any of its Subsidiaries will conduct its business in violation of any of the foregoing, except for possible violations which could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Without limiting the generality of the foregoing, the Company is not in violation of any of the rules, regulations or requirements of the Principal Market and has no knowledge of any facts or circumstances that would reasonably lead to delisting or suspension of the Common Stock by the Principal Market in the foreseeable future. Except as set forth in Schedule 3(m), during the two (2) years prior to the date hereof, the Common Stock has been designated for quotation on the Principal Market. Except as set forth in Schedule 3(m), during the two (2) years prior to the date hereof, (i) trading in the Common Stock has not been suspended by the SEC or the Principal Market and (ii) the Company has received no communication, written or oral, from the SEC or the Principal Market regarding the suspension of the Common Stock from the Principal Market. The Company and its Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses, except where the failure to possess such certificates, authorizations or permits would not have, individually or in the aggregate, a Material Adverse Effect, and neither the Company nor any such Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit.

(n) Foreign Corrupt Practices. Neither the Company, nor any of its Subsidiaries, nor any director, officer, agent, employee or other Person acting on behalf of the Company or any of its Subsidiaries has, in the course of its actions for, or on behalf of, the Company or any of its Subsidiaries (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expenses relating to political activity; (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; (iii) violated or is in violation of any provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended; or (iv) made any unlawful bribe, rebate, payoff, influence payment, kickback or other unlawful payment to any foreign or domestic government official or employee.

(o) Sarbanes-Oxley Act. Except as disclosed in Schedule 3(o), the Company is in material compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002, as amended, that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the SEC thereunder that are effective as of the date hereof.

(p) Transactions With Affiliates. Except as set forth in Schedule 3(p), none of the officers, directors or employees of the Company or any of its Subsidiaries is presently a party to any transaction with the Company or any of its Subsidiaries (other than for ordinary course services as employees, officers or directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any such officer, director or employee or, to the knowledge of the Company or any of its Subsidiaries, any corporation, partnership, trust or other entity in which any such officer, director, or employee has a substantial interest or is an officer, director, trustee or partner.

(q) Equity Capitalization. As of the Initial Closing Date, the authorized capital stock of the Company consists of (i) 200,000,000 shares of Common Stock, of which as of the date hereof, 4,256,393 shares are issued and outstanding, 754,454 shares are reserved for issuance pursuant to the Company's stock option and purchase plans, 9,116,643 shares are reserved for issuance upon exercise of warrants outstanding and 54,109,568 shares are reserved for issuance pursuant to securities (other than the aforementioned options, warrants and the Notes and Warrants) exercisable or exchangeable for, or convertible into, Common Stock, (ii) 50,000,000 shares of preferred stock, par value \$0.0001 per share, none of which are issued and outstanding as of the date hereof and (iii) there are 3,437,837 shares of Common Stock held by non-affiliates of the Company. All of such outstanding shares have been, or upon issuance will be, validly issued and are fully paid and nonassessable. Except as set forth in the SEC Documents or as disclosed in Schedule 3(q), (i) none of the Company's capital stock is subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company; (ii) there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any shares of capital stock of the Company or any of its Subsidiaries, or contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional shares of capital stock of the Company or any of its Subsidiaries or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any shares of capital stock of the Company or any of its Subsidiaries; (iii) there are no outstanding debt securities, notes, credit agreements, credit facilities or other agreements, documents or instruments evidencing Indebtedness (as defined below) of the Company or any of its Subsidiaries or by which the Company or any of its Subsidiaries is or may become bound; (iv) there are no financing statements securing obligations in any material amounts, either singly or in the aggregate, filed in connection with the Company or any of its Subsidiaries; (v) there are no agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of their securities under the 1933 Act; (vi) there are no outstanding securities or instruments of the Company or any of its Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to redeem a security of the Company or any of its Subsidiaries; (vii) there are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities; (viii) the Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement; and (ix) the Company and its Subsidiaries have no liabilities or obligations required to be disclosed in the SEC Documents but not so disclosed in the SEC Documents, other than those incurred in the ordinary course of the Company's or any of its Subsidiaries' respective businesses and which, individually or in the aggregate, do not or would not have a Material Adverse Effect. The Company has furnished or made available to the Buyers true, correct and complete copies of the Company's Certificate of Incorporation, as amended and as in effect on the date hereof (the "**Certificate of Incorporation**"), and the Company's Bylaws, as amended and as in effect on the date hereof (the "**Bylaws**"), and the terms of all securities convertible into, or exercisable or exchangeable for shares of Common Stock and the material rights of the holders thereof in respect thereto.

(r) Indebtedness and Other Contracts. Except as disclosed on Schedule 3(r), neither the Company nor any of its Subsidiaries (i) has any outstanding Indebtedness (as defined below), (ii) is a party to any contract, agreement or instrument, the violation of which, or default under which, by the other party(ies) to such contract, agreement or instrument could reasonably be expected to result in a Material Adverse Effect, (iii) is in violation of any term of or in default under any contract, agreement or instrument relating to any Indebtedness, except where such violations and defaults would not result, individually or in the aggregate, in a Material Adverse Effect, or (iv) is a party to any contract, agreement or instrument relating to any Indebtedness, the performance of which, in the judgment of the Company's officers, has or is expected to have a Material Adverse Effect. Schedule 3(r) provides a detailed description of the material terms of any such outstanding Indebtedness. For purposes of this Agreement: (x) "**Indebtedness**" of any Person means, without duplication (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services, including, without limitation, "capital leases" in accordance with GAAP (other than trade payables entered into in the ordinary course of business consistent with past practice), (C) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with GAAP, consistently applied for the periods covered thereby, is classified as a capital lease, (G) all indebtedness referred to in clauses (A) through (F) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, lien, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (H) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (G) above; and (y) "**Contingent Obligation**" means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any Indebtedness, lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto.

(s) Absence of Litigation. There is no action, suit, proceeding, inquiry or investigation before or by the Principal Market, any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company or any of its Subsidiaries, the Common Stock or any of the Company's Subsidiaries or any of the Company's or its Subsidiaries' officers or directors, whether of a civil or criminal nature or otherwise, in their capacities as such, except as set forth in Schedule 3(s). The matters set forth in Schedule 3(s) would not reasonably be expected to have a Material Adverse Effect.

(t) Insurance. The Company and each of its Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company believes to be prudent and customary in the businesses in which the Company and its Subsidiaries are engaged. Neither the Company nor any such Subsidiary has been refused any insurance coverage sought or applied for and neither the Company nor any such Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect.

(u) Employee Relations.

(i) Neither the Company nor any of its Subsidiaries is a party to any collective bargaining agreement or employs any member of a union. The Company and its Subsidiaries believe that their relations with their employees are good. No executive officer (as defined in Rule 501(f) under the 1933 Act) of the Company or any of its Subsidiaries has notified the Company or any such Subsidiary that such officer intends to leave the Company or any such Subsidiary or otherwise terminate such officer's employment with the Company or any such Subsidiary. No executive officer of the Company or any of its Subsidiaries, to the knowledge of the Company or any of its Subsidiaries, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement, non-competition agreement, or any other contract or agreement or any restrictive covenant, and the continued employment of each such executive officer does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters.

(ii) The Company and its Subsidiaries are in compliance with all federal, state, local and foreign laws and regulations respecting labor, employment and employment practices and benefits, terms and conditions of employment and wages and hours, except where failure to be in compliance would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

(v) Title. The Company and its Subsidiaries have good and marketable title in fee simple to all real property and good and marketable title to all personal property owned by them which is material to the business of the Company and its Subsidiaries, in each case free and clear of all liens, encumbrances and defects except for Permitted Liens which do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company and any of its Subsidiaries. Any real property and facilities held under lease by the Company and any of its Subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not materially interfere with the use made and proposed to be made of such property and buildings by the Company and its Subsidiaries.

(w) Intellectual Property Rights. The Company and its Subsidiaries own or possess adequate rights or licenses to use all trademarks, trade names, service marks, service mark registrations, service names, original works of authorship, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets and other intellectual property rights and all applications and registrations therefor ("**Intellectual Property Rights**") necessary to conduct their respective businesses as now conducted. None of the Company's Intellectual Property Rights have expired or terminated or have been abandoned or are expected to expire or terminate or are expected to be abandoned, within three years from the date of this Agreement. The Company does not have any knowledge of any infringement by the Company or its Subsidiaries of Intellectual Property Rights of others. There is no claim, action or proceeding being made or brought, or to the knowledge of the Company or any of its Subsidiaries, being threatened, against the Company or any of its Subsidiaries regarding its Intellectual Property Rights. Neither the Company nor any of its Subsidiaries is aware of any facts or circumstances that might give rise to any of the foregoing infringements or claims, actions or proceedings. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their Intellectual Property Rights.

(x) Environmental Laws. Except as would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect: (i) neither the Company nor its Subsidiaries is in violation of any Environmental Laws (as hereinafter defined), (ii) the Company and its Subsidiaries have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) the Company and its Subsidiaries are in compliance with all terms and conditions of any such permit, license or approval. The term "**Environmental Laws**" means all federal, state, local or foreign laws relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), including, without limitation, laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "**Hazardous Materials**") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations issued, entered, promulgated or approved thereunder.

(y) Subsidiary Rights. The Company or one of its Subsidiaries has the unrestricted right to vote, and (subject to limitations imposed by applicable law) to receive dividends and distributions on, all capital securities of its Subsidiaries as owned by the Company or such Subsidiary.

(z) Investment Company Status. Neither the Company nor any Subsidiary is, and upon consummation of the sale of the Securities, and for so long any Buyer holds any Securities, will be, an "investment company," a company controlled by an "investment company" or an "affiliated person" of, or "promoter" or "principal underwriter" for, an "investment company" as such terms are defined in the Investment Company Act of 1940, as amended.

(aa) Tax Status. The Company and each of its Subsidiaries (i) has made or filed all U.S. federal, state and foreign income and all other tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations, except those being contested in good faith and (iii) has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim.

(bb) Internal Accounting and Disclosure Controls. Except as set forth in Schedule 3(bb) or as set forth in the SEC Documents, the Company and each of its Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset and liability accountability, (iii) access to assets or incurrence of liabilities is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets and liabilities is compared with the existing assets and liabilities at reasonable intervals and appropriate action is taken with respect to any difference. Except as set forth in Schedule 3(bb) or as set forth in the SEC Documents, the Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15 under the 1934 Act) that are effective in ensuring that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms of the SEC, including, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is accumulated and communicated to the Company's management, including its principal executive officer or officers and its principal financial officer or officers, as appropriate, to allow timely decisions regarding required disclosure.

(cc) Off Balance Sheet Arrangements. There is no transaction, arrangement, or other relationship between the Company and an unconsolidated or other off balance sheet entity that is required to be disclosed by the Company in its 1934 Act filings and is not so disclosed or that otherwise would be reasonably likely to have a Material Adverse Effect.

(dd) Ranking of Notes. Except as set forth in Schedule 3(dd), no Indebtedness of the Company or any of its Subsidiaries is senior to or ranks *pari passu* with the Notes in right of payment, whether with respect of payment of redemptions, interest, damages or upon liquidation or dissolution or otherwise.

(ee) Transfer Taxes. On each Closing Date, all stock transfer or other taxes (other than income or similar taxes) that are required to be paid in connection with the sale and transfer of the Securities to be sold to each Buyer hereunder will be, or will have been, fully paid or provided for by the Company, and all laws imposing such taxes will be or will have been complied with.

(ff) Manipulation of Price. The Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result, or that could reasonably be expected to cause or result, in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any person any compensation for soliciting another to purchase any other securities of the Company.

(gg) Acknowledgement Regarding Buyers' Trading Activity. The Company acknowledges and agrees that (i) none of the Buyers has been asked to agree, nor has any Buyer agreed, to desist from purchasing or selling, long and/or short, securities of the Company, or "derivative" securities based on securities issued by the Company or to hold the Securities for any specified term; (ii) any Buyer, and counter-parties in "derivative" transactions to which any such Buyer is a party, directly or indirectly, presently may have a "short" position in the Common Stock, and (iii) each Buyer shall not be deemed to have any affiliation with or control over any arm's length counter-party in any "derivative" transaction. The Company further understands and acknowledges that one or more Buyers may engage in hedging and/or trading activities at various times during the period that the Securities are outstanding and (b) such hedging and/or trading activities, if any, can reduce the value of the existing stockholders' equity interest in the Company both at and after the time the hedging and/or trading activities are being conducted. The Company acknowledges that such aforementioned hedging and/or trading activities do not constitute a breach of this Agreement, the Notes, the Warrants or any of the documents executed in connection herewith.

(hh) U.S. Real Property Holding Corporation. The Company is not, has never been, and so long as any Securities remain outstanding, shall not become, a U.S. real property holding corporation within the meaning of Section 897 of the Code and the Company shall so certify upon any Buyer's request.

(ii) Bank Holding Company Act. Neither the Company nor any of its Subsidiaries or affiliates is subject to the Bank Holding Company Act of 1956, as amended (the "BHCA") and to regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). Neither the Company nor any of its Subsidiaries or affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent (25%) or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Subsidiaries or affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(jj) No Additional Agreements. Neither the Company nor any of its Subsidiaries has any agreement or understanding with any Buyer with respect to the transactions contemplated by the Transaction Documents other than as specified in the Transaction Documents.

(kk) Disclosure. Except for the transaction contemplated herein, the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Buyers or their agents or counsel with any information that constitutes or could reasonably be expected to constitute material, nonpublic information. The Company understands and confirms that each of the Buyers will rely on the foregoing representations in effecting transactions in securities of the Company. All disclosure provided to the Buyers regarding the Company, or any of its Subsidiaries, their business and the transactions contemplated hereby, including the disclosure schedules to this Agreement, furnished by or on behalf of the Company is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. Each press release issued by the Company or any of its Subsidiaries during the twelve (12) months preceding the date of this Agreement did not at the time of release contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. No event or circumstance has occurred or information exists with respect to the Company or any of its Subsidiaries or its or their business, properties, prospects, operations or financial conditions, which, under applicable law, rule or regulation, requires public disclosure or announcement by the Company but which has not been so publicly announced or disclosed. The Company acknowledges and agrees that no Buyer makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 2.

(ll) Shell Company Status. The Company is not, and has not been since July 14, 2013, an issuer identified in Rule 144(i)(1) of the 1933 Act. As of July 14, 2013, the Company filed current “Form 10 information” (as defined in Rule 144 (i)(3)) with the SEC reflecting its status as an entity that was no longer an issuer described in Rule 144(i)(1)(i).

(mm) Stock Option Plans. Each stock option granted by the Company was granted (i) in accordance with the terms of the applicable stock option plan of the Company and (ii) with an exercise price at least equal to the fair market value of the Common Stock on the date such stock option would be considered granted under GAAP and applicable law. No stock option granted under the Company’s stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no policy or practice of the Company to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its Subsidiaries or their financial results or prospects.

(nn) No Disagreements with Accountants and Lawyers. There are no material disagreements of any kind presently existing, or reasonably anticipated by the Company to arise, between the Company and the accountants and lawyers formerly or presently employed by the Company. In addition, on or prior to the date hereof, the Company had discussions with its accountants about its financial statements previously filed with the SEC. Based on those discussions, the Company has no reason to believe that it will need to restate any such financial statements or any part thereof.

(oo) No Disqualification Events. Except as set forth in Schedule 3(oo), with respect to Securities to be offered and sold hereunder in reliance on Rule 506(b) under the 1933 Act, none of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering hereunder, any beneficial owner of 20% or more of the Company’s outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the 1933 Act) connected with the Company in any capacity at the time of sale (each, an “**Issuer Covered Person**” and, together, “**Issuer Covered Persons**”) is subject to any of the “Bad Actor” disqualifications described in Rule 506(d)(1)(i) to (viii) under the 1933 Act (a “**Disqualification Event**”), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3). The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event. The Company has complied, to the extent applicable, with its disclosure obligations under Rule 506(e), and has furnished to the Buyers a copy of any disclosures provided thereunder.

(pp) Other Covered Persons. The Company is not aware of any Person that has been or will be paid (directly or indirectly) remuneration for solicitation of Buyers or potential purchasers in connection with the sale of any Securities.

4. COVENANTS.

(a) Best Efforts. Each party shall use its best efforts timely to satisfy each of the covenants and the conditions to be satisfied by it as provided in Sections 6 and 7 of this Agreement.

(b) Form D and Blue Sky. The Company agrees to file a Form D with respect to the Securities as required under Regulation D and to provide a copy thereof to each Buyer promptly after such filing. The Company shall, on or before each Closing Date, take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for or to qualify the Securities for sale to the Buyers at such Closing pursuant to this Agreement under applicable securities or “Blue Sky” laws of the states of the United States (or to obtain an exemption from such qualification), and shall provide evidence of any such action so taken to the Buyers on or prior to the applicable Closing Date. The Company shall make all filings and reports relating to the offer and sale of the Securities required under applicable securities or “Blue Sky” laws of the states of the United States following the applicable Closing Date.

(c) Reporting Status. For so long as the Company is required to file reports under the 1934 Act, the Company shall timely file all reports required to be filed with the SEC pursuant to the 1934 Act, and the Company shall not terminate its status as an issuer required to file reports under the 1934 Act even if the 1934 Act or the rules and regulations thereunder would no longer require or otherwise permit such termination.

(d) Use of Proceeds. The Company will use the proceeds from the sale of the Securities solely for working capital and general corporate purposes.

(e) Financial Information. The Company agrees to send the following to each Buyer during the Reporting Period (i) unless the following are filed with the SEC through EDGAR and are available to the public through the EDGAR system, within one (1) Business Day after the filing thereof with the SEC, a copy of its Annual Reports on Form 10-K, any Quarterly Reports on Form 10-Q, any Current Reports on Form 8-K (or any analogous reports under the 1934 Act) and any registration statements (other than on Form S-8) or amendments filed pursuant to the 1933 Act, (ii) unless the following are filed with the SEC through EDGAR and are available to the public through the EDGAR system, on the same day as the release thereof, facsimile or e-mailed copies of all press releases issued by the Company or any of its Subsidiaries, and (iii) copies of any notices and other information made available or given to the stockholders of the Company generally, contemporaneously with the making available or giving thereof to the stockholders. As used herein, “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) [Intentionally omitted.]

(g) Transfer Agent. For so long any Securities are outstanding, the Company shall cause its transfer agent to participate in the Depository Trust Company Fast Automated Securities Transfer Program.

(h) Fees. The Company shall be responsible for the payment of any placement agent’s fees, financial advisory fees, or broker’s commissions (other than for Persons engaged by any Buyer) relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold each Buyer harmless against, any liability, loss or expense (including, without limitation, reasonable attorney’s fees and out-of-pocket expenses) arising in connection with any claim relating to any such payment. Except as otherwise set forth in the Transaction Documents, each party to this Agreement shall bear its own expenses in connection with the sale of the Securities to the Buyers.

(i) Pledge of Securities. The Company acknowledges and agrees that the Securities may be pledged by a Buyer in connection with a bona fide margin agreement or other loan or financing arrangement that is secured by the Securities. The pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Buyer effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document, including, without limitation, Section 2(f) hereof; provided that a Buyer and its pledgee shall be required to comply with the provisions of Section 2(f) hereof in order to effect a sale, transfer or assignment of Securities to such pledgee. The Company hereby agrees to execute and deliver such documentation as a pledgee of the Securities may reasonably request in connection with a pledge of the Securities to such pledgee by a Buyer.

(j) Disclosure of Transactions and Other Material Information. On or before 8:30 a.m., New York City time, on January [], 2019, (i) the Company shall issue a press release reasonably acceptable to the Buyers and (ii) file a Current Report on Form 8-K describing the terms of the transactions contemplated by the Transaction Documents in the form required by the 1934 Act and attaching the material Transaction Documents (including, without limitation, this Agreement and all schedules and exhibits to this Agreement, the form of Notes, the form of the Warrants and the Security Documents as exhibits to such filing) (including all attachments, the “**8-K Filing**”). Subject to the foregoing, neither the Company, its Subsidiaries nor any Buyer shall issue any press releases or any other public statements with respect to the transactions contemplated hereby; provided, however, that the Company shall be entitled, without the prior approval of any Buyer, to make any press release or other public disclosure with respect to such transactions (i) in substantial conformity with the 8-K Filing and contemporaneously therewith and (ii) as is required by applicable law and regulations (provided that in the case of clause (i) each Buyer shall be consulted by the Company in connection with any such press release or other public disclosure prior to its release). Except as required by applicable law, without the prior written consent of any applicable Buyer, neither the Company nor any of its Subsidiaries or affiliates shall disclose the name of such Buyer in its capacity as a Buyer in any filing, announcement, release or otherwise.

(k) Additional Notes: Variable Securities. So long as any Buyer beneficially owns any Notes, the Company will not issue any Notes (other than to the Buyers as contemplated hereby), and the Company shall not issue any other securities that would cause a breach or default under the Notes; provided, however, the Company may amend its outstanding Indebtedness to provide for the approved issuance of these Notes and adjust any relevant terms accordingly. For so long as any Notes remain outstanding, the Company shall not, in any manner, issue or sell any rights, warrants or options to subscribe for or purchase Common Stock or directly or indirectly convertible into or exchangeable or exercisable for Common Stock at a price which varies or may vary with the market price of the Common Stock, including by way of one or more reset(s) to any fixed price unless the conversion, exchange or exercise price of any such security cannot be less than the then applicable Conversion Price (as defined in the Notes) with respect to the Common Stock into which any Note is convertible or the then applicable Exercise Price (as defined in the Warrants) with respect to the Common Stock into which any Warrant is exercisable.

(l) Corporate Existence. So long as any Buyer beneficially owns any Securities, the Company shall (i) maintain its corporate existence and (ii) not be party to any Fundamental Transaction (as defined in the Notes) unless the Company is in compliance with the applicable provisions governing Fundamental Transactions set forth in the Notes and the Warrants.

(m) Reservation of Shares. So long as any Buyer owns any Securities, the Company shall take all action necessary to at all times have authorized, and reserved for the purpose of issuance, no less than the Required Reserved Amount. If at any time the number of shares of Common Stock authorized and reserved for issuance is not sufficient to meet the Required Reserved Amount, the Company will promptly take all corporate action necessary to authorize and reserve a sufficient number of shares, including, without limitation, calling a special meeting of stockholders to authorize additional shares to meet the Company's obligations under Section 3(c), in the case of an insufficient number of authorized shares, obtain stockholder approval of an increase in such authorized number of shares, and voting the management shares of the Company in favor of an increase in the authorized shares of the Company to ensure that the number of authorized shares is sufficient to meet the Required Reserved Amount.

(n) Conduct of Business. The business of the Company and its Subsidiaries shall not be conducted in violation of any law, ordinance or regulation of any governmental entity, except where such violations would not result, either individually or in the aggregate, in a Material Adverse Effect.

(o) Short Sales. Starting on the date hereof and ending on the 45th day following the applicable Closing Date, no Buyer shall engage in any short sales or similar transactions with respect to the Common Stock, nor cause any Person to engage in any short sales or similar transactions with respect to the Common Stock.

(p) Notice of Disqualification Events. The Company will notify the Buyers in writing, prior to the applicable Closing Date of (i) any Disqualification Event relating to any Issuer Covered Person and (ii) any event that would, with the passage of time, become a Disqualification Event relating to any Issuer Covered Person.

(q) Collateral Agent.

(i) Each Buyer hereby (a) appoints Empery Tax Efficient, LP as the collateral agent hereunder and under the Security Documents (in such capacity, the "**Collateral Agent**"), and (b) authorizes the Collateral Agent (and its officers, directors, employees and agents) to take such action on such Buyer's behalf in accordance with the terms hereof and thereof. The Collateral Agent shall not have, by reason hereof or pursuant to any Security Documents, a fiduciary relationship in respect of any Buyer. Neither the Collateral Agent nor any of its officers, directors, employees and agents shall have any liability to any Buyer for any action taken or omitted to be taken in connection hereof or the Security Documents except to the extent caused by its own gross negligence or willful misconduct, and each Buyer agrees to defend, protect, indemnify and hold harmless the Collateral Agent and all of its officers, directors, employees and agents (collectively, the "**Collateral Agent Indemnitees**") from and against any losses, damages, liabilities, obligations, penalties, actions, judgments, suits, fees, costs and expenses (including, without limitation, reasonable attorneys' fees, costs and expenses) incurred by such Collateral Agent Indemnitee, whether direct, indirect or consequential, arising from or in connection with the performance by such Collateral Agent Indemnitee of the duties and obligations of Collateral Agent pursuant hereto or any of the Security Documents.

(ii) The Collateral Agent shall be entitled to rely upon any written notices, statements, certificates, orders or other documents or any telephone message believed by it in good faith to be genuine and correct and to have been signed, sent or made by the proper Person, and with respect to all matters pertaining to this Agreement or any of the other Transaction Documents and its duties hereunder or thereunder, upon advice of counsel selected by it.

(iii) The Collateral Agent may resign from the performance of all its functions and duties hereunder and under the Notes and the Security Documents at any time by giving at least ten (10) Business Days prior written notice to the Company and each holder of the Notes. Such resignation shall take effect upon the acceptance by a successor Collateral Agent of appointment as provided below. Upon any such notice of resignation, the holders of a majority of the outstanding principal amount of Notes shall appoint a successor Collateral Agent. Upon the acceptance of the appointment as Collateral Agent, such successor Collateral Agent shall succeed to and become vested with all the rights, powers, privileges and duties of the retiring Collateral Agent, and the retiring Collateral Agent shall be discharged from its duties and obligations under this Agreement, the Notes and the Security Agreement. After any Collateral Agent's resignation hereunder, the provisions of this Section 4(q) shall inure to its benefit. If a successor Collateral Agent shall not have been so appointed within said ten (10) Business Day period, the retiring Collateral Agent shall then appoint a successor Collateral Agent who shall serve until such time, if any, as the holders of a majority of the outstanding principal amount of Notes appoints a successor Collateral Agent as provided above.

(iv) The Company hereby covenants and agrees to take all actions as promptly as practicable reasonably requested by either the holders of a majority of the outstanding principal amount of Notes or the Collateral Agent (or its successor), from time to time pursuant to the terms of this Section 4(q), to secure a successor Collateral Agent satisfactory to such requesting part(y)(ies), in their sole discretion, including, without limitation, by paying all fees of such successor Collateral Agent, by having the Company agree to indemnify any successor Collateral Agent and by each of the Company executing a collateral agency agreement or similar agreement and/or any amendment to the Security Documents reasonably requested or required by the successor Collateral Agent.

(v) The Company agrees to pay the Collateral Agent, by wire transfer of immediately available funds in accordance with the Collateral Agent's written wire instructions, a quarterly agency fee of \$10,000 within three (3) Business Days following the end of each calendar quarter that the Collateral Agent acted as collateral agent in accordance with this Section 4(q) and the Security Documents during such calendar quarter, *provided*, such fee shall be non-duplicative to any existing fee arrangements with the Collateral Agent arising from existing Indebtedness.

(r) Closing Documents. On or prior to the tenth (10th) Business Day after each applicable Closing Date, the Company agrees to deliver, or cause to be delivered, to each Buyer a complete closing set of the executed Transaction Documents, Securities and any other documents relating to each applicable Closing required to be delivered to any party pursuant to Section 7(b) hereof or otherwise.

(s) Pledges of Intellectual Property Rights. The Company hereby agrees that it shall not pledge, mortgage, encumber or otherwise permit the Intellectual Property Rights to be subject to any lien, security interest, encumbrances, or charge (such actions hereinafter referred to collectively as "**Pledge**") any of its Intellectual Property Rights except for Pledges related to current commercial development agreements as listed on Schedule 4(s) or for future commercial development agreements entered into in the ordinary course of business. The Company hereby further agrees: (a) to promptly notify the Collateral Agent of any such future commercial development agreements (but only if the Collateral Agent executes a confidentiality agreement with respect to any material, non-public information regarding or related to such commercial development agreements prior to its receipt of any such material, non-public information), and (b) to amend Schedule 4(s) in connection with such additional Pledges, with the approval of the Collateral Agent, which approval shall not be unreasonably withheld.

5. REGISTER; TRANSFER AGENT INSTRUCTIONS.

(a) Register. The Company shall maintain at its principal executive offices (or such other office or agency of the Company as it may designate by notice to each holder of Securities), a register for the Notes and the Warrants in which the Company shall record the name and address of the Person in whose name the Notes and the Warrants have been issued (including the name and address of each transferee), the principal amount of Notes held by such Person, the number of Conversion Shares issuable pursuant to the terms of the Notes and the number of Warrant Shares issuable upon exercise of the Warrants held by such Person. The Company shall keep the register open and available at all times during business hours for inspection of any Buyer or its legal representatives.

(b) Transfer Agent Instructions. The Company shall issue irrevocable instructions to its transfer agent, and any subsequent transfer agent, in the form of Exhibit H attached hereto (the “**Irrevocable Transfer Agent Instructions**”) to issue certificates or credit shares to the applicable balance accounts at DTC, registered in the name of each Buyer or its respective nominee(s), for the Conversion Shares and Warrant Shares issued at each applicable Closing or pursuant to the terms of the Notes or exercise of the Warrants in such amounts as specified from time to time by each Buyer to the Company upon conversion of the Notes or exercise of the Warrants. The Company warrants that no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section 5(b), and stop transfer instructions to give effect to Section 2(f) hereof, will be given by the Company to its transfer agent with respect to the Securities, and that the Securities shall otherwise be freely transferable on the books and records of the Company as and to the extent provided in this Agreement and the other Transaction Documents. If a Buyer effects a sale, assignment or transfer of the Securities in accordance with Section 2(f), the Company shall permit the transfer and shall promptly instruct its transfer agent to issue one or more certificates or credit shares to the applicable balance accounts at DTC in such name and in such denominations as specified by such Buyer to effect such sale, transfer or assignment. In the event that such sale, assignment or transfer involves the Conversion Shares or Warrant Shares sold, assigned or transferred pursuant to an effective registration statement or pursuant to Rule 144, the transfer agent shall issue such Securities to the Buyer, assignee or transferee, as the case may be, without any restrictive legend. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to a Buyer. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section 5(b) will be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section 5(b), that a Buyer shall be entitled, in addition to all other available remedies, to seek an order and/or injunction restraining any breach and requiring immediate issuance and transfer, without the necessity of showing economic loss and without any bond or other security being required.

6. CONDITIONS TO THE COMPANY’S OBLIGATION TO SELL.

(a) The obligation of the Company hereunder to issue and sell the Initial Notes and the related Warrants to each Initial Buyer at the Initial Closing is subject to the satisfaction, at or before the Initial Closing Date, of each of the following conditions, *provided* that these conditions are for the Company’s sole benefit and may be waived by the Company at any time in its sole discretion by providing each Buyer with prior written notice thereof:

(i) Such Initial Buyer shall have executed each of the Transaction Documents to which it is a party and the Investor Questionnaire and delivered each of the same to the Company.

(ii) Such Initial Buyer shall have executed and delivered to the Company the flow of funds memorandum (“**Flow of Funds**”), confirming the Initial Purchase Price payable by such Initial Buyer and the wiring instructions applicable thereto.

(iii) Such Initial Buyer shall have delivered its Initial Purchase Price to the Company for the Initial Note(s) and Warrant(s) purchased by such Initial Buyer at the Initial Closing by wire transfer of immediately available funds pursuant to the wire instructions provided by the Company *provided*, if the Initial Buyer is directed to wire its funds to a third party pursuant to the Flow of Funds, the receipt of funds by such designated third party shall constitute delivery of its Purchase Price, in part or in whole as indicated in the Flow of Funds, hereunder.

(iv) The representations and warranties of such Initial Buyer shall be true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of the date when made and as of the Initial Closing Date as though made at that time (except for representations and warranties that speak as of a specific date which shall be true and correct as of such specified date), and such Initial Buyer shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by such Initial Buyer at or prior to the Initial Closing Date.

(b) The obligation of the Company hereunder to issue and sell the Subsequent Note(s) to each Subsequent Buyer at the applicable Subsequent Closing is subject to the satisfaction, at or before the applicable Subsequent Closing Date of each of the following conditions, *provided* that these conditions are for the Company’s sole benefit and may be waived by the Company at any time in its sole discretion by providing each Subsequent Buyer with prior written notice thereof:

(i) Such Subsequent Buyer shall have executed the Investor Questionnaire and delivered the same to the Company.

(ii) Such Subsequent Buyer shall have executed either (x) a Joinder Agreement or (y) a Subsequent Closing Notice, as applicable, and delivered the same to the Company.

(iii) Such Subsequent Buyer shall have delivered its Subsequent Purchase Price to the Company for the Subsequent Note(s) being purchased by such Subsequent Buyer at the applicable Subsequent Closing by wire transfer of immediately available funds pursuant to the wire instructions provided by the Company.

(iv) The representations and warranties of such Subsequent Buyer shall be true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of the date when made and as of the applicable Subsequent Closing Date as though made at that time (except for representations and warranties that speak as of a specific date which shall be true and correct as of such specified date), and such Subsequent Buyer shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by such Subsequent Buyer at or prior to the applicable Subsequent Closing Date.

7. CONDITIONS TO EACH BUYER'S OBLIGATION TO PURCHASE.

(a) The obligation of each Initial Buyer hereunder to purchase the Initial Notes and Warrants at the Initial Closing is subject to the satisfaction, at or before the Initial Closing Date, of each of the following conditions, provided that these conditions are for each Initial Buyer's sole benefit and may be waived by such Initial Buyer at any time in its sole discretion by providing the Company with prior written notice thereof:

(i) The Company and each of its Subsidiaries shall have duly executed and delivered to such Initial Buyer each of the following documents to which it is a party: (A) each of the Transaction Documents, and (B) the Initial Note(s) (allocated in such principal amounts as such Initial Buyer shall request) and the related Warrant(s), in each case being purchased by such Initial Buyer at the Initial Closing pursuant to this Agreement.

(ii) The Company shall have delivered to such Initial Buyer a copy of the Irrevocable Transfer Agent Instructions, in the form of Exhibit H attached hereto, which instructions shall have been delivered to and acknowledged in writing by the Company's transfer agent.

(iii) The Company shall have delivered to such Initial Buyer a certificate evidencing the good standing of the Company and each of its Subsidiaries in such entity's jurisdiction of formation issued by the Secretary of State (or comparable office) of such jurisdiction, as of a date within ten (10) days of the Initial Closing Date.

(iv) The Company shall have delivered to such Initial Buyer a certificate evidencing the Company's and each of its Subsidiary's qualification as a foreign corporation and good standing issued by the Secretary of State (or comparable office) of each jurisdiction in which the Company and its Subsidiaries conduct business, as of a date within ten (10) days of the Initial Closing Date.

(v) The Company shall have delivered to such Initial Buyer a certificate, executed by the Secretary of the Company and dated as of the Initial Closing Date, as to (i) the resolutions consistent with Section 3(b) as adopted by the Company's and each of its Subsidiary's Board of Directors in a form reasonably acceptable to such Initial Buyer, (ii) the Certificate of Incorporation of the Company and each of its Subsidiaries and (iii) the Bylaws of the Company and each of its Subsidiaries, each as in effect at the Initial Closing, in the form attached hereto as Exhibit I.

(vi) The representations and warranties of the Company shall be true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of the date when made and as of the Initial Closing Date as though made at that time (except for representations and warranties that speak as of a specific date which shall be true and correct as of such specified date) and the Company shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company at or prior to the Initial Closing Date. Such Initial Buyer shall have received a certificate, executed by the Chief Financial Officer of the Company, dated as of the Initial Closing Date, to the foregoing effect and as to such other matters as may be reasonably requested by such Initial Buyer in the form attached hereto as Exhibit J.

(vii) The Common Stock (I) shall be designated for quotation on the Principal Market and (II) shall not have been suspended, as of the Initial Closing Date, by the SEC or the Principal Market from quotation on the Principal Market nor shall suspension by the SEC or the Principal Market have been threatened, as of the Initial Closing Date, in writing by the SEC or the Principal Market.

(viii) The Company shall have obtained all governmental, regulatory or third party consents and approvals, if any, necessary for the sale of the Securities.

(ix) Each of the Company's Subsidiaries shall have executed and delivered to such Buyer the Guaranty Amendment.

(x) The Collateral Agent shall have received the Fourth Amendment to the Subordination and Intercreditor Agreement, in the form attached hereto as Exhibit K (the "**September 2016 Subordination Agreement Amendment**"), which further amends that certain Subordination and Intercreditor Agreement dated as of September 1, 2016 by and among Longboard Capital Advisors LLC, the Company, Ener-Core Power, Inc., Anthony Tang, as a Senior Lender (as defined therein) and Empery Tax Efficient, LP in its capacity as collateral agent for the Senior Note Lenders (as defined therein), as amended to date.

(xi) The Collateral Agent shall have received the Security Amendment Agreement, duly executed by the Company and each of its Subsidiaries, together with the original stock certificates representing all of the equity interests and all promissory notes required to be pledged thereunder, accompanied by undated stock powers and allonges executed in blank and other proper instruments of transfer.

(xii) The Company shall have delivered to such Initial Buyer such other documents relating to the transactions contemplated by this Agreement as such Initial Buyer or its counsel may reasonably request.

(b) The obligation of each Subsequent Buyer hereunder to purchase the Subsequent Notes at the applicable Subsequent Closing is subject to the satisfaction, at or before the Subsequent Closing Date, of each of the following conditions, provided that these conditions are for each Subsequent Buyer's sole benefit and may be waived by such Subsequent Buyer at any time in its sole discretion by providing the Company with prior written notice thereof:

(i) The Company and each of its Subsidiaries shall have duly executed and delivered to such Subsequent Buyer each of the following documents to which it is a party: (A) each of the Transaction Documents, and (B) the Subsequent Note(s) (allocated in amounts as such Subsequent Buyer shall request) being purchased by such Subsequent Buyer at the applicable Subsequent Closing pursuant to this Agreement.

(ii) If applicable, the Company shall have duly executed and delivered to such Subsequent Buyer the Joinder Agreement or Subsequent Closing Notice of such Subsequent Buyer.

(iii) The Company shall have delivered to such Subsequent Buyer a copy of the Irrevocable Transfer Agent Instructions, in the form of Exhibit H attached hereto, which instructions shall have been delivered to and acknowledged in writing by the Company's transfer agent.

(iv) The Company shall have delivered to such Subsequent Buyer a certificate evidencing the good standing of the Company and each of its Subsidiaries in such entity's jurisdiction of formation issued by the Secretary of State (or comparable office) of such jurisdiction, as of a date within ten (10) days of the Initial Closing Date, and a bringdown of such certificate(s) as of a date within ten (10) days of the applicable Subsequent Closing Date.

(v) The Company shall have delivered to such Subsequent Buyer a certificate evidencing the Company's and each of its Subsidiary's qualification as a foreign corporation and good standing issued by the Secretary of State (or comparable office) of each jurisdiction in which the Company and its Subsidiaries conduct business, as of a date within ten (10) days of the Initial Closing Date, and a bringdown of such certificate(s) as of a date within ten (10) days of the applicable Subsequent Closing Date.

(vi) The Company shall have delivered to such Subsequent Buyer a certificate, executed by the Secretary of the Company and dated as of the Initial Closing Date, as to (i) the resolutions consistent with Section 3(b) as adopted by the Company's and each of its Subsidiary's Board of Directors in a form reasonably acceptable to such Subsequent Buyer, (ii) the Certificate of Incorporation of the Company and each of its Subsidiaries and (iii) the Bylaws of the Company and each of its Subsidiaries, each as in effect at the applicable Subsequent Closing, in the form attached hereto as Exhibit I.

(vii) The representations and warranties of the Company shall be true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of the date when made and as of the applicable Subsequent Closing Date as though made at that time (except for representations and warranties that speak as of a specific date which shall be true and correct as of such specified date) and the Company shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company at or prior to the applicable Subsequent Closing Date. Such Subsequent Buyer shall have received a certificate, executed by the Chief Financial Officer of the Company, dated as of the applicable Subsequent Closing Date, to the foregoing effect and as to such other matters as may be reasonably requested by such Subsequent Buyer in the form attached hereto as Exhibit J.

(viii) The Common Stock (I) shall be designated for quotation on the Principal Market and (II) shall not have been suspended, as of the applicable Subsequent Closing Date, by the SEC or the Principal Market from quotation on the Principal Market nor shall suspension by the SEC or the Principal Market have been threatened, as of the applicable Subsequent Closing Date, in writing by the SEC or the Principal Market.

(ix) The Company shall have obtained all governmental, regulatory or third party consents and approvals, if any, necessary for the sale of the Securities.

(x) The Company shall have delivered to such Subsequent Buyer such other documents relating to the transactions contemplated by this Agreement as such Subsequent Buyer or its counsel may reasonably request.

8. TERMINATION. In the event that the Initial Closing shall not have occurred with respect to an Initial Buyer on or before five (5) Business Days from the date hereof due to the Company's or such Initial Buyer's failure to satisfy the conditions set forth in Sections 6 and 7 above (and the nonbreaching party's failure to waive such unsatisfied condition(s)), the nonbreaching party shall have the option to terminate this Agreement with respect to such breaching party at the close of business on such date by delivering a written notice to that effect to each other party to this Agreement and without liability of any party to any other party.

9. MISCELLANEOUS.

(a) Governing Law; Jurisdiction; Jury Trial. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

(b) Counterparts. This Agreement and any amendments hereto may be executed and delivered in two or more counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party hereto and delivered to the other party; provided that a facsimile or ".pdf" electronic format signature shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile or ".pdf" electronic format signature.

(c) Headings. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

(d) Severability. If any provision of this Agreement is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Agreement so long as this Agreement as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

(e) Entire Agreement; Amendments. This Agreement and the other Transaction Documents supersede all other prior oral or written agreements between the Buyers, the Company, their affiliates and Persons acting on their behalf with respect to the matters discussed herein, and this Agreement, the other Transaction Documents and the instruments referenced herein and therein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor any Buyer makes any representation, warranty, covenant or undertaking with respect to such matters. Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company, Anthony Tang so long as Anthony Tang or any of his affiliates holds any Securities and Empery so long as Empery or any of its affiliates holds any Securities (the “**Required Holders**”); provided that any such amendment or waiver that complies with the foregoing but that disproportionately, materially and adversely affects the rights and obligations of any Buyer relative to the comparable rights and obligations of the other Buyers shall require the prior written consent of such adversely affected Buyer; provided, further, that the provisions of Section 4(q) cannot be amended without the additional prior written approval of the Collateral Agent or its successor. Any amendment or waiver effected in accordance with this Section 9(e) shall be binding upon each Buyer and holder of Securities and the Company. No such amendment shall be effective to the extent that it applies to less than all of the Buyers or holders of Securities. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of the Transaction Documents unless the same consideration (other than the reimbursement of legal fees) also is offered to all of the parties to the Transaction Documents, holders of Notes or holders of the Warrants, as the case may be. The Company has not, directly or indirectly, made any agreements with any Buyers relating to the terms or conditions of the transactions contemplated by the Transaction Documents except as set forth in the Transaction Documents. Without limiting the foregoing, the Company confirms that, except as set forth in this Agreement, no Buyer has made any commitment or promise or has any other obligation to provide any financing to the Company or otherwise.

(f) Notices. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); (iii) upon receipt, if sent by e-mail (provided that such sent e-mail is kept on file (whether electronically or otherwise) by the sending party and the sending party does not immediately receive an automatically generated message from the recipient’s e-mail server that such e-mail could not be delivered to such recipient) or (iv) one Business Day after deposit with an overnight courier service, in each case properly addressed to the party to receive the same. The addresses, facsimile numbers and e-mail addresses for such communications shall be:

If to the Company:

Ener-Core, Inc.
30100 Town Center Dr., Suite O-209
Laguna Niguel, California 92677
Telephone: (949) 732-4420
Attention: Mr. Domonic J. Carney, Chief Financial Officer
Email: DJ.Carney@ener-core.com

With a copy (for informational purposes only) to:

K&L Gates LLP
1 Park Plaza, 12th Floor
Irvine, California 92614
Telephone: (949) 623-3545
Facsimile: (949) 623-4477
Attention: Shoshannah D. Katz, Esq.
Email: shoshannah.katz@klgates.com

If to the Transfer Agent:

VStock Transfer, LLC.
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436
Facsimile: (646) 536-3179
Attention: Yoel Goldfeder
E-mail: yoel@vstocktransfer.com

If to a Buyer, to its address, facsimile number and e-mail address set forth on the Schedule of Buyers, with copies to such Buyer's representatives as set forth on the Schedule of Buyers,

or to such other address, facsimile number and/or e-mail address and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's facsimile machine or e-mail containing the time, date, recipient facsimile number and an image of the first page of such transmission or (C) provided by an overnight courier service shall be rebuttable evidence of personal service, receipt by facsimile or receipt from an overnight courier service in accordance with clause (i), (ii) or (iv) above, respectively. A copy of the e-mail transmission containing the time, date and recipient e-mail address shall be rebuttable evidence of receipt by e-mail in accordance with clause (iii) above.

(g) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns, including any purchasers of the Securities. The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Required Holders, including by way of a Fundamental Transaction (unless the Company is in compliance with the applicable provisions governing Fundamental Transactions set forth in the Notes and the Warrants). A Buyer may assign some or all of its rights hereunder without the consent of the Company, in which event such assignee shall be deemed to be a Buyer hereunder with respect to such assigned rights.

(h) No Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except that each Indemnitee shall have the right to enforce the obligations of the Company with respect to Section 9(k).

(i) Survival. Unless this Agreement is terminated under Section 8, the representations and warranties of the Company and the Buyers contained in Sections 2 and 3, and the agreements and covenants set forth in Sections 4, 5 and 9 shall survive each Closing. Each Buyer shall be responsible only for its own representations, warranties, agreements and covenants hereunder.

(j) Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby, including without limitation taking such reasonable action as is necessary or desirable to perfect a security interest in the Company's or one or more of its Subsidiaries' Intellectual Property. Also, without limiting the generality of the requirements of the Company set forth in the Transaction Documents, the Company hereby covenants and agrees to provide prompt notice to the Collateral Agent upon the issuance of any patents in the name of the Company or any of their Subsidiaries anywhere in the world.

(k) Indemnification.

(i) In consideration of each Buyer's execution and delivery of the Transaction Documents and acquiring the Securities thereunder and in addition to all of the Company's other obligations under the Transaction Documents, the Company shall defend, protect, indemnify and hold harmless each Buyer and each other holder of the Securities and all of their stockholders, partners, members, officers, directors, employees and direct or indirect investors and any of the foregoing Persons' agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "**Indemnitees**") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "**Indemnified Liabilities**"), incurred by any Indemnitee as a result of, or arising out of, or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby or (c) any cause of action, suit or claim brought or made against such Indemnitee by a third party (including for these purposes a derivative action brought on behalf of the Company) and arising out of or resulting from (i) the execution, delivery, performance or enforcement of the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (ii) any transaction financed or to be financed in whole or in part, directly or indirectly, with the proceeds of the issuance of the Securities, (iii) any disclosure made by such Buyer pursuant to Section 4(j), or (iv) the status of such Buyer or holder of the Securities as an investor in the Company pursuant to the transactions contemplated by the Transaction Documents. To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities that is permissible under applicable law.

(ii) Promptly after receipt by an Indemnitee under this Section 9(k) of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving an Indemnified Liability, such Indemnitee shall, if a claim for indemnification in respect thereof is to be made against any indemnifying party under this Section 9(k), deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnitee; provided, however, that an Indemnitee shall have the right to retain its own counsel with the fees and expenses of not more than one counsel for such Indemnitee to be paid by the indemnifying party, if, in the reasonable opinion of the Indemnitee, the representation by such counsel of the Indemnitee and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnitee and any other party represented by such counsel in such proceeding. Legal counsel referred to in the immediately preceding sentence shall be selected by the Buyer holding at least a majority of the aggregate principal amount of the Notes. The Indemnitee shall cooperate fully with the indemnifying party in connection with any negotiation or defense of any such action or Indemnified Liabilities by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnitee that relates to such action or Indemnified Liabilities. The indemnifying party shall keep the Indemnitee fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the prior written consent of the Indemnitee, which consent shall not be unreasonably withheld conditioned or delayed, consent to entry of any judgment or enter into any settlement or other compromise which (i) does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnitee of a release from all liability in respect to such Indemnified Liabilities or litigation, (ii) requires any admission of wrongdoing by such Indemnitee, or (iii) obligates or requires an Indemnitee to take, or refrain from taking, any action. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnitee with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnitee under this Section 9(k), except to the extent that the indemnifying party is prejudiced in its ability to defend such action.

(iii) The indemnification required by this Section 9(k) shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Liabilities are incurred.

(iv) The indemnity agreements contained herein shall be in addition to (x) any cause of action or similar right of the Indemnitee against the indemnifying party or others, and (y) any liabilities the indemnifying party may be subject to pursuant to the law.

(l) No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

(m) Remedies. Each Buyer and each holder of the Securities shall have all rights and remedies set forth in the Transaction Documents and all rights and remedies which such holders have been granted at any time under any other agreement or contract and all of the rights which such holders have under any law. Any Person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security), to recover damages by reason of any breach of any provision of this Agreement and to exercise all other rights granted by law. Furthermore, the Company recognizes that in the event that it fails to perform, observe, or discharge any or all of its obligations under the Transaction Documents, any remedy at law may prove to be inadequate relief to the Buyers. The Company therefore agrees that the Buyers shall be entitled to seek temporary and permanent injunctive relief in any such case without the necessity of proving actual damages and without posting a bond or other security.

(n) Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) the Transaction Documents, whenever any Buyer exercises a right, election, demand or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then such Buyer may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights.

(o) Payment Set Aside. To the extent that the Company makes a payment or payments to the Buyers hereunder or pursuant to any of the other Transaction Documents or the Buyers enforce or exercise their rights hereunder or thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, foreign, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

(p) Independent Nature of Buyers' Obligations and Rights. The obligations of each Buyer under any Transaction Document are several and not joint with the obligations of any other Buyer, and no Buyer shall be responsible in any way for the performance of the obligations of any other Buyer under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Buyer pursuant hereto or thereto, shall be deemed to constitute the Buyers as, and the Company acknowledges that the Buyers do not so constitute, a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Buyers are in any way acting in concert or as a group, and the Company shall not assert any such claim with respect to such obligations or the transactions contemplated by the Transaction Documents and the Company acknowledges that the Buyers are not acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. The Company acknowledges and each Buyer confirms that it has independently participated in the negotiation of the transaction contemplated hereby with the advice of its own counsel and advisors. Each Buyer shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of any other Transaction Documents, and it shall not be necessary for any other Buyer to be joined as an additional party in any proceeding for such purpose.

[Signature Pages Follow]

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Securities Purchase Agreement to be duly executed as of the date first written above.

COMPANY:

ENER-CORE, INC.

By: _____
Name: Domonic J. Carney
Title: Chief Financial Officer

Signature Page to Securities Purchase Agreement

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Securities Purchase Agreement to be duly executed as of the date first written above.

BUYER:

[]

By: _____

Name:

Title:

Aggregate Principal Amount of Note Purchased:

Purchase Price:

Address:

Attention:

Facsimile:

Telephone:

Email:

Signature Page to Securities Purchase Agreement

EXHIBITS

Exhibit A	Form of Note
Exhibit B	Form of Warrant
Exhibit C	Guaranty Amendment
Exhibit D	Security Amendment Agreement
Exhibit E	Form of Joinder Agreement
Exhibit F	Form of Subsequent Closing Notice
Exhibit G	Form of Investor Questionnaire
Exhibit H	Form of Irrevocable Transfer Agent Instructions
Exhibit I	Form of Secretary's Certificate
Exhibit J	Form of Compliance Certificate
Exhibit K	September 2016 Subordination Agreement Amendment

SCHEDULES

Schedule 3(a)	Organization and Qualification
Schedule 3(f)	Acknowledgment Regarding Buyer's Purchase of Securities
Schedule 3(j)	SEC Documents; Financial Statements
Schedule 3(k)	Absence of Certain Changes
Schedule 3(m)	Conduct of Business; Regulatory Permits
Schedule 3(o)	Sarbanes-Oxley Act
Schedule 3(p)	Transactions With Affiliates
Schedule 3(q)	Equity Capitalization
Schedule 3(r)	Indebtedness and Other Contracts
Schedule 3(s)	Absence of Litigation
Schedule 3(bb)	Internal Accounting and Disclosure Controls
Schedule 3(dd)	Ranking of Notes
Schedule 3(oo)	No Disqualification Events
Schedule 4(s)	Pledges of Intellectual Property Rights

EXHIBIT A

**Form of Note
[omitted]**

EXHIBIT B

**Form of Warrant
[omitted]**

B-1

EXHIBIT C

Form of Guaranty Amendment

THIRD AMENDMENT TO GUARANTY

THIS THIRD AMENDMENT TO GUARANTY (this “**Amendment**”) is made and entered into as of January 18, 2019 by and between Ener-Core Power, Inc., a Delaware corporation (the “**Guarantor**”) and the undersigned, and, in accordance with the terms hereof, amends that certain Guaranty, dated as of November 23, 2016 (as amended to date, the “**Guaranty**”), made by the Guarantor, in favor of the “**Buyers**” party to that certain Securities Purchase Agreement, dated as of November 23, 2016 (the “**November 2016 SPA**”), by and among Ener-Core, Inc., a Delaware corporation (the “**Company**”), and the investors listed on the Schedule of Buyers attached thereto. Capitalized terms used herein but not otherwise defined herein shall have the meanings ascribed to such terms in the Guaranty.

RECITALS

WHEREAS, pursuant to Section 12(b) of the Guaranty, provisions of the Guaranty may be amended and the observance thereof may be waived only with the written consent of the Company and the Required Holders (as defined in the November 2016 SPA);

WHEREAS, any amendment effected in accordance with Section 12(b) shall be binding upon each Buyer and holder of Securities and the Company; and

WHEREAS, the parties hereto wish to amend the Guaranty as set forth below.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants herein contained and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties, intending to be legally bound, agree as follows:

ARTICLE I

AMENDMENTS TO THE GUARANTY

Section 1.1 The fourth paragraph under the WITNESSETH section of the Guaranty is hereby deleted, and the following paragraphs shall be added after the third paragraph under the WITNESSETH section of the Guaranty:

“WHEREAS, the Company and each party listed as a “**Buyer**” on the Schedule of Buyers (each a “**January 2019 Buyer**”, and collectively, the “**January 2019 Buyers**”) attached to that certain Securities Purchase Agreement dated January 18, 2019 (as amended, restated or modified from time to time, the “**January 2019 SPA**”) are parties to the January 2019 SPA, pursuant to which, among other things, the January 2019 Buyers shall purchase from the Company certain senior secured convertible “**Notes**” (as defined in the January 2019 SPA) (collectively, the “**January 2019 Notes**”).”

“WHEREAS, (a) each of the November 2016 Buyers, the September 2017 Buyers, the June 2018 Buyers and the January 2019 Buyers are hereinafter referred to individually as a “**Buyer**” and collectively, the “**Buyers**”, (b) the November 2016 Notes, the September 2017 Notes, the June 2018 Notes and the January 2019 Notes are hereinafter referred to collectively as the “**Notes**”, (c) the November 2016 SPA, the September 2017 SPA, the June 2018 SPA and the January 2019 SPA are hereinafter referred to collectively as the “**Securities Purchase Agreement**”, and (d) collectively, the (1) November 2016 SPA, the November 2016 Notes and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the November 2016 SPA, (2) the September 2017 SPA, the September 2017 Notes and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the September 2017 SPA, (3) the June 2018 SPA, the June 2018 Notes and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the June 2018 SPA, and (4) the January 2019 SPA, the January 2019 Notes and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the January 2019 SPA, are hereinafter referred to as the “**Combined Transaction Documents**”).”

ARTICLE II

MISCELLANEOUS

Section 2.1 Effect of this Amendment. This Amendment shall form a part of the Guaranty for all purposes, and each party thereto and hereto shall be bound hereby. From and after the execution of this Amendment by the parties hereto, any reference to the Guaranty shall be deemed a reference to the Guaranty as amended hereby. This Amendment shall be deemed to be in full force and effect only from and after both the execution of this Amendment by the parties hereto and the execution of one or more agreements substantially identical to this Amendment by the Company and each of the other Required Holders. Except as specifically amended as set forth herein, each term and condition of the Guaranty shall continue in full force and effect.

Section 2.2 Entire Agreement. This Amendment, together with the Guaranty, contains the entire agreement of the parties and supersedes any prior or contemporaneous written or oral agreements between them concerning the subject matter of this Amendment.

Section 2.3 Governing Law. This Amendment shall be governed by the internal law of the State of New York.

Section 2.4 Counterparts. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument; signature pages may be detached from multiple separate counterparts and attached to a single counterpart so that all signature pages are physically attached to the same document. This Amendment may be executed by fax or electronic mail, in PDF format, and no party hereto may contest this Amendment's validity solely because a signature was faxed or otherwise sent electronically.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have executed this Third Amendment to Guaranty as of the date first above written.

ENER-CORE POWER, INC., a Delaware corporation

By: _____
Name: Domonic J. Carney
Title: Chief Financial Officer

Address for Notices:

30100 Town Center Dr., Suite O-209
Laguna Niguel, California 92677
Attention: Mr. Domonic J. Carney
Email: DJ.Carney@ener-core.com

EXHIBIT D

Security Amendment Agreement

[omitted]

EXHIBIT E

Form of Joinder Agreement

[omitted]

EXHIBIT F

Form of Subsequent Closing Notice

[omitted]

EXHIBIT G

Form of Investor Questionnaire

*This investor questionnaire is being submitted by the undersigned to Ener-Core, Inc., a Delaware corporation (“**Issuer**”) in order to determine whether the undersigned qualifies as an “accredited investor” under Regulation D promulgated under the Securities Act of 1933 (the “**Securities Act**”). The undersigned understands that Issuer will rely upon the accuracy and completeness of the information provided in this questionnaire in determining whether certain issuances of securities of Issuer may qualify for an exemption from the registration requirements of the Securities Act. Please return your completed questionnaire and executed signature page hereto with your signature page to the Securities Purchase Agreement.*

I. Accredited Investor: The undersigned hereby represents and warrants that the undersigned is an “accredited investor” under Regulation D promulgated under the Securities Act. (please check box if you are an accredited investor)

The undersigned is an “accredited investor” for one of the following reasons (check whichever applies):

(a) **Individuals.** If the undersigned is a natural person (ignoring any revocable grantor trust), then the undersigned hereby represents and warrants as follows (check whichever applies):

- The undersigned is a director, executive officer, or general partner of the Issuer, or a director, executive officer, or general partner of a general partner of the Issuer.
- The undersigned has a net worth (either individually or jointly with the undersigned’s spouse) in excess of \$1,000,000 (see calculation guidance below).
- The undersigned (i) either (A) had an individual annual income (exclusive of spousal income) in excess of \$200,000 or (B) had a joint income with the undersigned’s spouse in excess of \$300,000 in each of the two preceding tax years, and (ii) reasonably expects to have the same income level (individually or jointly, as applicable) in the current tax year (see calculation guidance below).

*The term “**net worth**” means the excess of total assets over total liabilities. In calculating “net worth,” the Investor must exclude the value of the Investor’s principal residence as an asset. The value of the principal residence should be calculated as the fair market value of the residence, less any debt secured by such residence. To the extent that the amount of debt secured by the primary residence exceeds the fair market value of such residence, this excess amount of debt should be considered a liability for purposes of calculating net worth. The term “**individual income**” means adjusted gross income, as reported for federal income tax purposes, less any income attributable to a spouse or property owned by a spouse, increased by the amount (if not attributable to a spouse or property owned by a spouse) of any tax-exempt shares received, losses claimed as a partner in an entity treated as a partnership for tax purposes, any deduction claimed for depletion, any deduction for long term capital gains. The term “**joint income**” is defined in the same manner as “individual income,” except that income attributable to a spouse or property owned by a spouse is included.*

(b) **Trusts.** If the undersigned is a trust, then the undersigned hereby represents and warrants that the undersigned is (*check whichever applies*):

- A revocable trust (such as a living trust) or a trust formed for the purpose of acquiring the securities and for which, in either case, each grantor is an accredited investor. Indicate each grantor and the category that describes how each such grantor itself is qualified as an “accredited investor”:

- A trust which has total assets in excess of \$5,000,000, not formed for the specific purpose of acquiring securities, whose purchase is directed by a “sophisticated person” within the meaning of Regulation D who has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of an investment in the proposed investment.

(c) **Entities.** If the undersigned is a corporation, partnership, limited liability company or trust, then the undersigned hereby represents and warrants that the undersigned is (*check whichever applies*):

- an employee benefit plan within the meaning of the Employment Retirement Income Security Act of 1974, as amended (“**ERISA**”), if either:

- a. the investment decision is made by a plan fiduciary, as defined in ERISA § 3(21), that is a bank, savings and loan association, insurance company or registered investment adviser,
- b. an employee benefit plan with total assets in excess of \$5,000,000, or
- c. a self-directed plan with investment decisions made solely by persons who are accredited investors as defined in Rule 501(a) promulgated under the Securities Act.

- one of the following entities, not formed for the specific purpose of acquiring securities and having total assets in excess of \$5,000,000:

- a. an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended;
- b. a corporation, partnership, or limited liability company; or
- c. a Massachusetts or similar business trust.

- a bank as defined in Section 3(a)(2) of the Securities Act, or any savings and loan association or other institution as defined in Section 3(a)(5)(A) of the Securities Act, whether acting in its individual or a fiduciary capacity.
- a broker or dealer registered pursuant to Section 15 of the Securities Exchange Act of 1934, as amended.
- an insurance company as defined in Section 2(13) of the Securities Act.
- an investment company registered under the Investment Company Act of 1940 (the “**Investment Company Act**”), or a business development company as defined in Section 2(a)(48) of the Investment Company Act.
- a Small Business Investment Company licensed by the U.S. Small Business Administration under Section 301(c) or (d) of the Small Business Investment Act of 1958.
- a plan established and maintained by a state, its political subdivisions, or any agency or instrumentality of a state or its political subdivisions for the benefit of its employees with total assets in excess of \$5,000,000.
- a private business development company as defined in Section 202(a)(22) of the Investment Advisers Act of 1940, as amended.
- A n entity in which all of the equity owners are “accredited investors” under any of the above categories (including the categories for individuals and trusts listed in the preceding Sections 1(a) and 1(b)). If the undersigned belongs to this investor category only, list the equity owners of the undersigned, and the “accredited investor” category which each such equity owner satisfies:

If the Issuer needs to verify my status as an accredited investor or has any questions with respect to such status, I hereby consent to request that the Issuer contact:

Name: _____

Firm name: _____

Email: _____

Telephone: _____

Address: _____

Relationship to accredited investor: _____

II. Not an Accredited Investor: The undersigned hereby represents and warrants that the undersigned does NOT meet one of the foregoing tests and does not qualify as an “accredited investor” under Regulation D promulgated under the Securities Act.
(please check box if you are not an accredited investor)

Signature Page Follows

The undersigned has/have executed this Accredited Investor Questionnaire effective as of the date set forth below.

FOR INDIVIDUALS

By: _____
Signature

Name: _____

Date: _____

By: _____
Signature

Name: _____

Date: _____

NOTE: IF YOU ARE PURCHASING SHARES WITH YOUR SPOUSE, YOU MUST BOTH SIGN THIS SIGNATURE PAGE.

IF YOU ARE PURCHASING SHARES WITH ANOTHER PERSON NOT YOUR SPOUSE, YOU MUST EACH FILL OUT A SEPARATE QUESTIONNAIRE.

FOR ENTITIES

Name of Entity (i.e., corporation, partnership, trust, LLC etc.)

By: _____
Signature

Name: _____

Title: _____

Date: _____

EXHIBIT H

Form of Irrevocable Transfer Agent Instructions

ENER-CORE, INC.

January 18, 2019

VStock Transfer, LLC
18 Lafayette Place
Woodmere, New York 11598
Telephone: (212) 828-8436
Facsimile: (646) 536-3179
Attention: Yoel Goldfeder
E-mail: yoel@vstocktransfer.com

Ladies and Gentlemen:

Reference is made to that certain Securities Purchase Agreement, dated as of January 18, 2019 (the “**Agreement**”), by and among Ener-Core, Inc., a Delaware corporation (the “**Company**”), and the investors named on each Buyer’s signature page to the Agreement and the Schedule of Buyers attached thereto (collectively, the “**Holders**”), pursuant to which the Company is issuing to the Holders: (i) convertible senior secured promissory notes (the “**Notes**”), which Notes shall be convertible into shares of common stock of the Company, par value \$0.0001 per share (the “**Common Stock**”), and (ii) warrants (the “**Warrants**”), which are exercisable to purchase shares of Common Stock.

This letter shall serve as our irrevocable authorization and direction to you (provided that you are the transfer agent of the Company at such time):

(i) to issue shares of Common Stock upon conversion of the Notes (the “**Conversion Shares**”) to or upon the order of a Holder from time to time upon delivery to you of a properly completed and duly executed Conversion Notice, in the form attached hereto as Exhibit I, which has been acknowledged by the Company as indicated by the signature of a duly authorized officer of the Company thereon; and

(ii) to issue shares of Common Stock upon exercise of the Warrants (the “**Warrant Shares**”) to or upon the order of a Holder from time to time upon delivery to you of a properly completed and duly executed Exercise Notice, in the form attached hereto as Exhibit II, which has been acknowledged by the Company as indicated by the signature of a duly authorized officer of the Company thereon.

You acknowledge and agree that so long as you have previously received (a) a written legal opinion from the Company’s legal counsel that either (i) a registration statement covering resales of the Conversion Shares and/or Warrant Shares has been declared effective by the Securities and Exchange Commission (“**SEC**”) under the Securities Act of 1933, as amended (the “**Securities Act**”), or (ii) sales of the Conversion Shares and/or the Warrant Shares may be made in conformity with Rule 144 under the Securities Act (“**Rule 144**”) and (b) if applicable, a copy of such registration statement, then within three (3) business days of your receipt of a notice of transfer, Conversion Notice or Exercise Notice, you shall issue the certificates representing the Conversion Shares and/or the Warrant Shares, as applicable, registered in the names of such transferees, and such certificates shall not bear any legend restricting transfer of the Conversion Shares and/or the Warrant Shares thereby and should not be subject to any stop-transfer restriction; *provided, however*, that if such Conversion Shares and Warrant Shares are not registered for resale under the Securities Act or able to be sold under Rule 144, then the certificates for such Conversion Shares and/or Warrant Shares shall bear the following legend:

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL, IN FORM AND SUBSTANCE REASONABLY ACCEPTABLE TO THE COMPANY, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

[Remainder of page left blank intentionally. Signatures follow.]

Please execute this letter in the space indicated to acknowledge your agreement to act in accordance with these instructions. Should you have any questions concerning this matter, please contact me at 949-616-3300.

Very truly yours,
ENER-CORE, INC.

By: _____
Name: Domonic J. Carney
Title: Chief Financial Officer

THE FOREGOING INSTRUCTIONS ARE
ACKNOWLEDGED AND AGREED TO
this 18th day of January, 2019
VSTOCK TRANSFER, LLC

By: _____
Name: Yoel Goldfeder
Title: Chief Executive Officer

Enclosures

Signature Page to Transfer Agent Instructions

EXHIBIT I

CONVERSION NOTICE

ENER-CORE, INC.

Reference is made to the convertible unsecured promissory note (the “**Note**”) issued to the undersigned by Ener-Core, Inc., a Delaware corporation (the “**Company**”). In accordance with and pursuant to the Note, the undersigned hereby elects to convert the Conversion Amount (as defined in the Note) of the Note indicated below into shares of Common Stock par value \$0.0001 per share (the “**Common Stock**”) of the Company, as of the date specified below.

Date of Conversion: _____

Aggregate Conversion Amount to be converted: _____

Please confirm the following information:

Conversion Price: _____

Number of shares of Common Stock to be issued: _____

Please issue the Common Stock into which the Note is being converted in the following name and to the following address:

Issue to: _____

Facsimile Number and E-mail Address: _____

Authorization:
By: _____
Title: _____
Dated: _____

Account Number (if book entry transfer): _____

Transaction Code Number (if book entry transfer): _____

Installment Amounts to be reduced and amount of reduction: _____

Exhibit I

ACKNOWLEDGMENT

The Company hereby acknowledges this Conversion Notice and hereby directs VStock Transfer, LLC to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated January 18, 2019 from the Company and acknowledged and agreed to by VStock Transfer, LLC.

ENER-CORE, INC.

By: _____
Name: _____
Title: _____

EXHIBIT II
EXERCISE NOTICE

**TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON STOCK**

ENER-CORE, INC.

The undersigned holder hereby exercises the right to purchase _____ of the shares of Common Stock (“**Warrant Shares**”) of Ener-Core, Inc., a Delaware corporation (the “**Company**”), evidenced by the attached Warrant to Purchase Common Stock (the “**Warrant**”). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as:

_____ a “Cash Exercise” with respect to _____ Warrant Shares; and/or

_____ a “Cashless Exercise” with respect to _____ Warrant Shares.

2. Payment of Exercise Price. In the event that the holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the holder shall pay the Aggregate Exercise Price in the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to the holder _____ Warrant Shares in accordance with the terms of the Warrant.

Date: _____, _____

Name of Registered Holder

By: _____
Name:
Title:

Exhibit II

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs VStock Transfer, LLC to issue the above indicated number of shares of Common Stock in accordance with the Transfer Agent Instructions dated January 18, 2019 from the Company and acknowledged and agreed to by VStock Transfer, LLC.

ENER-CORE, INC.

By: _____
Name: _____
Title: _____

EXHIBIT I

Form of Secretary's Certificate

Pursuant to Section 7(a)(v) of the Securities Purchase Agreement, dated as of January 18, 2019 (the "Purchase Agreement"), by and among Ener-Core, Inc., a Delaware corporation (the "Company"), and the investors set forth on the Schedule of Buyers attached to the Purchase Agreement (each, a "Buyer" and collectively, the "Buyers"), Domonic J. Carney, the Secretary of the Company, hereby certifies, in his capacity as an officer of the Company and as an officer of Ener-Core Power, Inc., a Delaware corporation (the "Subsidiary"), and not individually, on behalf of the Company and the Subsidiary, respectively, that:

1. Attached hereto as Exhibit A are true, correct and complete copies of resolutions duly adopted by the Board of Directors (the "Board") of the Company and the Board of Directors (the "Subsidiary Board") of the Subsidiary (collectively, the "Board Resolutions"), approving the matters contemplated by Section 3(b) of the Purchase Agreement. Such resolutions have not been amended, modified, supplemented, annulled or revoked and are in full force and effect in the form adopted, and are the only resolutions adopted by the Board and the Subsidiary Board or by any committee of or designated by the Board and Subsidiary Board relating to (i) the transactions contemplated by the Board Resolutions, and (ii) the transaction agreements identified in the Board Resolutions. All members of the Board and Subsidiary Board were, at the time of their approval of the resolutions attached hereto as Exhibit A, respectively, and have been at all times thereafter, duly elected, qualified, and acting directors of the Company and the Subsidiary, respectively.

2. Attached hereto as Exhibit B are true, correct and complete copies of the Certificate of Incorporation of the Company, as currently in effect (the "Certificate"), and the Certificate of Incorporation of the Subsidiary, as currently in effect (the "Subsidiary Certificate"). The Certificate has not been amended subsequent to September 3, 2015, and no action has been taken by the Company, its stockholders, directors, or officers to authorize or effect any further amendment or modification to such Certificate, and the Subsidiary Certificate has not been amended subsequent to June 28, 2013, and no action has been taken by the Subsidiary, its stockholders, directors, or officers to authorize or effect any further amendment or modification to such Subsidiary Certificate.

3. Attached hereto as Exhibit C are true, correct and complete copies of the Bylaws of the Company, as currently in effect (the "Bylaws"), and the Bylaws of the Subsidiary, as currently in effect (the "Subsidiary Bylaws"). The Bylaws have not been amended subsequent to September 3, 2015, and no action has been taken by the Company, its stockholders, directors, or officers to authorize or effect any further amendment or modification to such Bylaws, and the Subsidiary Bylaws have not been amended subsequent to August 1, 2012, and no action has been taken by the Subsidiary, its stockholders, directors, or officers to authorize or effect any further amendment or modification to such Subsidiary Bylaws.

Capitalized terms contained herein and not otherwise defined shall be interpreted in accordance with their meaning in the Purchase Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has signed his name to this Secretary's Certificate this January 18, 2019.

By: _____
Name: Domic J. Carney
Title: Secretary

EXHIBIT A

Board Resolutions

Subsidiary Board Resolutions

EXHIBIT B

Certificates of Incorporation

EXHIBIT C

Bylaws

EXHIBIT J

Form of Compliance Certificate

Pursuant to Section 7(a)(vi) of the Securities Purchase Agreement, dated as of January 18, 2019 (the "Purchase Agreement"), by and among Ener-Core, Inc., a Delaware corporation (the "Company"), and the investors set forth on the Schedule of Buyers attached to the Purchase Agreement (each, a "Buyer" and collectively, the "Buyers"), Domonic J. Carney, the Chief Financial Officer of the Company, hereby certifies, in his capacity as an officer of the Company and not individually, on behalf of the Company and to the best of his knowledge after a reasonable investigation that:

1. The representations and warranties of the Company contained in Section 3 of the Purchase Agreement are true and correct in all material respects (except for those representations and warranties that are qualified by materiality or Material Adverse Effect, which shall be true and correct in all respects) as of the date when made and as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date which shall be true and correct as of such specified date).

2. The Company has performed, satisfied and complied in all respects with the covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company at or prior to the Closing Date.

Capitalized terms contained herein and not otherwise defined shall be interpreted in accordance with their meaning in the Purchase Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has signed his name to this Compliance Certificate this January 18, 2019.

By: _____
Name: Domic J. Carney
Title: Chief Financial Officer

EXHIBIT K

**September 2016 Subordination Agreement Amendment
[omitted]**

DISCLOSURE SCHEDULES TO SECURITIES PURCHASE AGREEMENT

(Note: Capitalized terms used herein and not otherwise defined shall have the definitions ascribed to such terms in the Agreement.)

Schedule 3(a)

(Organization and Qualification)

Ener-Core Power, Inc., a Delaware corporation

Schedule 3(f)

(Acknowledgment Regarding Buyer's Purchase of Securities)

None.

Schedule 3(j)

(SEC Documents; Financial Statements)

The Company filed its Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2018 prior to the opening of the Trading Day of the Principal Market on November 20, 2018.

Schedule 3(k)

(Absence of Certain Changes)

None.

Schedule 3(m)

(Conduct of Business; Regulatory Permits)

None.

Schedule 3(o)

(Sarbanes-Oxley Act)

None, other than as disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2017, and as described in Schedule 3(aa) below.

Schedule 3(p)
(Transactions With Affiliates)

Bridge Note Financing

Between September 2017 and June 2018, the Company sold and issued the Bridge Notes (as defined below) and the June 2018 Notes (as defined below). The following officers and director purchased the Bridge Notes and/or June 2018 Notes in the principal amount and related warrants in the quantities listed adjacent to their names in exchange for cash or accrued compensation liabilities, as applicable.

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(2)
Douglas Hamrin	Vice President, Engineering	25,278(3)	10,111	22,750(4)
Mark Owen	Vice President of Operations and Business Development	34,722(5)	13,888	31,250(6)
Michael Hammons	Director	33,334(7)	57,778	30,000

- (1) Consists of (i) Bridge 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 own; and (ii) Bridge Notes in the principal amounts of \$11,111 and \$40,000 purchased in the name of Domonic J. Carney in January and March 2018, respectively.
- (2) Includes \$36,000 in forgiveness of accrued payroll liabilities owed to Mr. Carney as of March 26, 2018.
- (3) Consists of a Bridge Note in the principal amount of \$25,278 purchased in March 2018.
- (4) Consists of \$22,750 in forgiveness of accrued payroll liabilities owed to Mr. Hamrin as of March 26, 2018.
- (5) Consists of Bridge Notes in the principal amounts of \$8,333 and \$26,389 purchased in December 2017 and March 2018, respectively.
- (6) Includes \$23,750 in forgiveness of accrued payroll liabilities owed to Mr. Owen as of March 26, 2018.
- (7) Consists of a Bridge Note in the principal amount of \$5,556 purchased in November 2017 and a June 2018 Note in the principal amount of \$27,777.78.

Indemnification Agreements

The Certificate of Incorporation and Bylaws require the Company to indemnify its directors to the fullest extent permitted by Delaware law. In addition, the Company has entered indemnification agreements with each of its directors and officers.

See also [Schedule 3\(f\)](#).

Schedule 3(q)
(Equity Capitalization)

- (ii) **Outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any shares of capital stock of the Company or any of its Subsidiaries, or contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional shares of capital stock of the Company or any of its Subsidiaries or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any shares of capital stock of the Company or any of its Subsidiaries.**

None.

- (iv) **Financing statements securing obligations in any material amounts, either singly or in the aggregate, filed in connection with the Company or any of its Subsidiaries.**

UCC financing statements have been filed in connection with (i) the issuance by the Company of the 2015 Senior Notes (as defined below), (ii) the CLA (as defined below) (iii) certain of its capital lease obligations.

- (v) **Agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of their securities under the 1933 Act.**

In connection with the issuance and sale of the 2016 Senior Notes (as defined hereinafter), the Company entered into a Registration Rights Agreement with the investors (the "**Registration Rights Agreement**"), pursuant to which the Company is required to file one or more registration statements with the Securities and Exchange Commission (the "**SEC**") to register for resale by the investors the shares issuable upon conversion of the 2016 Senior Notes (the "**Conversion Shares**") and shares underlying certain warrants issued to the holders of the 2016 Senior Notes (the "**Warrant Shares**"), and use its best efforts to maintain the effectiveness of such registration statement(s). The Company was required to file the first such registration statement promptly following the initial closing date under the securities purchase agreement for the 2016 Senior Notes, which occurred on December 2, 2016, but in no event later than the date that is forty-five (45) days after such initial closing date. The Registration Rights Agreement required the Company to obtain effectiveness of the required registration statement by specified deadlines contained in the Registration Rights Agreement. The Company complied with its obligation to file such registration statement on January 17, 2017 and the SEC declared such registration statement effective on February 21, 2017. In connection with the execution of the Transaction Documents, the required number of investors waived the Company's ongoing maintenance obligations pursuant to the Registration Rights Agreement with respect to such Conversion Shares and Warrant Shares.

In connection with the issuance and sale of the June 2018 Notes (as defined hereinafter), the Company agreed to provide the holders of such June 2018 Notes with certain registration rights effective upon the issuance by the Company of June 2018 Notes for aggregate gross proceeds of at least \$4.0 million pursuant to the related securities purchase agreement. As of the date hereof, such provision has not been triggered.

Schedule 3(r)
(Indebtedness and Other Contracts)

Senior Secured Notes

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	<u>11,990,000</u>	<u>(3,202,000)</u>	<u>(90,000)</u>	<u>8,698,000</u>
Less: current portion	<u>(11,990,000)</u>	<u>3,202,000</u>	<u>90,000</u>	<u>(8,698,000)</u>
Long term portion	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

In the fourth quarter of 2016, the Company entered into a securities purchase agreement pursuant to which it issued a new series of convertible senior secured notes (collectively, the “**2016 Senior Notes**”) and related warrants, and entered into amendment agreements related to the convertible senior secured notes originally issued in April and May 2015 (the “**2015 Senior Notes**”) and the Convertible Unsecured Notes (as defined below). The Company issued and sold new 2016 Senior Notes with a face value of \$3,747,000 and an original issue discount of \$375,000 for gross cash proceeds of \$3,372,000. Additionally, the Company amended and restated the 2015 Senior Notes, the aggregate principal amount of which was \$5,000,000 prior to such amendment and restatement. Upon the amendment and restatement of the 2015 Senior Notes, the face value of such 2015 Senior Notes was \$5,556,000 with an original issue discount of \$556,000.

In conjunction with the issuance and/or amendment and restatement, as applicable, of the aggregate face value of \$9,302,000 of the 2016 Senior Notes and 2015 Senior Notes, the Company issued five-year warrants to purchase up to 3,720,839 shares of the Company's common stock at \$3.00 per share. In 2016, 2015 Senior Notes in the aggregate principal amount of \$111,000 were converted into 44,444 shares of common stock at \$2.50 per share.

Between September 2017 and March 2018, the Company entered into a securities purchase agreement, including several amendments and restatements thereto, pursuant to which it issued a new series of convertible senior secured notes (collectively the "**Bridge Notes**") and related warrants on substantially identical terms as the 2016 Senior Notes described above, except for the initial exercise price of the detachable warrants. The Company issued and sold in the aggregate Bridge Notes with a face value of approximately \$2,444,446 and an original issue discount of approximately \$244,445 for gross cash proceeds of approximately \$2,100,000 and the forgiveness of approximately \$100,000 in accrued payroll liabilities owed to four employees. In conjunction with the issuance of the Bridge Notes, the Company issued five-year warrants to purchase up to 977,773 shares of common stock at an exercise price of \$1.50 per share. The Bridge Notes mature on December 31, 2018 and rank *pari passu* with the 2015 Senior Notes and 2016 Senior Notes.

On June 5, 2018, the Company entered into a securities purchase agreement, pursuant to which it issued a new series of convertible senior secured notes (collectively, the "**June 2018 Notes**") in the aggregate principal amount of approximately \$439,444 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 Notes rank *pari passu* with the Bridge Notes, 2016 Senior Notes (as defined below) and 2015 Senior Notes (as defined below). Concurrent with the initial closing of the June 2018 Notes, 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.

The Company refers to the June 2018 Notes, the Bridge Notes, the 2016 Senior Notes and the amended and restated 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. The Senior Notes are convertible at a price per share of \$0.25, which is adjustable upon a Company stock split, reverse split, or common share dividend.

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; *provided* that effective upon the issuance by the Company of Notes for aggregate gross proceeds of at least \$2.0 million pursuant to the Agreement, the maturity date will be December 31, 2020. 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 (a “**Holder Optional Redemption**”). Notwithstanding, effective upon the issuance by the Company of Notes for aggregate gross proceeds of at least \$2.0 million pursuant to the Agreement, a Holder Optional Redemption will not be permitted.

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 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 agreement for the 2016 Senior Notes, the Senior Notes and the related transaction documents.

During the year ended December 31, 2017, two holders of Senior Notes converted an aggregate of \$60,000 of principal outstanding under the Senior Notes into 24,000 shares of the Company's common stock. As a result of these conversions, the Company incurred a loss of \$53,000, representing the unamortized debt discount and deferred financing fees.

In connection with the issuance of the Initial Notes under the Agreement, the Company and certain holders of the Senior Notes entered into certain amendment agreements and/or waivers to: (1) effective upon the issuance by the Company of Notes with an aggregate principal amount of at least \$2,000,000 pursuant to the Agreement (x) remove the covenants in the securities purchase agreements with respect to the 2015 Senior Notes and 2016 Senior Notes, and revise the definitions of "Eligible Market" in the 2015 Senior Notes and 2016 Senior Notes, that require the Company to commence trading of its Common Stock on a national securities exchange, (y) extend the maturity date of the 2015 Senior Notes, 2016 Senior Notes and Bridge Notes to December 31, 2020 and (z) remove the holders' right of redemption under Section 7 of the 2015 Senior Notes, 2016 Senior Notes and Bridge Notes; and (2) allow for the issuance of the Notes and Warrants and obtain certain waivers by the investors under the 2015 Senior Notes, 2016 Senior Notes and Bridge Notes and the related securities purchase agreements.

The terms of the Senior Notes, as amended and/or restated to date, including the related securities purchase agreements, and the related pledge, guaranty and intercreditor agreements, are described in the following Current Reports on Form 8-K, incorporated by reference herein:

- Filed April 23, 2015 ([EDGAR Link](#))
- Filed May 7, 2015 ([EDGAR Link](#))
- Filed October 23, 2015 ([EDGAR Link](#))
- Filed November 3, 2015 ([EDGAR Link](#))
- Filed November 25, 2015 ([EDGAR Link](#))
- Filed December 11, 2015 ([EDGAR Link](#))
- Filed December 31, 2015 ([EDGAR Link](#))
- Filed April 5, 2016 ([EDGAR Link](#))
- Filed September 2, 2016 ([EDGAR Link](#))
- Filed October 24, 2016 ([EDGAR Link](#))
- Filed November 25, 2016 ([EDGAR Link](#))
- Filed December 2, 2016 ([EDGAR Link](#))
- Filed December 14, 2016 ([EDGAR Link](#))
- Filed May 1, 2017 ([EDGAR Link](#))
- Filed September 20, 2017 ([EDGAR Link](#))
- Filed November 2, 2017 ([EDGAR Link](#))
- Filed December 21, 2017 ([EDGAR Link](#))
- Filed January 26, 2018 ([EDGAR Link](#))
- Filed March 27, 2018 ([EDGAR Link](#))
- Filed June 6, 2018 ([EDGAR Link](#))
- Filed July 3, 2018 ([EDGAR Link](#))

Convertible Unsecured Notes

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

	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	\$ —	\$ —	\$ —

On September 1, 2016, the Company entered into a securities purchase agreement and related notes and warrants pursuant to which it issued certain convertible unsecured promissory notes (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. The Company 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, the Company increased its 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.

Concurrent with the issuance of the June 2018 Notes and execution of related amendments to the other Senior Notes described above, 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.

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 December 31, 2017, the Convertible Unsecured Notes remain outstanding. The Convertible Unsecured Notes are subordinate to the Senior Notes. 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 \$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.

The terms of the Convertible Unsecured Notes and the related warrants, including the related agreements, are also described in the Company’s Current Report on Form 8-K, filed September 2, 2016 ([EDGAR Link](#)), incorporated by reference herein.

In connection with the issuance of the Securities under the Agreement, the Company and certain holders of the Convertible Unsecured Notes intend to enter into certain amendment agreements to: (1) provide for the payment in kind of interest accrued and unpaid through June 30, 2018 (with re-commencement of accrual of interest payable in cash on July 1, 2018), (2) adjust the conversion price under the Convertible Unsecured Notes to \$0.25 per share of Common Stock and (3) amend and restate a definition to facilitate the Company’s efforts to consummate the sale of the Securities under the Agreement.

Leases Payable

Capital leases payable consisted of the following as of September 30, 2018:

	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

Standby Letter of Credit

Pursuant to the terms of the Commercial License Agreement (“CLA”), dated as of November 14, 2014, by and between the Company and Dresser-Rand, 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 June 30, 2017 (“**Letter of Credit**”). If the investor is required to make any payments on the Letter of Credit, subject to the terms of the Intercreditor Agreement (as defined hereinafter), the Company must reimburse the investor the full amount of any such payment. Such payment obligation is 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 are 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 will 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 is obligated to pay a monthly fee equal to 1% of the amount of the Letter of Credit for the first twelve months. If the Support Agreement has not terminated after the initial twelve months, the Company will pay another one-time fee equal to 4% of the amount of the Letter of Credit, and a monthly fee equal to 2% of the amount of the Letter of Credit for up to another twelve months.

Concurrent with the execution of the amendment to the CMLA in April 2017, the Company and Dresser-Rand agreed to modify the requirements for the existing backstop security. As modified, The Company was required to maintain a \$500,000 backstop security, reduced from \$2.1 million, 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.

Amendments to Backstop Security and Senior Notes

In June 2016, the Company 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, the Company 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. Further, effective as of April 27, 2017, the Company executed a First Amendment to the Support Agreement (the "**BSSA Amendment**"), with the individual investor. The BSSA Amendment is intended to conform the terms of the Support Agreement and related Letter of Credit to the terms of the CMLA. The BSSA Amendment (i) reduces the security obligation underlying the Letter of Credit from \$2.1 million to \$500,000, consistent with the current terms of the CMLA, (ii) extends the term of the backstop security to March 31, 2018, (iii) reduces the related fee payable under the Support Agreement to 1% per month for the remainder of the term, (iv) provided for the amendment and restatement of the warrant issued to the investor in connection with the execution of the Support Agreement in order to reduce the exercise price per share of common stock of to \$3.00 and insert a beneficial ownership blocker provision at 4.99% and (v) provided that the Company would issue the investor an additional warrant to purchase 41,000 shares of Common Stock at an exercise price of \$3.00 per share, subject to a 4.99% beneficial ownership blocker.

In connection with the execution of the BSSA Amendment, on April 27, 2017, the Company and certain investors holding Senior Notes executed first amendments to such Senior Notes to revise the definition of “**Backstop Agreement**” to include any amendments, restatements, supplements or other modifications thereof, as may be permitted thereunder.

For detailed terms of the Backstop Security and related documents, see the Company’s Current Reports on Form 8-K filed November 3, 2015 ([EDGAR Link](#)) and May 1, 2017 ([EDGAR Link](#)), each incorporated by reference herein. See also “Standby Letter of Credit” above.

Capital Leases

The Company leases certain assets, primarily computer equipment under agreements expiring in 2020. The total amount of the capital leases is approximately \$35,000.

Operating Leases

The Company leases its office facility and equipment under operating leases, which for the most part, are renewable. The leases also provide that the Company pays insurance and taxes. The Company’s primary operating lease expired on December 31, 2016 and the Company extended the lease for a three-month period ending March 31, 2017 at a reduced interim rate. The Company signed a new lease on February 2017 for a separate facility and moved into the new facilities in April 2017.

For the year ended December 31, 2016 and through March 31, 2017, the Company’s headquarters were 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. The Company extended the lease at a reduced rate until March 31, 2017. The monthly rent was \$26,825 for 2016 and reduced to \$15,000 per month for the three months ending March 31, 2017. As of April 1, 2017, the Company’s headquarters were located at 8965 Research Drive, Irvine, CA 92618 and consisted of a mixed use commercial office of 4,960 square feet. From January through March 2017, the Company’s monthly rent was \$15,000 for the Toledo Way property holdover and, from April 1, 2017 through April 2018, the Company’s monthly rent was \$10,168 per month, which increased to \$10,473 per month on in April 2018 through October 2018, for the Research Drive property. The Toledo Way lease terminated on April 1, 2017 and the Research Drive property lease terminated in October 2018. The Company’s rent expense under these leases was \$37,000 and \$67,000 for the three and nine months ended September 30, 2018 and 2017, respectively.

Trade Accounts

The Company has approximately \$2,080,000 in trade accounts payable as of September 30, 2018.

Schedule 3(s)
(Absence of Litigation)

On September 23, 2016 AMTRA ENGINEERING B.V. filed a civil lawsuit (Case number 30-2016-00877078-CU-BC-CJC) in the Superior Court, County of Orange, State of California against Ener-Core Power, Inc. alleging breach of contract and breach of warranty. The lawsuit is due to a billing dispute surrounding a contractor for the Attero 250Kw unit delivered in June 2014 to the Netherlands. The Company has settled the lawsuit for \$42,500 in cash, which has been paid in full. The Company intends to file a counter-claim against the contractor's related company to recover \$78,000 in unpaid billings.

On March 22, 2017, Dian Griesel filed a civil lawsuit (Case number 30-2017-009001490CU-BC-CJC) in the Superior Court, County of Orange, State of California against Ener-Core Power, Inc. for 42,657.40 of past due payables for investor relations services performed for the Company during the 2016 fiscal year. The Company settled the case on November 17, 2017 for \$30,000 and has received a full legal release.

On November 13, 2017, Praxair Distribution, Inc. filed a civil lawsuit (Case number 00955447-CU-CL-CJC) in the Superior Court, County of Orange, State of California against Ener-Core Power, Inc. for \$41,595.45 of past due payables for industrial gases and materials purchased by the Company during the year ended December 31, 2016. The Company was served notice on November 28, 2017 and expects to dispute a portion of the amount claimed. The Company has settled the past due payables for \$40,000 payable monthly at \$5,000 per month beginning October 1, 2018 until paid in full.

A commercial partner of the Company has notified the Company that such partner may make a claim with respect to an incident involving the Company's technology; as of the date of the Agreement, no claim has been received and the Company is unable to quantify the scope of any potential claim.

Schedule 3(bb)
(Internal Accounting and Disclosure Controls)

As of December 31, 2017, the Company's management, under the supervision and with the participation of its Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of its disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended).

Based on such evaluation, the disclosure controls and procedures of the Company and the Subsidiary as of December 31, 2017 were ineffective at the reasonable assurance level due to the following material weaknesses in internal control over financial reporting:

1. The Company does not have complete written documentation of all of its internal control policies and procedures. Management evaluated the impact of the Company's failure to have written documentation of its internal controls and procedures on its assessment of its disclosure controls and procedures and has concluded that the control deficiency that resulted represented a material weakness.

2. The Company does not have sufficient segregation of duties within accounting functions, which is a basic internal control. Due to its size and nature, segregation of all conflicting duties may not always be possible and may not be economically feasible. However, to the extent possible, the initiation of transactions, the custody of assets and the recording of transactions should be performed by separate individuals. Management evaluated the impact of the Company's failure to have segregation of duties on its assessment of its disclosure controls and procedures and has concluded that the control deficiency that resulted represented a material weakness.
3. For the year ending December 31, 2017, management concluded that the Company did not have a sufficient, integrated purchasing and accounting system to allow for proper tracking, control and costing of its prototype KG2/PO unit costs carried as a fixed asset and Powerstations currently under construction for sale and carried in inventory. Although the Company believes that its costing is accurate, based on additional review and procedures, to the extent the Company sells additional units, it will need to enhance its controls over its inventory systems. Management evaluated the impact of the Company's failure to have adequate inventory accounting systems, coupled with the risk associated with costing its inventory, and the expected future activity for its inventory costing system and has concluded that the control deficiency that resulted represented a material weakness.
4. For the year ended December 31, 2017, management concluded that the Company's management information systems and information technology internal control design was deficient because the potential for unauthorized access to certain information systems and software applications existed during 2017 in several departments, including corporate accounting. Additionally, certain key controls for maintaining the overall integrity of systems and data processing were not properly designed and operating effectively. These deficiencies increased the likelihood of potential material errors in the Company's financial reporting. Management evaluated the impact of the Company's failure to have adequate information technology controls, on its assessment of its disclosure controls and procedures and has concluded that the control deficiency that resulted represented a material weakness.

The Company is attempting to remediate the material weaknesses in its disclosure controls and procedures and internal controls over financial reporting identified in its Annual Report on Form 10-K for the fiscal year ended December 31, 2017 by refining its internal procedures (see below). The Company has initiated the following corrective actions, which management believes are reasonably likely to materially affect the Company's financial reporting, as they are designed to remediate the material weaknesses as described above:

- The Company is 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.

- The Company is in the process of strengthening its internal policies and enhancing its processes for ensuring consistent treatment and recording of reserve estimates and that validation of its conclusions regarding significant accounting policies and their application to the Company's business transactions are carried out by personnel with an appropriate level of accounting knowledge, experience and training.
- The Company is evaluating additional analytical tools and accounting systems to address the inventory costing control weaknesses identified and enhance its internal controls over inventory and prototype capitalization.
- The Company has engaged and will continue to engage additional Information Technology consultants to improve and update its information technology systems and enhance its internal controls over information technology.

The Company does not expect to have fully remediated these material weaknesses until management has tested those internal controls and found them to have been remediated. The Company expects to improve its internal controls and to test the improvements during its annual testing for the fiscal year ending December 31, 2018.

Schedule 3(dd)
(Ranking of Notes)

The Senior Notes, the Initial Notes and any Subsequent Notes issuable pursuant to this transaction will rank *pari passu*. The Convertible Unsecured Notes are subordinated to all such senior obligations pursuant to another subordination and intercreditor agreement. See also Schedule 3(r).

Schedule 3(oo)
(No Disqualification Events)

None.

Schedule 4(s)
(Pledges of Intellectual Property Rights)

None, except as provided in the CMLA, as amended to date.

FOURTH AMENDMENT TO SUBORDINATION AND INTERCREDITOR AGREEMENT

THIS FOURTH AMENDMENT TO SUBORDINATION AND INTERCREDITOR AGREEMENT, dated as of December [], 2018 (this "Amendment"), to the Subordination and Intercreditor Agreement dated as of September 1, 2016 (as further amended, restated, supplemented or otherwise modified from time to time, the "Intercreditor Agreement") is entered into by and among Longboard Capital Advisors LLC (the "Subordinated Agent"), Ener-Core, Inc., a Delaware corporation ("Borrower"), Ener-Core Power, Inc., a Delaware corporation, Anthony Tang, as a Senior Lender (as defined below) (the "Senior L/C Lender"), and Empery Tax Efficient, LP in its capacity as collateral agent for the Senior Note Lenders (as defined below) (together with its successors and assigns, the "Agent").

WITNESSETH:

WHEREAS, the Borrower is entering into an additional securities purchase agreement, dated as of the date hereof, pursuant to which it will issue and sell additional convertible senior secured notes, and

WHEREAS, the parties desire to amend the Intercreditor Agreement to include the additional securities purchase agreement and related notes as "Senior Note Debt".

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

1. Definitions. All capitalized terms not otherwise defined herein and defined in the Intercreditor Agreement shall have the meanings ascribed to such terms in the Intercreditor Agreement.

2. Amendment to Definition of Senior Note Agreements. The first sentence in Recital A to the Intercreditor Agreement is hereby amended and restated in its entirety, to read as follows:

"Borrower, Agent and Senior Note Lenders have entered into (i) a Securities Purchase Agreement dated as of April 22, 2015, (ii) a Securities Purchase Agreement dated as of May 7, 2015, (iii) a Securities Purchase Agreement dated as of November 23, 2016, (iv) those Amendment Agreements dated as of November 23, 2016, (v) a Securities Purchase Agreement dated as of September 19, 2017, (vi) a Securities Purchase Agreement dated as of June 5, 2018 and (vii) a Securities Purchase Agreement dated as of December [], 2018 (collectively, as each may be amended, restated, supplemented or otherwise modified from time to time, the "Senior Note Agreements") pursuant to which, among other things, Senior Note Lenders have agreed, subject to the terms and conditions set forth in the Senior Note Agreements, to purchase, or receive upon the amendment and restatement of existing senior secured notes of the Borrower, senior secured notes from Borrower."

3. Amendment to Legend. The legend in Section 2.9 of the Intercreditor Agreement is hereby amended and restated in its entirety, to read as follows:

“This instrument and the rights and obligations evidenced hereby are subordinate in the manner and to the extent set forth in that certain Subordination and Intercreditor Agreement, dated as of September 1, 2016 (as the same may be amended or otherwise modified from time to time pursuant to the terms thereof, the “Subordination Agreement”), by and among Longboard Capital Advisors LLC (the “Subordinated Agent”), Ener-Core, Inc., a Delaware corporation (“Borrower”), Ener-Core Power, Inc., a Delaware corporation (the “Guarantor”), Anthony Tang, as a Senior Lender (as defined therein) (the “Senior L/C Lender”), and Empery Tax Efficient, LP in its capacity as collateral agent for the Senior Note Lenders (as defined therein) (together with its successors and assigns, the “Agent”), to the indebtedness (including interest) owed by the Credit Parties (as defined therein) pursuant to that certain (i) Securities Purchase Agreement dated as of April 22, 2015, (ii) Securities Purchase Agreement dated as of May 7, 2015, (iii) Securities Purchase Agreement dated as of November 23, 2016, (iv) Amendment Agreements dated as of November 23, 2016, (v) Securities Purchase Agreement dated as of September 19, 2017, (vi) Securities Purchase Agreement dated as of June 5, 2018, and (vii) a Securities Purchase Agreement dated as of December [], 2018 in each case of clauses (i), (ii), (iii), (v), (vi) and (vii), by and among Borrower, Agent and the Senior Note Lenders and, in the case of clause (iv), by and between the Borrower and the existing holders of certain senior secured notes of the Borrower, in each case, as amended, restated, supplemented, refinanced or otherwise modified from time to time; and each holder of this instrument, by its acceptance hereof, irrevocably agrees to be bound by the provisions of the Subordination Agreement.”

4. Miscellaneous.

(a) Amendments. No amendment, modification, termination, or waiver of any provision of this Amendment will be effective without the written agreement of the parties hereto.

(b) Section Titles. Section and subsection titles in this Amendment are included for convenience of reference only and shall have no substantive effect.

(c) Applicable Law. This Amendment shall be construed in all respects in accordance with and governed by the internal laws of the State of New York, without giving effect to any conflicts of laws provisions.

(d) Counterparts. This Amendment and any amendments, waivers, consents or supplements may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which, when so executed and delivered, will be deemed an original and all of which shall together constitute one and the same instrument.

(e) Continued Effectiveness of the Intercreditor Agreement. Each party to this Amendment hereby (a) acknowledges and consents to this Amendment, and (b) confirms and agrees that the Intercreditor Agreement shall continue to be, in full force and effect and is hereby ratified and confirmed in all respects, except that on and after the date hereof, all references to the Intercreditor Agreement shall mean the Intercreditor Agreement as amended by this Amendment.

[Remainder of this page intentionally left blank]

IN WITNESS WHEREOF, this Amendment is executed by each of the undersigned as of the date first above written.

SUBORDINATED AGENT:

LONGBOARD CAPITAL ADVISORS LLC

By _____
Name:
Title:

Fourth Amendment To
Subordination and intercreditor agreement

IN WITNESS WHEREOF, this Amendment is executed by each of the undersigned as of the date first above written.

CREDIT PARTIES:

ENER-CORE, INC.

By _____
Name: Domonic J. Carney
Title: Chief Financial Officer

ENER-CORE POWER, INC.

By _____
Name: Domonic J. Carney
Title: Chief Financial Officer

Fourth Amendment To
Subordination and intercreditor agreement

IN WITNESS WHEREOF, this Amendment is executed by each of the undersigned as of the date first above written.

SENIOR L/C LENDER:

Anthony Tang

Fourth Amendment To
Subordination and intercreditor agreement

IN WITNESS WHEREOF, this Amendment is executed by each of the undersigned as of the date first above written.

AGENT:

EMPERY TAX EFFICIENT, LP

By: Empery Asset Management, LP, its authorized agent

By _____
Name: Brett Director
Title: General Counsel

Fourth Amendment To
Subordination and intercreditor agreement

FIFTH AMENDMENT TO THE PLEDGE AND SECURITY AGREEMENT

This **FIFTH AMENDMENT TO THE PLEDGE AND SECURITY AGREEMENT**, dated as of January [], 2018 (this “**Fifth Amendment**”), is entered into by and among **Ener-Core, Inc.**, a Delaware corporation (the “**Company**”), **Ener-Core Power, Inc.** (“**ECP**”), a Delaware corporation, and each other Subsidiary of the Company and ECP hereafter becoming party hereto (together with the Company and ECP, each a “**Grantor**” and, collectively, the “**Grantors**”), and **Empery Tax Efficient, LP**, in its capacity as collateral agent (in such capacity, the “**Collateral Agent**”) for (a) the buyers listed in the Schedule of Buyers (the “**April 2015 Investors**”) attached to that certain Securities Purchase Agreement dated April 22, 2015 entered into by and among the Company and the April 2015 Investors (as the same may be amended, restated or otherwise modified from time to time, the “**April 2015 SPA**”); (b) the buyers listed in the Schedule of Buyers (the “**May 2015 Investors**”) attached to that certain Securities Purchase Agreement, dated as of May 7, 2015 entered into by and among the Company and the May 2015 Investors (as the same may be amended, restated or otherwise modified from time to time, the “**May 2015 SPA**”); (c) the buyers listed in the Schedule of Buyers (the “**November 2016 Investors**”) attached to that certain Securities Purchase Agreement, dated as of November 23, 2016 entered into by and among the Company and the November 2016 Investors (as the same may be amended, restated, joined or otherwise modified from time to time, the “**November 2016 SPA**”); (d) the holders of the notes amended, restated and delivered pursuant to those Amendment Agreements (collectively, the “**Amendment Agreements**”), pursuant to which the Company amended and restated certain notes held by the April 2015 Investors and the May 2015 Investors for senior secured convertible notes; (e) the buyers listed in the Schedule of Buyers (the “**September 2017 Investors**”) attached to that certain Securities Purchase Agreement, dated as of September 19, 2017 entered into by and among the Company and the September 2017 Investors (as the same may be amended, restated, joined or otherwise modified from time to time, the “**September 2017 SPA**”); (f) the buyers listed in the Schedule of Buyers (the “**June 2018 Investors**”) attached to that certain Securities Purchase Agreement, dated as of June 5, 2018 entered into by and among the Company and the June 2018 Investors (as the same may be amended, restated, joined or otherwise modified from time to time, the “**June 2018 SPA**”); and (g) the buyers listed in the Schedule of Buyers (the “**January 2019 Investors**”) attached to that certain Securities Purchase Agreement, dated as of January 18, 2019 entered into by and among the Company and the January 2019 Investors (as the same may be amended, restated, joined or otherwise modified from time to time, the “**January 2019 SPA**”). Reference is hereby made to that certain Pledge and Security Agreement dated April 23, 2015 by and among the Company and the Collateral Agent (as amended, restated, supplemented or otherwise modified prior to the date hereof, the “**Security Agreement**”). Capitalized terms used herein and not otherwise defined shall have the definitions ascribed to such terms in the Security Agreement.

RECITALS

WHEREAS, the Company had previously entered into the April 2015 SPA with the April 2015 Investors pursuant to which the Company issued senior secured promissory notes (as amended, restated, replaced or otherwise modified from time to time in accordance with the terms thereof (including pursuant to the Amendment Agreements), collectively, the “**April 2015 Notes**”) and warrants (“**April 2015 Warrants**”) to the April 2015 Investors (the financing transaction contemplated under the April SPA is hereinafter referred as the “**April 2015 Financing**”).

WHEREAS, as required under the terms of the April 2015 SPA, the Company entered into the Security Agreement with the Collateral Agent for the benefit of the April 2015 Investors, pursuant to which the Company granted the Collateral Agent a security interest in all personal property (with certain exceptions as set forth in the Security Agreement) for the benefit of the April 2015 Investors in order to secure all of the Company’s obligations under the April 2015 SPA and the April 2015 Notes.

WHEREAS, as required under the terms of the May 2015 SPA, the Company amended the Security Agreement with the Collateral Agent, pursuant to which the Company granted the Collateral Agent a security interest in all personal property (with certain exceptions as set forth in the Security Agreement) for the benefit of the May 2015 Investors in order to secure all of the Company's obligations under the May 2015 SPA and the senior secured convertible notes issued pursuant to the May 2015 SPA (as amended, restated, replaced or otherwise modified from time to time in accordance with the terms thereof (including pursuant to the Amendment Agreements), collectively, the "**May 2015 Notes**").

WHEREAS, on November 23, 2016, in connection with the consummation of the transactions contemplated by the November 2016 SPA, the Grantors executed and delivered to the Collateral Agent a second amendment to the Pledge and Security Agreement that granted to the Collateral Agent (i) for the benefit of the November 2016 Investors, a security interest in all personal property (with certain exceptions specified below) of the Grantors to secure all of the Company's obligations under the November 2016 SPA and the senior secured notes issued pursuant thereto (as such notes may be amended, restated, replaced or otherwise modified from time to time in accordance with the terms thereof, collectively, the "**November 2016 Notes**") and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the November 2016 SPA; and (ii) for the benefit of the April 2015 Investors and the May 2015 Investors, a security interest in all personal property (with certain exceptions specified below) of the Grantors to secure all of the Company's obligations under the Amendment Agreements and the senior secured notes amended, restated and delivered pursuant thereto and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the Amendment Agreements.

WHEREAS, on September 17, 2017, in connection with the consummation of the transactions contemplated by the September 2017 SPA, the Grantors executed and delivered to the Collateral Agent a third amendment to the Pledge and Security Agreement that granted to the Collateral Agent for the benefit of the September 2017 Investors, a security interest in all personal property (with certain exceptions specified below) of the Grantors to secure all of the Company's obligations under the September 2017 SPA and the senior secured notes issued pursuant thereto (as such notes may be amended, restated, replaced or otherwise modified from time to time in accordance with the terms thereof, collectively, the "**September 2017 Notes**") and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the September 2017 SPA.

WHEREAS, on June 5, 2017, in connection with the consummation of the transactions contemplated by the June 2018 SPA, the Grantors executed and delivered to the Collateral Agent a fourth amendment to the Pledge and Security Agreement that granted to the Collateral Agent for the benefit of the June 2018 Investors, a security interest in all personal property (with certain exceptions specified below) of the Grantors to secure all of the Company's obligations under the June 2018 SPA and the senior secured notes issued pursuant thereto (as such notes may be amended, restated, replaced or otherwise modified from time to time in accordance with the terms thereof, collectively, the "**June 2018 Notes**") and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the June 2018 SPA.

WHEREAS, it is a condition precedent to the January 2019 Investors consummating the transactions contemplated by the January 2019 SPA that the Grantors execute and deliver to the Collateral Agent a further amendment to the Pledge and Security Agreement providing for their grant to the Collateral Agent, for the benefit of the January 2019 Investors, of a security interest in all personal property (with certain exceptions specified below) of the Grantors to secure all of the Company's obligations under the January 2019 SPA and the senior secured notes issued pursuant thereto (as such notes may be amended, restated, replaced or otherwise modified from time to time in accordance with the terms thereof, collectively, the "**January 2019 Notes**") and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the January 2019 SPA.

WHEREAS, the Company and the Collateral Agent desire to enter into this Fifth Amendment in order amend the Security Agreement to include the January 2019 Investors as secured parties to whom the Company is also granting the aforementioned security interests such that the January 2019 Notes shall rank *pari passu* in priority with the April 2015 Notes, the May 2015 Notes, the November 2016 Notes, the September 2017 Notes and the June 2018 Notes, with the holders of each of the April 2015 Notes, the May 2015 Notes, the November 2016 Notes, the September 2017 Notes, the June 2018 Notes and the January 2019 Notes having a first priority perfected security interest in all of the current and future assets of the Company and all direct and indirect Subsidiaries of the Company, except for the “Excluded Assets” (as such term is defined in the Security Agreement).

WHEREAS, each Grantor has determined that the execution, delivery and performance of this Fifth Amendment directly benefits, and are in the best interest of the Company and such Grantor.

NOW, THEREFORE, in consideration of the premises and the agreements herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto covenant and agree as follows:

SECTION 1. Amendments to the Security Agreement.

(a) The definition of the term “**Securities Purchase Agreement**” in the first paragraph of the Security Agreement is hereby amended and restated such that it means, collectively, the April 2015 SPA (as defined below), the May 2015 SPA (as defined below), the November 2016 SPA (as defined below), the Amendment Agreements (as defined below), the September 2017 SPA (as defined below), the June 2018 SPA (as defined below) and the January 2019 SPA (as defined below).

(b) The seventh recital in the Security Agreement is hereby deleted, and the following recitals set forth below are hereby added after the sixth recital in the Security Agreement:

“WHEREAS, the Company and each party listed as a “Buyer” (each a “**January 2019 Buyer**”, and collectively, the “**January 2019 Buyers**”) on the Schedule of Buyers (as such schedule may be amended, restated, joined or otherwise modified from time to time) attached to that certain Securities Purchase Agreement by and among the Company and the January 2019 Buyers dated January 18, 2018 (as the same may be amended, restated, joined or otherwise modified from time to time, the “**January 2019 SPA**”), are parties to the January 2019 SPA, pursuant to which the Company is required to sell, and the January 2019 Buyers shall purchase or have the right to purchase, senior secured notes (the “**January 2019 Notes**”).”

“WHEREAS, (a) each of the April 2015 Buyers, the May 2015 Buyers, the November 2016 Buyers, the September 2017 Buyers and the June 2018 Buyers are hereinafter referred to individually as a “**Buyer**” and collectively, the “**Buyers**”; (b) the April 2015 Notes, the May 2015 Notes, the November 2016 Notes, the September 2017 Notes and the June 2018 Notes are hereinafter referred to collectively as the “**Notes**”; and (c) collectively, the (1) April 2015 SPA, the April 2015 Notes and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the April 2015 SPA; (2) the May 2015 SPA, the May 2015 Notes and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the May 2015 SPA; (3) the November 2016 SPA, the November 2016 Notes and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the November 2016 SPA; (4) the Amendment Agreements and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the Amendment Agreements; (5) the September 2017 SPA, the September 2017 Notes and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the September 2017 SPA; (6) the June 2018 SPA, the June 2018 Notes and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the June 2018 SPA; and (7) the January 2019 SPA, the January 2019 Notes and each of the other agreements entered into by the parties thereto in connection with the transactions contemplated by the January 2019 SPA are hereinafter referred to as the “**Combined Transaction Documents**.”

(c) Section 1(c) of the Security Agreement is hereby amended to add the following term and definition:

“**Note Required Holders**” means the holders of a majority of the outstanding principal amount of April 2015 Notes, the April 2015 Notes, the November 2016 Notes, the September 2017 Notes, the June 2018 Notes and the January 2019 Notes, taken together, and shall include Empery Asset Master Ltd. (“**Empery**”) so long as Empery or any of its affiliates holds any April 2015 Notes, any May 2015 Notes, any November 2016 Notes, any September 2017 Notes, any June 2018 Notes or any January 2019 Notes.”

SECTION 2. Effectiveness. This Fifth Amendment shall become effective as of the date hereof only upon the satisfaction of all of the following conditions precedent (the date of satisfaction of such conditions being referred to herein as the “**Fifth Amendment Effective Date**”):

(a) The Collateral Agent shall have received a counterpart signature page of this Fifth Amendment duly executed by each of the Grantors; and

(b) The representations and warranties contained in Section 3 of this Fifth Amendment are and will be true and correct in all material respects on and as of the Fifth Amendment Effective Date to the same extent as though made on and as of that date, except to the extent such representations and warranties specifically relate to an earlier date, in which case they were true and correct in all material respects on and as of such earlier date.

SECTION 3. Representations and Warranties. In order to induce the Collateral Agent to enter into this Fifth Amendment and to amend the Security Agreement in the manner provided herein, each Grantor represents and warrants to the Agent, that the following statements are true and correct in all material respects:

(a) This Fifth Amendment has been duly executed and delivered by each Grantor party hereto and each of this Fifth Amendment and the Security Agreement as amended hereby is the legal, valid and binding obligation of each Grantor, and is enforceable against each Grantor in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency or similar laws affecting the enforcement of creditors’ rights generally and by equitable principles relating to enforceability.

(b) The execution, delivery and performance of this Fifth Amendment and the Security Agreement as amended hereby, are within each Grantor's corporate powers and have been duly authorized by all necessary corporate actions of each Grantor. The execution, delivery and performance of this Fifth Amendment and the existing Security Agreement as amended hereby (a) do not require any consent or approval of, registration or filing with, or any other action by, any governmental authority or other regulatory body or any other Person, except (A) such as have been obtained or made and are in full force and effect, (B) for filings and registrations necessary to perfect Liens created pursuant to the Notes and the Transaction Documents, or (C) consents or approvals the failure of which to obtain would not reasonably be expected to result in a Material Adverse Effect (as defined in the Securities Purchase Agreement), (b) will not violate any law applicable to any Grantor which would result in a Material Adverse Effect (as defined in the Securities Purchase Agreement), (c) will not result in a default under any material indebtedness, and (d) will not result in the creation or imposition of any Lien on any asset of any Grantor, except Liens created pursuant to the Notes and the Transaction Documents.

SECTION 4. References to and Effect on the Security Agreement.

(a) On and after the Fifth Amendment Effective Date, each reference in the Security Agreement to "this Agreement", "hereunder", "hereof", "herein" or words of like import referring to the Security Agreement, and each reference in the Transaction Documents to the "Pledge and Security Agreement", "thereunder", "thereof" or words of like import referring to the Security Agreement shall mean and be a reference to the Security Agreement, as amended by this Fifth Amendment.

(b) Except as specifically amended by this Fifth Amendment, the Security Agreement and the Transaction Documents shall remain in full force and effect and are hereby ratified and confirmed.

(c) The execution, delivery and performance of this Fifth Amendment shall not constitute a waiver of any provision of, or operate as a waiver of any right, power or remedy of any Collateral Agent or Buyer under, the Security Agreement or any of the other Transaction Documents.

SECTION 5. APPLICABLE LAW. THIS FIFTH AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, CONSTRUED AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, EXCEPT AS REQUIRED BY MANDATORY PROVISIONS OF LAW AND EXCEPT TO THE EXTENT THAT THE VALIDITY AND PERFECTION OR THE PERFECTION AND THE EFFECT OF PERFECTION OR NON-PERFECTION OF THE SECURITY INTEREST CREATED HEREBY, OR REMEDIES HEREUNDER, IN RESPECT OF ANY PARTICULAR COLLATERAL ARE GOVERNED BY THE LAW OF A JURISDICTION OTHER THAN THE STATE OF NEW YORK

SECTION 6. Counterparts and Facsimile or Electronic Signatures. This Fifth Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument; signature pages may be detached from multiple separate counterparts and attached to a single counterpart so that all signature pages are physically attached to the same document. This Fifth Amendment may be executed by fax or electronic mail, in PDF format, and no party hereto may contest this Fifth Amendment's validity solely because a signature was faxed or otherwise sent electronically.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, each Grantor has caused this Fifth Amendment to be executed and delivered by its officer thereunto duly authorized, as of the date first above written.

ENER-CORE, INC., a Delaware corporation

By: _____
Name: Domonic J. Carney
Title: Chief Financial Officer

Address for Notices:

30100 Town Center Dr., Suite O-209
Laguna Niguel, California 92677
Attention: Mr. Domonic J. Carney
Email: DJ.Carney@ener-core.com

ENER-CORE POWER, INC., a Delaware corporation

By: _____
Name: Domonic J. Carney
Title: Chief Financial Officer

Address for Notices:

30100 Town Center Dr., Suite O-209
Laguna Niguel, California 92677
Attention: Mr. Domonic J. Carney
Email: DJ.Carney@ener-core.com

Signature Page to Fifth Amendment to Pledge and Security Agreement

ACCEPTED BY:

EMPERY TAX EFFICIENT, LP,
as Collateral Agent

By: Empery Asset Management, LP, its authorized
agent

By: _____
Name: Brett Director
Title: General Counsel
Address: c/o Empery Asset Management, LP
1 Rockefeller Plaza, Suite 1205
New York, NY 10020

Signature Page to Fifth Amendment to Pledge and Security Agreement