

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): July 18, 2025

TECOGEN INC.

(Exact Name of Registrant as Specified in Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

001-36103

(Commission File Number)

04-3536131

(IRS Employer Identification No.)

**76 Treble Cove Road, Building 1
North Billerica, Massachusetts 01862**

(Address of Principal Executive Offices and Zip Code)

(781) 466-6400

(Registrant's telephone number, including area code)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	Trading Symbol	Name of exchange on which registered
Common Stock, \$0.001 par value per share	TGEN	NYSE American, LLC

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:

- ☐ 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 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. ☐

Section 1 - Registrant's Business and Operations

Item 1.01. Entry into a Material Definitive Agreement.

On July 18, 2025, Tecogen Inc., a Delaware corporation ("*Company*"), entered into an underwriting agreement ("*Underwriting Agreement*") with Roth Capital Partners, LLC, as the sole manager and underwriter ("*underwriter*") of an underwritten public offering ("*Offering*"), pursuant to which the Company agreed to issue and sell 3,500,000 shares ("*Firm Shares*") of its common stock, \$.001 par value per share ("*Common Stock*"), at a price to the public of \$5.00 per share, less an underwriting discount equal to seven percent (7%) of the gross proceeds of the offering. Pursuant to the Underwriting Agreement, the Company granted the underwriters a 45-day option to purchase up to an additional 485,000 shares of its Common Stock ("*Option Shares*," and together with the Firm Shares, "*Shares*") at the public offering price, less underwriting discounts and commissions. As of July 18, 2025, the underwriter had not exercised its over-allotment option.

The Underwriting Agreement contains customary representations and warranties, conditions to closing, market standoff provisions, termination provisions and indemnification obligations, including for liabilities under the Securities Act of 1933, as amended ("*Securities Act*"). The Offering was made pursuant to a Registration Statement on Form S-1 (File No. 333-288668) that was filed by the Company with the Securities and Exchange Commission ("*SEC*") on July 15, 2025, as amended, and declared effective by the SEC on July 17, 2025 and a Registration Statement on Form S-1 (File No. 333-288740) filed pursuant to Rule 462(b) under the Securities Act which was filed with the SEC and became effective on July 17, 2025. A final prospectus relating to the Offering will be filed with the SEC pursuant to Rule 424(b) under the Securities Act.

The Company estimates that the net proceeds of the Offering, after deducting underwriting discounts and commissions and estimated offering expenses, will be approximately \$16,275,000 (or approximately \$18,530,250 if the underwriter exercises its option to purchase additional shares in full). The Company intends to use the net proceeds of the Offering for continued product development, increased sales and marketing activities, sales, marketing, additional human resources, capital expenditures, and other costs and expenses it may incur in connection with its anticipated expansion into the data center market, and for general working capital and corporate purposes.

The Company expects the Offering to close on or about July 21, 2025, for the Firm Shares, subject to the satisfaction of customary closing conditions.

The representations, warranties and covenants contained in the Underwriting Agreement were made solely for the benefit of the parties thereto and may be subject to limitations agreed upon by the parties thereto. Accordingly, the Underwriting Agreement is incorporated herein by reference only to provide investors with information regarding the terms of the Underwriting Agreement and not to provide investors with any other factual information regarding the Company or its businesses, and should be read in conjunction with the disclosures in the Company's periodic reports and other filings with the SEC.

The foregoing description of the Underwriting Agreement is not complete and is qualified in its entirety by reference to the full text of the Underwriting Agreement, a copy of which is filed as Exhibit 1.1 to this Current Report on Form 8-K.

Section 8 - Other Events

Item 8.01 Other Events

On July 18, 2025, the Company issued a press release announcing the pricing of the Offering. A copy of the press release is filed as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Item 8.01 and Exhibit 99.01 to this Current Report on Form 8-K shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Forward-Looking Statements

This press release contains “forward-looking statements” which may describe strategies, goals, outlooks or other non-historical matters, or projected revenues, income, returns or other financial measures, that may include words such as “*believe*,” “*expect*,” “*anticipate*,” “*intend*,” “*plan*,” “*estimate*,” “*project*,” “*target*,” “*potential*,” “*will*,” “*should*,” “*could*,” “*likely*,” or “*may*” and similar expressions intended to identify forward-looking statements. These statements are only predictions and involve known and unknown risks, uncertainties, and other factors that may cause our actual results to differ materially from those expressed or implied by such forward-looking statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Forward-looking statements speak only as of the date on which they are made, and we undertake no obligation to update or revise any forward-looking statements except as required under the securities laws.

In addition to those factors described in the Company’s Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current reports on Form 8-K, under “*Risk Factors*,” and elsewhere therein, as well as the risks described in the registration statement and preliminary prospectus related to the offering, among the factors that could cause actual results to differ materially from past and projected future results are the following: statements regarding expected gross proceeds from the offering, the anticipated use of net proceeds from the offering, and completion and timing of the public offering, fluctuations in demand for our products and services, competing technological developments, issues relating to research and development, the availability of incentives, rebates, and tax benefits relating to our products and services, changes in the regulatory environment relating to our products and services, integration of acquired business operations, the impact of tariffs, and the ability to obtain financing on favorable terms to fund existing operations and anticipated growth.

Section 9 - Financial Statements and Exhibits

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit</u>	<u>Description</u>
1.1	Underwriting Agreement, dated July 18, 2025 by and between the Registrant and Roth Capital Partners, LLC *
99.1	Press Release, dated July 18, 2025 *
104	Cover Page Interactive Data File (embedded within the Inline XBRL Document)
*	Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, hereunto

TECOGEN INC.

duly authorized.

July 18, 2025

By: /s/ Abinand Rangesh

Abinand Rangesh, Chief Executive Officer

TECOGEN INC.
UNDERWRITING AGREEMENT
3,500,000 Shares of Common Stock

July 18, 2025

Roth Capital Partners, LLC
888 San Clemente Drive, Suite 400
Newport Beach, CA 92660

Ladies and Gentlemen:

Tecogen Inc., a Delaware corporation (the “Company”), proposes, subject to the terms and conditions stated herein, to issue and sell to the underwriters named in Schedule I hereto (the “Underwriters,” or each, an “Underwriter”), for whom Roth Capital Partners, LLC is acting as the representative (the “Representative”), 3,500,000 authorized but unissued shares (the “Firm Shares”) of common stock of the Company, par value \$.001 per share (the “Common Stock”). In addition, the Company also proposes to sell to the Underwriters, upon the terms and conditions set forth in Section 4 hereof, up to an additional 485,000 authorized but unissued shares of Common Stock (the “Option Shares”). The Firm Shares and the Option Shares are hereinafter collectively referred to as the “Shares” or “Securities.”

The Company and the Underwriters hereby confirm their agreement as follows:

1. Registration Statement and Prospectus.

The Company has prepared and filed with the Securities and Exchange Commission (the “Commission”) a registration statement on Form S-1 (File No. 333-288668) under the Securities Act of 1933, as amended (the “Securities Act”), and the rules and regulations (the “Rules and Regulations”) of the Commission thereunder relating to the Shares and such amendments to such registration statement (including post effective amendments) as may have been required to the date of this Agreement. Such registration statement, as amended (including any post effective amendments), has been declared effective by the Commission.

Such registration statement, including amendments thereto (including post effective amendments thereto) at the time of effectiveness thereof (the “Effective Time”), the exhibits and any schedules thereto at the Effective Time or thereafter during the period of effectiveness and the documents and information otherwise deemed to be a part thereof or included therein by the Securities Act or otherwise pursuant to the Rules and Regulations at the Effective Time or thereafter during the period of effectiveness, is herein called the “Registration Statement.” If the Company has filed or files an abbreviated registration statement pursuant to Rule 462(b) under the Securities Act (the “Rule 462 Registration Statement”), then any reference herein to the term

Registration Statement shall include such Rule 462 Registration Statement. Any preliminary prospectus included in the Registration Statement or filed with the Commission pursuant to Rule 424(a) under the Securities Act is hereinafter called a “Preliminary Prospectus.”

The Company is filing with the Commission pursuant to Rule 424 under the Securities Act a final prospectus covering the Securities, which includes the information permitted to be omitted therefrom at the Effective Time by Rule 430A under the Securities Act. Such final prospectus, as so filed, is hereinafter called the “Final Prospectus.” The Final Prospectus, the Pricing Prospectus and any preliminary prospectus in the form in which they were included in the Registration Statement or filed with the Commission pursuant to Rule 424 under the Securities Act is hereinafter called a “Prospectus.”

Reference made herein to the Final Prospectus, any Preliminary Prospectus or to the Prospectus shall be deemed to refer to and include any documents incorporated by reference therein, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include any document filed under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the rules and regulations of the Commissions thereunder, incorporated by reference in such Preliminary Prospectus or the Prospectus, as the case may be. The term “Effective Date” shall mean each date that the Registration Statement and any post-effective amendment or amendments thereto became or become effective.

The Commission has not notified the Company of any objection to the use of form of Registration Statement or any post-effective amendment thereto.

2. Representations and Warranties of the Company Regarding the Offering.

(a) The Company represents and warrants to, and agrees with, the Underwriters, as of the date hereof, as of the Closing Date (as defined in Section 4(d) below) and as of each Option Closing Date (as defined in Section 4(b) below), as follows:

(i) **No Material Misstatements or Omissions.** At each of the time of effectiveness thereof, at the date hereof, at the Closing Date, and at each Option Closing Date, if any, the Registration Statement complied or will comply in all material respects with the requirements of the Securities Act and the Rules and Regulations and did not, does not, and will not, as the case may be, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Time of Sale Disclosure Package (as defined in Section 2(a)(v)(A)(1) below) as of 5:00 p.m. (Eastern time) (the “Applicable Time”) on the date hereof, at the Closing Date and on each Option Closing Date, if any, and the Final Prospectus, as amended or supplemented, as of its date, at the time of filing pursuant to Rule 424(b) under the Securities Act, at the Closing Date and at each Option Closing Date, if any, when considered together with the Time of Sale Disclosure Package, did not, does not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of

the circumstances under which they were made, not misleading. The representations and warranties set forth in the two immediately preceding sentences shall not apply to statements in or omissions from the Registration Statement, the Time of Sale Disclosure Package or any Prospectus in reliance upon, and in conformity with, written information furnished to the Company by the Underwriters specifically for use in the preparation thereof, which written information is described in Section 7(g). The Registration Statement contains all exhibits and schedules required to be filed by the Securities Act or the Rules and Regulations. No order preventing or suspending the effectiveness or use of the Registration Statement or any Prospectus is in effect and no proceedings for such purpose have been instituted or are pending, or, to the knowledge of the Company, are contemplated or threatened by the Commission.

(ii) **Marketing Materials.** The Company has not distributed any prospectus or other offering material in connection with the offering and sale of the Shares other than the Time of Sale Disclosure Package and the roadshow or investor presentations delivered to and approved by the Underwriters for use in connection with the marketing of the offering of the Securities (the “Marketing Materials”).

(iii) [Reserved].

(iv) [Reserved].

(v) **Accurate Disclosure.** (A) The Company has provided a copy to the Underwriters of each Issuer Free Writing Prospectus (as defined below), if any, used in the sale of Shares. The Company has filed all Issuer Free Writing Prospectuses, if any, required to be so filed with the Commission, and no order preventing or suspending the effectiveness or use of any Issuer Free Writing Prospectus is in effect and no proceedings for such purpose have been instituted or are pending, or, to the knowledge of the Company, are contemplated or threatened by the Commission. When taken together with the rest of the Time of Sale Disclosure Package or the Final Prospectus, no Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of Shares, has, does or will include (x) any untrue statement of a material fact or omission to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, or (y) information that conflicted, conflicts or will conflict with the information contained in the Registration Statement or the Final Prospectus. The representations and warranties set forth in the immediately preceding sentence shall not apply to statements in or omissions from the Time of Sale Disclosure Package, the Final Prospectus or any Issuer Free Writing Prospectus in reliance upon, and in conformity with, written information furnished to the Company by the Underwriters specifically for use in the preparation thereof, which written information is described in Section 7(g). As used in this paragraph and elsewhere in this Agreement:

(1) “Time of Sale Disclosure Package” means the Prospectus most recently filed with the Commission before the time of this

Agreement, including any preliminary prospectus supplement deemed to be a part thereof, each Issuer Free Writing Prospectus, and the description of the transaction provided by the Underwriters included on Schedule II.

(2) “Issuer Free Writing Prospectus” means any “issuer free writing prospectus,” as defined in Rule 433 under the Securities Act, relating to the Shares that (A) is required to be filed with the Commission by the Company, or (B) is exempt from filing pursuant to Rule 433(d)(5)(i) or (d)(8) under the Securities Act, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company’s records pursuant to Rule 433(g) under the Securities Act.

(B) At the time of filing of the Registration Statement and at the date hereof, the Company was not and is not an “ineligible issuer,” as defined in Rule 405 under the Securities Act or an “excluded issuer” as defined in Rule 164 under the Securities Act.

(C) Each Issuer Free Writing Prospectus listed on Schedule III satisfied, as of its issue date and at all subsequent times through the Prospectus Delivery Period, all other conditions as may be applicable to its use as set forth in Rules 164 and 433 under the Securities Act, including any legend, record-keeping or other requirements.

(vi) **Financial Statements.** The consolidated financial statements of the Company, together with the related notes and schedules, included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus comply in all material respects with the applicable requirements of the Securities Act and the Exchange Act and the rules and regulations of the Commission thereunder, and fairly present the financial condition of the Company as of the dates indicated and the results of operations and changes in cash flows for the periods therein specified in conformity with U.S. generally accepted accounting principles (“GAAP”) consistently applied throughout the periods involved. No other financial statements or schedules are required under the Securities Act, the Exchange Act, or the Rules and Regulations to be included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package or the Final Prospectus.

(vii) **Independent Accountants.** To the Company’s knowledge, Wolf & Company, PC, which has expressed its opinion with respect to the financial statements and schedules incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus, is an independent registered public accounting firm with respect to the Company within the meaning of the Securities Act and the Rules and Regulations.

(viii) **Accounting and Disclosure Controls.** Except as disclosed in the Registration Statement, the Company and its Subsidiaries (as defined below) maintain systems of “internal control over financial reporting” (as defined under Rules 13a-15 and

15d-15 under the Exchange Act) that comply with the requirements of the Exchange Act and have been designed by, or under the supervision of, their respective principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including, but not limited to, 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 GAAP and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences; and (v) the interactive data in eXtensible Business Reporting Language included in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus fairly present the information called for in all material respects and are prepared in accordance with the Commission's rules and guidelines applicable thereto. Since the date of the latest audited financial statements included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus, there has been no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting. As used in this Agreement, the term "Subsidiaries" means American DG Energy Inc., a Delaware corporation, American DG New York, LLC, a Delaware limited liability company, and Tecogen CHP Solutions Inc., a Province of Ontario company (each a "Subsidiary"). Since the date of the latest audited consolidated financial statements included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus, there has been no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Except as disclosed in the Registration Statement, the Company maintains disclosure controls and procedures that have been designed to ensure that material information relating to the Company and its Subsidiaries is made known to the Company's principal executive officer and principal financial officer by others within those entities; and such disclosure controls and procedures are effective.

(ix) **Forward-Looking Statements.** The Company had a reasonable basis for, and made in good faith, each "forward-looking statement" (within the meaning of Section 27A of the Securities Act or Section 21E of the Exchange Act) contained or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package, the Final Prospectus or the Marketing Materials.

(x) **Statistical and Marketing-Related Data.** All statistical or market-related data included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package or the Final Prospectus, or included in the

Marketing Materials, are based on or derived from sources that the Company reasonably believes to be reliable and accurate.

(xi) **Trading Market.** The Common Stock is registered pursuant to Section 12(b) of the Exchange Act and is approved for listing on the NYSE American LLC (“NYSE American”). To the Company’s knowledge, there is no action pending by NYSE American to delist the Common Stock from NYSE American, nor has the Company received any notification that NYSE American is contemplating terminating such listing. When issued, the Shares will be listed on NYSE American. The Company has taken all actions it deems reasonably necessary or advisable to take on or prior to the date of this Agreement to assure that it will be in compliance in all material respects with all applicable corporate governance requirements set forth in the rules of NYSE American that are then in effect and will take all action it deems reasonably necessary or advisable to assure that it will be in compliance in all material respects with other applicable corporate governance requirements set forth in NYSE American rules not currently in effect upon and all times after the effectiveness of such requirements.

(xii) **Absence of Manipulation.** The Company has not taken, directly or indirectly, any action that is designed to or that has constituted or that would 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 the Shares.

(xiii) **Investment Company Act.** The Company is not and, after giving effect to the offering and sale of the Shares and the application of the net proceeds thereof, will not be an “investment company,” as such term is defined in the Investment Company Act of 1940, as amended.

3. *Representations and Warranties Regarding the Company.*

(a) The Company represents and warrants to, and agrees with, the Underwriters, as of the date hereof and as of the Closing Date and as of each Option Closing Date, as follows:

(i) **Good Standing.** Each of the Company and its Subsidiaries has been duly organized and is validly existing as a corporation or other entity in good standing under the laws of its jurisdiction of incorporation. Each of the Company and its Subsidiaries has the power and authority (corporate or otherwise) to own its properties and conduct its business as currently being carried on and as described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, and is duly qualified to do business as a foreign corporation or other entity in good standing in each jurisdiction in which it owns or leases real property or in which the conduct of its business makes such qualification necessary, except where the failure to so qualify would not have or be reasonably likely to result in a material adverse effect upon the business, prospects, properties, operations, condition (financial or otherwise) or results of

operations of the Company and its Subsidiaries, taken as a whole, or in its ability to perform its obligations under this Agreement (“Material Adverse Effect”).

(ii) **Authorization.** The Company has the power and authority to enter into this Agreement and to authorize, issue and sell the Firm Shares and Option Shares as contemplated by this Agreement. This Agreement has been duly authorized by the Company, and when executed and delivered by the Company, and will constitute the valid, legal and binding obligations of the Company, enforceable against the Company in accordance with its their respective terms, except as rights to indemnity hereunder may be limited by federal or state securities laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally and subject to general principles of equity.

(iii) **Contracts.** The execution, delivery and performance of this Agreement and the consummation of the transactions herein contemplated will not (A) result in a material breach or material violation of any of the terms and provisions of, or constitute a default under, any law, order, rule or regulation to which the Company or any Subsidiary is subject, or by which any property or asset of the Company or any Subsidiary is bound or affected, (B) conflict with, result in any material violation or material breach of, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or give to others any right of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) (a “Default Acceleration Event”) of, any agreement, lease, credit facility, debt, note, bond, mortgage, indenture or other instrument (the “Contracts”) or material obligation or other material understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, except to the extent that such conflict, default, or Default Acceleration Event not reasonably likely to result in a Material Adverse Effect, or (C) result in a breach or violation of any of the terms and provisions of, or constitute a default under, the Company’s articles of incorporation or by-laws.

(iv) **No Violations of Governing Documents.** Neither the Company nor any of its Subsidiaries is in material violation, breach or default under its certificate of incorporation, by-laws or other equivalent organizational or governing documents.

(v) **Consents.** No consents, approvals, orders, authorizations or filings are required on the part of the Company in connection with the execution, delivery or performance of this Agreement and the issue and sale of the Shares, except (A) the registration under the Securities Act of the Shares, which has been effected, (B) the necessary filings and approvals from the NYSE American to list the Shares, (C) such consents, approvals, authorizations, registrations or qualifications as may be required under state or foreign securities or Blue Sky laws and the rules of the Financial Industry Regulatory Authority, Inc. (“FINRA”) in connection with the purchase and distribution of the Shares by the Underwriters, (D) such consents and approvals as have been obtained and are in full force and effect, and (E) such consents, approvals, orders, authorizations

and filings the failure of which to make or obtain is not reasonably likely to result in a Material Adverse Effect.

(vi) **Capitalization.** The Company has an authorized capitalization as set forth in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus. All of the issued and outstanding shares of capital stock of the Company are duly authorized and validly issued, fully paid and nonassessable, and have been issued in compliance with all applicable securities laws, and conform to the description thereof in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus. All of the issued shares of capital stock of each Subsidiary of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and, except as set forth in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus, are owned directly or indirectly by the Company, free and clear of all liens, encumbrances, equities or claims. Except for the issuances of options or restricted stock in the ordinary course of business, since the respective dates as of which information is provided in the Registration Statement, the Time of Sale Disclosure Package or the Final Prospectus, the Company has not entered into or granted any convertible or exchangeable securities, options, warrants, agreements, contracts or other rights in existence to purchase or acquire from the Company any shares of the capital stock of the Company. The Shares, when issued and paid for as provided herein, will be duly authorized and validly issued, fully paid and nonassessable, will be issued in compliance with all applicable securities laws, and will be free of preemptive, registration or similar rights-and will conform to the description of the capital stock of the Company contained in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus.

(vii) **Taxes.** Each of the Company and its Subsidiaries has (a) filed all foreign, federal, state and local tax returns (as hereinafter defined) required to be filed with taxing authorities prior to the date hereof or has duly obtained extensions of time for the filing thereof and (b) paid all taxes (as hereinafter defined) shown as due and payable on such returns that were filed and has paid all taxes imposed on or assessed against the Company or such respective Subsidiary. The provisions for taxes payable, if any, shown on the financial statements included or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus are sufficient for all accrued and unpaid taxes, whether or not disputed, and for all periods to and including the dates of such consolidated financial statements. To the knowledge of the Company, no material issues have been raised (and are currently pending) by any taxing authority in connection with any of the returns or taxes asserted as due from the Company or its Subsidiaries, and no waivers of statutes of limitation with respect to the returns or collection of taxes have been given by or requested from the Company or its Subsidiaries. The term “taxes” mean all federal, state, local, foreign, and other net income, gross income, gross receipts, sales, use, ad valorem, transfer, franchise, profits, license, lease, service, service use, withholding, payroll, employment, excise, severance, stamp, occupation, premium, property, windfall profits, customs, duties or other taxes, fees, assessments, or charges of any kind whatever, together with any interest and any

penalties, additions to tax, or additional amounts with respect thereto. The term “returns” means all returns, declarations, reports, statements, and other documents required to be filed in respect to taxes.

(viii) **Material Change.** Except as set forth on Schedule 3(a)(viii) of the Disclosure Schedule, since the respective dates as of which information is given in the Registration Statement, the Time of Sale Disclosure Package or the Final Prospectus, (a) neither the Company nor any of its Subsidiaries has incurred any material liability or obligation, direct or contingent, or entered into any material transaction other than in the ordinary course of business, (b) the Company has not declared or paid any dividends or made any distribution of any kind with respect to its capital stock, (c) there has not been any change in the capital stock of the Company or any of its Subsidiaries (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants, upon the conversion of outstanding shares of preferred stock or other convertible securities or the issuance of restricted stock awards or restricted stock units under the Company’s existing stock awards plans, or any new grants thereof in the ordinary course of business), (d) there has not been any material change in the Company’s long-term or short-term debt, and (e) to the knowledge of the Company, there has not been the occurrence of any Material Adverse Effect.

(ix) **Absence of Proceedings.** There is not pending or, to the knowledge of the Company, threatened, any action, suit or proceeding to which the Company or any of its Subsidiaries is a party or of which any property or assets of the Company or any of its Subsidiaries is the subject before or by any court or governmental agency, authority or body, or any arbitrator or mediator, which is reasonably likely to result in a Material Adverse Effect.

(x) **Permits.** The Company and each of its Subsidiaries holds, and is in compliance with, all franchises, grants, authorizations, licenses, permits, easements, consents, certificates and orders (“Permits”) of any governmental or self-regulatory agency, authority or body required for the conduct of its business, and all such Permits are in full force and effect, in each case except where the failure to hold, or comply with, any of them is not reasonably likely to result in a Material Adverse Effect or adversely affect the consummation of the transactions contemplated by this Agreement.

(xi) **Good Title.** The Company and each of its Subsidiaries have good and marketable title to all property (whether real or personal) described in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus as being owned by them that are material to the business of the Company, in each case free and clear of all liens, claims, security interests, other encumbrances or defects, except those that are disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus and those that are not reasonably likely to result in a Material Adverse Effect. The property held under lease by the Company and its Subsidiaries is held by them under valid, subsisting and enforceable leases with only such

exceptions with respect to any particular lease as do not interfere in any material respect with the conduct of the business of the Company and its Subsidiaries.

(xii) **Intellectual Property.** The Company and each of its Subsidiaries owns or possesses or has valid right to use all patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, copyrights, licenses, inventions, trade secrets and similar rights necessary for the conduct of the business of the Company and its Subsidiaries as currently carried on and as described in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus and which the failure to so have would have a Material Adverse Effect (“Intellectual Property”). To the knowledge of the Company, no action or use by the Company or any of its Subsidiaries involves or gives rise to any infringement of, or license or similar fees for, any Intellectual Property of others, except where such action, use, license or fee is not reasonably likely to result in a Material Adverse Effect. Neither the Company nor any of its Subsidiaries have received any notice alleging any such infringement or fee. To the Company’s knowledge, none of the technology employed by the Company or any Subsidiary has been obtained or is being used by the Company or such Subsidiary in violation of any contractual obligation binding on the Company or such Subsidiary or, to the Company’s knowledge, any of the officers, directors or employees of the Company or any Subsidiary, or, to the Company’s knowledge, otherwise in violation of the rights of any persons, except in each case for such violations as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(xiii) **Employment Matters.** There is (A) no unfair labor practice complaint pending against the Company, or any of its Subsidiaries, nor to the Company’s knowledge, threatened against it or any of its Subsidiaries, before the National Labor Relations Board, any state or local labor relation board or any foreign labor relations board, and no grievance or arbitration proceeding arising out of or under any collective bargaining agreement is so pending against the Company or any of its Subsidiaries, or, to the Company’s knowledge, threatened against it and (B) no labor disturbance by the employees of the Company or any of its Subsidiaries exists or, to the Company’s knowledge, is imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or its Subsidiaries, principal suppliers, manufacturers, customers or contractors, that could reasonably be expected, singularly or in the aggregate, to have a Material Adverse Effect. The Company is not aware that any key employee or significant group of employees of the Company or any Subsidiary plans to terminate employment with the Company or any such Subsidiary.

(xiv) **ERISA Compliance.** No “prohibited transaction” (as defined in Section 406 of the Employee Retirement Income Security Act of 1974, as amended, including the regulations and published interpretations thereunder (“ERISA”), or Section 4975 of the Internal Revenue Code of 1986, as amended from time to time (the “Code”)) or “accumulated funding deficiency” (as defined in Section 302 of ERISA) or any of the events set forth in Section 4043(b) of ERISA (other than events with respect to which the

thirty (30)-day notice requirement under Section 4043 of ERISA has been waived) has occurred or could reasonably be expected to occur with respect to any employee benefit plan of the Company or any of its Subsidiaries which would reasonably be expected to, singularly or in the aggregate, have a Material Adverse Effect. Each employee benefit plan of the Company or any of its Subsidiaries is in compliance in all material respects with applicable law, including ERISA and the Code. The Company and its Subsidiaries have not incurred and could not reasonably be expected to incur liability under Title IV of ERISA with respect to the termination of, or withdrawal from, any pension plan (as defined in ERISA). Each pension plan for which the Company or any of its Subsidiaries would have any liability that is intended to be qualified under Section 401(a) of the Code is so qualified, and, to the Company's knowledge, nothing has occurred, whether by action or by failure to act, which could, singularly or in the aggregate, cause the loss of such qualification.

(xv) **Environmental Matters.** The Company and its Subsidiaries are in compliance with all foreign, federal, state and local rules, laws and regulations relating to the use, treatment, storage and disposal of hazardous or toxic substances or waste and protection of health and safety or the environment which are applicable to their businesses ("Environmental Laws"), except where the failure to comply has not had and would not reasonably be expected to have, singularly or in the aggregate, a Material Adverse Effect. There has been no storage, generation, transportation, handling, treatment, disposal, discharge, emission, or other release of any kind of toxic or other wastes or other hazardous substances by, due to, or caused by the Company or any of its Subsidiaries (or, to the Company's knowledge, any other entity for whose acts or omissions the Company or any of its Subsidiaries is or may otherwise be liable) upon any of the property now or previously owned or leased by the Company or any of its Subsidiaries, or upon any other property, in violation of any law, statute, ordinance, rule, regulation, order, judgment, decree or permit or which would, under any law, statute, ordinance, rule (including rule of common law), regulation, order, judgment, decree or permit, give rise to any liability, except for any violation or liability which has not had and would not reasonably be expected to have, singularly or in the aggregate, a Material Adverse Effect; and there has been no disposal, discharge, emission or other release of any kind onto such property or into the environment surrounding such property of any toxic or other wastes or other hazardous substances with respect to which the Company or any of its Subsidiaries has knowledge.

(xvi) **SOX Compliance.** Except as disclosed or incorporated by reference in the Registration Statement, the Company is in compliance in all material respects with all applicable provisions of the Sarbanes-Oxley Act of 2002 and all rules and regulations promulgated thereunder or implementing the provisions thereof.

(xvii) **Money Laundering Laws.** The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all

jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the “Money Laundering Laws”); and no action, suit or proceeding by or before any Governmental Entity involving the Company or any of its Subsidiaries with respect to the Money Laundering Laws is pending or, to the knowledge of the Company, threatened. “Governmental Entity” shall be defined as any arbitrator, court, governmental body, regulatory body, administrative agency or other authority, body or agency (whether foreign or domestic) having jurisdiction over the Company or any of its Subsidiaries or any of their respective properties, assets or operations.

(xviii) **Foreign Corrupt Practices Act.** Neither the Company, any of its Subsidiaries, nor any director or executive officer of the Company or any Subsidiary, nor, to the knowledge of the Company, any employee, representative, agent, affiliate of the Company or any of its Subsidiaries or any other person acting on behalf of the Company or any of its Subsidiaries, is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the “FCPA”), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any “foreign official” (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA and the Company and, to the knowledge of the Company, its affiliates have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.

(xix) **OFAC.** Neither the Company, any of its Subsidiaries nor any director or executive officer of the Company or any Subsidiary, nor, to the knowledge of the Company, any employee, representative, agent or affiliate of the Company or any of its Subsidiaries or any other person acting on behalf of the Company or any of its Subsidiaries is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department (“OFAC”); and the Company will not directly or indirectly use the proceeds of the offering of the Shares contemplated hereby, or lend, contribute or otherwise make available such proceeds to any person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.

(xx) **Insurance.** The Company and each of its Subsidiaries carries, or is covered by, insurance in such amounts and covering such risks as is adequate for the conduct of its business and the value of its properties and as is customary for companies engaged in similar businesses in similar industries.

(xxi) **Books and Records.** The minute books of the Company and each of its Subsidiaries have been made available to the Underwriters and counsel for the

Underwriters, and such books (i) contain a reasonably complete summary of all meetings and actions of the board of directors (including each board committee) and shareholders of the Company (or analogous governing bodies and interest holders, as applicable), and each of its Subsidiaries since the time of its respective incorporation or organization through the date of the latest meeting and action, and (ii) accurately in all material respects reflect all transactions referred to in such minutes.

(xxii) **No Undisclosed Contracts.** There is no contract or document required by the Securities Act or by the Rules and Regulations to be described in the Registration Statement, the Time of Sale Disclosure Package or in the Final Prospectus or to be filed as an exhibit to the Registration Statements which is not so described or filed therein as required; and all descriptions of any such Contracts or documents contained in the Registration Statement, the Time of Sale Disclosure Package and in the Final Prospectus are accurate and complete descriptions of such documents in all material respects. Other than as described in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus, no such Contract has been suspended or terminated for convenience or default by the Company or any Subsidiary party thereto or any of the other parties thereto, and neither the Company nor any of its Subsidiaries has received notice, and the Company has no knowledge, of any such pending or threatened suspension or termination, except for such pending or threatened suspensions or terminations that have not had, and would not reasonably be expected to have, a Material Adverse Effect, individually or in the aggregate.

(xxiii) **No Undisclosed Relationships.** No relationship, direct or indirect, exists between or among the Company or any of its Subsidiaries on the one hand, and the directors, executive officers, shareholders (or analogous interest holders), customers or suppliers of the Company or any of its Subsidiaries on the other hand, which is required to be described in the Registration Statement, the Time of Sale Disclosure Package or the Final Prospectus under applicable SEC rules and regulations and which is not so described.

(xxiv) **Insider Transactions.** There are no outstanding loans, advances (except normal advances for business expenses in the ordinary course of business) or guarantees of indebtedness by the Company or any of its Subsidiaries to or for the benefit of any of the officers or directors of the Company, any of its Subsidiaries or any of their respective family members, except as disclosed in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus. All transactions by the Company with office holders or control persons of the Company have been duly approved by the board of directors of the Company, or duly appointed committees or officers thereof, if and to the extent required under applicable law.

(xxv) **No Registration Rights.** Except as set forth in Schedule 3(a)(xxv) of the Disclosure Schedule, no person or entity has the right to require registration of Common Stock or other securities of the Company or any of its Subsidiaries within 180 days of the date hereof because of the filing or effectiveness of the Registration Statement

or otherwise, except for persons and entities who have expressly waived such right in writing or who have been given timely and proper written notice and have failed to exercise such right within the time or times required under the terms and conditions of such right. Except as described in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus, there are no persons with registration rights or similar rights to have any securities registered by the Company or any of its Subsidiaries under the Securities Act.

(xxvi) **Continued Business.** Except as set forth on Schedule 3(a)(xxvi) of the Disclosure Schedule, no supplier, customer, distributor or sales agent of the Company or any Subsidiary has notified the Company or any Subsidiary that it intends to discontinue or decrease the rate of business done with the Company or any Subsidiary, except where such discontinuation or decrease has not resulted in and could not reasonably be expected to result in a Material Adverse Effect.

(xxvii) **No Finder's Fee.** There are no claims, payments, issuances, arrangements or understandings for services in the nature of a finder's, consulting or origination fee with respect to the introduction of the Company to the Underwriters or the sale of the Shares hereunder or any other arrangements, agreements, understandings, payments or issuances with respect to the Company that may affect the Underwriters' compensation, as determined by FINRA.

(xxviii) **No Fees.** Except as disclosed to the Underwriter in writing, the Company has not made any direct or indirect payments (in cash, securities or otherwise) to (i) any person, as a finder's fee, investing fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who provided capital to the Company, (ii) any FINRA member, or (iii) any person or entity that has any direct or indirect affiliation or association with any FINRA member within the 12-month period prior to the date on which the Registration Statement was filed with the Commission ("Filing Date") or thereafter.

(xxix) **Proceeds.** None of the net proceeds of the offering will be paid by the Company to any participating FINRA member or any affiliate or associate of any participating FINRA member, except as specifically authorized herein.

(xxx) **No FINRA Affiliations.** To the Company's knowledge, no (i) officer or director of the Company or its Subsidiaries, (ii) owner of 5% or more of any class of the Company's securities or (iii) owner of any amount of the Company's unregistered securities acquired within the 180-day period prior to the Filing Date, has any direct or indirect affiliation or association with any FINRA member. The Company will advise the Underwriters and counsel to the Underwriters if it becomes aware that any officer, director of the Company or its Subsidiaries or any owner of 5% or more of any class of the Company's securities is or becomes an affiliate or associated person of a FINRA member participating in the offering.

(xxxix) **No Financial Advisor.** Other than the Underwriters, no person has the right to act as an underwriter or as a financial advisor to the Company in connection with the transactions contemplated hereby.

(xxxix) **Certain Statements.** The statements set forth or incorporated by reference in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus, insofar as they purport to describe the provisions of the laws and documents referred to therein, are accurate, complete and fair in all material respects, and under the caption “Description of Our Capital Stock” insofar as they purport to constitute a summary of (i) the terms of the Company’s outstanding securities, (ii) the terms of the Shares, and (iii) the terms of the documents referred to therein, are accurate, complete and fair in all material respects.

(xxxix) **Prior Sales of Securities.** Except as set forth in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus, the Company has not sold or issued any shares of Common Stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A under, or Regulations D or S of, the Securities Act, other than shares issued pursuant to employee benefit plans, stock option plans or other employee compensation plans or pursuant to outstanding preferred stock, options, rights, warrants, convertible notes, or other outstanding convertible securities.

(b) Any certificate signed by any officer of the Company and delivered to the Underwriters or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to the Underwriters as to the matters covered thereby.

4. Purchase, Sale and Delivery of Shares.

(a) On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell the Firm Shares, and the Underwriters agree to purchase the Firm Shares set forth opposite the name of each Underwriter in Schedule I hereto. The purchase price to be paid by the Underwriters to the Company for the Firm Shares shall be \$[-] per share (which for the avoidance of doubt equals ninety-three percent (93.0%) of the per Firm Shares public offering price) (the “Initial Price”).

(b) The Company hereby grants to the Underwriters the option to purchase some or all of the Option Shares and, upon the basis of the warranties and representations and subject to the terms and conditions herein set forth, the Underwriters shall have the right to purchase all or any portion of the Option Shares as may be necessary to cover over-allotments made in connection with the transactions contemplated hereby. The purchase price to be paid by the Underwriters for the Option Shares shall be the Initial Price. This option may be exercised by the Underwriters at any time and from time to time on or before the forty-fifth (45th) day following the date hereof, by written notice to the Company (the “Option Notice”). The Option Notice shall set forth the aggregate number of Option Shares as to which the option is being

exercised, and the date and time when the Option Shares are to be delivered (such date and time being herein referred to as the “Option Closing Date”); *provided, however*, that the Option Closing Date shall not be earlier than the Closing Date (as defined below) nor earlier than the first business day after the date on which the option shall have been exercised nor later than the fifth business day after the date on which the option shall have been exercised unless the Company and the Representative otherwise agree.

(c) Payment of the purchase price for and delivery of the Option Shares shall be made on an Option Closing Date in the same manner and at the same office as the payment for the Firm Shares, as set forth in subparagraph (d) below.

(d) The Firm Shares will be delivered by the Company to the Underwriters, against payment of the purchase price therefor by wire transfer of same day funds payable to the order of the Company at the offices of Roth Capital Partners, LLC, 888 San Clemente Drive, Suite 400, Newport Beach, CA 92660, or such other location as may be mutually acceptable, at 6:00 a.m. Pacific Time, on the first (or if the Firm Shares are priced, as contemplated by Rule 15c6-1(c) under the Exchange Act, after 4:30 p.m. Eastern time but prior to 11:59 p.m. Eastern time, the second) full business day following the date hereof, or at such other time and date as the Underwriters and the Company determine pursuant to Rule 15c6-1(a) under the Exchange Act, or, in the case of the Option Shares, at such date and time set forth in the Option Notice. The time and date of delivery of the Firm Shares is referred to herein as the “Closing Date.” On the Closing Date, the Company shall deliver the Firm Shares, which shall be registered in the name or names and shall be in such denominations as the Underwriters may request at least one (1) business day before the Closing Date, to the account of the Underwriters, which delivery shall be made through the facilities of the Depository Trust Company’s DWAC system.

(e) It is understood that the Representative has been authorized to accept delivery of and receipt for, and make payment of the purchase price for, the Firm Shares and any Option Shares that the Underwriters have agreed to purchase. The Representative, individually and not as the Representative of the Underwriters, may (but shall not be obligated to) make payment for any Shares to be purchased by the Underwriter whose funds shall not have been received by the Representative by the Closing Date or any Option Closing Date, as the case may be, for the account of the Underwriter, but any such payment shall not relieve the Underwriter from any of its obligations under this Agreement.

5. Covenants.

(a) The Company covenants and agrees with the Underwriters as follows:

(i) The Company shall prepare the Final Prospectus in a form approved by the Underwriters and file such Final Prospectus pursuant to Rule 424(b) under the Securities Act not later than the Commission's close of business on the second business day following the execution and delivery of this Agreement, or, if applicable, such earlier time as may be required by the Rules and Regulations.

(ii) During the period beginning on the date hereof and ending on the later of the Closing Date or such date as determined by the Underwriters the Final Prospectus is no longer required by law to be delivered in connection with sales by an underwriter or dealer (the “Prospectus Delivery Period”), prior to amending or supplementing the Registration Statement, including any Rule 462 Registration Statement, the Time of Sale Disclosure Package or the Final Prospectus, the Company shall furnish to the Underwriters for review and comment a copy of each such proposed amendment or supplement, and the Company shall not file any such proposed amendment or supplement to which the Underwriters reasonably object.

(iii) From the date of this Agreement until the end of the Prospectus Delivery Period, the Company shall promptly advise the Underwriters in writing (A) of the receipt of any comments of, or requests for additional or supplemental information from, the Commission, (B) of the time and date of any filing of any post-effective amendment to the Registration Statement or any amendment or supplement to the Time of Sale Disclosure Package, the Final Prospectus or any Issuer Free Writing Prospectus, (C) of the time and date that any post-effective amendment to the Registration Statement becomes effective and (D) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of any order preventing or suspending its use or the use of the Time of Sale Disclosure Package, the Final Prospectus or any Issuer Free Writing Prospectus, or of any proceedings to remove, suspend or terminate from listing or quotation the Common Stock from any securities exchange upon which it is listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes. If the Commission shall enter any such stop order at any time during the Prospectus Delivery Period, the Company will use its reasonable efforts to obtain the lifting of such order at the earliest possible moment. Additionally, the Company agrees that it shall comply with the provisions of Rules 424(b), 430A or 430C as applicable, under the Securities Act and will use its reasonable efforts to confirm that any filings made by the Company under Rule 424(b) or Rule 433 were received in a timely manner by the Commission (without reliance on Rule 424(b)(8) or 164(b) of the Securities Act).

(iv) (A) During the Prospectus Delivery Period, the Company will comply with all requirements imposed upon it by the Securities Act, as now and hereafter amended, and by the Rules and Regulations, as from time to time in force, and by the Exchange Act, as now and hereafter amended, so far as necessary to permit the continuance of sales of or dealings in the Shares as contemplated by the provisions hereof, the Time of Sale Disclosure Package, the Registration Statement and the Final Prospectus. If during the Prospectus Delivery Period any event occurs the result of which would cause the Final Prospectus (or if the Final Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) to include an untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary or appropriate in the opinion of the Company or its counsel or the Underwriters or counsel to the Underwriters to amend the Registration

Statement or supplement the Final Prospectus (or if the Final Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) to comply with the Securities Act, or to file under the Exchange Act any document that would be deemed to be incorporated by reference in the Final Prospectus in order to comply with the Securities Act or the Exchange Act, the Company will promptly notify the Underwriters, allow the Underwriters the opportunity to provide reasonable comments on such amendment, prospectus supplement or document, and will amend the Registration Statement or supplement the Final Prospectus (or if the Final Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) or file such document (at the expense of the Company) so as to correct such statement or omission or effect such compliance. (B) If at any time during the Prospectus Delivery Period there occurred or occurs an event or development the result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement or any Prospectus or included or would include, when taken together with the Time of Sale Disclosure Package, an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at that subsequent time, not misleading, the Company will promptly notify the Underwriters and will promptly amend or will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(b) The Company shall take or cause to be taken all necessary action to qualify the Shares for sale under the securities laws of such jurisdictions as the Underwriters reasonably designate and to continue such qualifications in effect so long as required for the distribution of the Shares, except that the Company shall not be required in connection therewith to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified, to execute a general consent to service of process in any state or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise subject.

(c) The Company will furnish to the Underwriters and counsel to the Underwriters copies of the Registration Statement, each Prospectus, any Issuer Free Writing Prospectus, and all amendments and supplements to such documents, in each case as soon as available and in such quantities as the Underwriters may from time to time reasonably request.

(d) The Company will make generally available to its security holders as soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, an earnings statement (which need not be audited) covering a 12-month period that shall satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 of the Rules and Regulations.

(e) The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, will pay or cause to be paid (A) all expenses (including transfer taxes allocated to the respective transferees) incurred

in connection with the delivery to the Underwriters of the Shares, and the cost of preparing and printing stock certificates and warrant certificates), (B) all reasonable expenses and reasonable fees (including, without limitation, the reasonable fees and reasonable expenses of the Company's counsel) in connection with the preparation, printing, filing, delivery, and shipping of the Registration Statement (including the financial statements therein and all amendments, schedules, and exhibits thereto), the Shares, the Time of Sale Disclosure Package, any Prospectus, the Final Prospectus, any Issuer Free Writing Prospectus and any amendment thereof or supplement thereto, (C) all reasonable filing fees and reasonable fees and disbursements of the Underwriters' counsel incurred in connection with the qualification of the Shares for offering and sale by the Underwriters or by dealers under the securities or blue sky laws of the states and other jurisdictions that the Underwriters shall designate, (D) the reasonable filing fees and reasonable fees and disbursements of counsel to the Underwriters incident to any required review and approval by FINRA, of the terms of the sale of the Shares, (F) listing fees, if any, and (G) all other reasonable costs and reasonable expenses incident to the performance of its obligations hereunder that are not otherwise specifically provided for herein. The Company will reimburse the Representative for the Underwriters' reasonable documented out-of-pocket expenses, including legal fees and disbursements, in connection with the purchase and sale of the Shares contemplated hereby up to an aggregate of \$150,000 (including amounts payable pursuant to clauses (C) and (D) above). If this Agreement is terminated by the Underwriters in accordance with the provisions of Section 6 or Section 9, the Company will reimburse the Underwriters for all reasonable documented out-of-pocket disbursements (including, but not limited to, reasonable documented fees and disbursements of counsel, travel expenses, postage, facsimile and telephone charges) incurred by the Underwriters in connection with its investigation, preparing to market and marketing the Shares or in contemplation of performing its obligations hereunder but such amount shall not, in the aggregate, exceed \$150,000. The reimbursement set forth in the immediately preceding two sentences of this Section 5(b)(iv) shall be in lieu of, and not in addition to, the amount deemed reimbursable as set forth in the engagement letter, dated January 15, 2025, between the Representative and the Company.

(f) The Company intends to apply the net proceeds from the sale of the Shares to be sold by it hereunder for the purposes set forth in the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus under the heading "Use of Proceeds."

(g) The Company has not taken and will not take, directly or indirectly, during the Prospectus Delivery Period, any action designed to or which might reasonably be expected to cause or result in, or that has constituted, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares.

(h) The Company represents and agrees that, unless it obtains the prior written consent of the Underwriters represents and agrees that, unless it obtains the prior

written consent of the Company, it has not made and will not make any offer relating to the Shares that would constitute an Issuer Free Writing Prospectus; provided that the prior written consent of the parties hereto shall be deemed to have been given in respect of the free writing prospectuses included in Schedule III. Any such free writing prospectus consented to by the Company and the Underwriters is hereinafter referred to as a “Permitted Free Writing Prospectus.” The Company represents that it has treated or agrees that it will treat each Permitted Free Writing Prospectus as an “issuer free writing prospectus,” as defined in Rule 433, and has complied or will comply with the requirements of Rule 433 applicable to any Permitted Free Writing Prospectus, including timely Commission filing where required, legending and record-keeping.

(i) The Company hereby agrees that, without the prior written consent of the Representative, it will not, during the period ending ninety (90) days after the date hereof (“Lock-Up Period”), (i) offer, pledge, issue, sell, contract to sell, purchase, contract to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for shares of Common Stock; or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise; or (iii) file any registration statement with the Commission relating to the offering of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock. The restrictions contained in the preceding sentence shall not apply to (1) the Shares to be sold hereunder, (2) the issuance of Common Stock upon the exercise of options or warrants or the conversion of outstanding preferred stock or other outstanding convertible securities disclosed as outstanding in the Registration Statement (excluding exhibits thereto), the Time of Sale Disclosure Package, and the Final Prospectus, (3) the issuance of employee stock options not exercisable during the Lock-Up Period and the grant of restricted stock awards or restricted stock units or shares of Common Stock pursuant to equity incentive plans described in the Registration Statement (excluding exhibits thereto), the Time of Sale Disclosure Package, and the Final Prospectus (collectively, “Incentive Equity”), (4) the filing of a registration statement on Form S-8, or amendment or supplement thereto covering Incentive Equity, or (5) the issuance of securities pursuant to acquisitions or strategic transactions approved by a majority of the Company’s disinterested directors, provided that such securities are issued as “restricted securities” and carry no registration rights that require or permit the filing of any registration statement in connection therewith within 90 days following the Closing Date, and provided that any such issuance shall only be to a person which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company but shall not include a transaction in which the Company is issuing securities for the purpose of raising capital or to an entity whose primary business is investing in securities.

(j) The Company hereby agrees, during a period of three years from the effective date of the Registration Statement, to furnish to the Underwriters copies of

all reports or other communications (financial or other) furnished to shareholders, and to deliver to the Underwriters as soon as reasonably practicable upon availability, copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange on which any class of securities of the Company is listed; provided, that any information or documents available on the Commission's Electronic Data Gathering, Analysis and Retrieval System shall be considered furnished for purposes of this Section 5(b)(ix).

(k) The Company hereby agrees to engage and maintain, at its expense, a registrar and transfer agent for the Common Stock.

(l) The Company hereby agrees to use its reasonable best efforts to obtain approval to list the Shares on NYSE American.

(m) The Company hereby agrees not to take, directly or indirectly, any action designed to cause or result in, or that has constituted or might reasonably be expected to constitute, under the Exchange Act or otherwise, the stabilization or manipulation of the price of any securities of the Company to facilitate the sale or resale of the Shares in the offering contemplated hereby.

(n) [Reserved].

(o) [Reserved].

(p) As of the date hereof, the Company has reserved and the Company shall continue to reserve and keep available at all times, free or preemptive rights, a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue Option Shares.

(q) [Reserved].

6. *Conditions of the Underwriter's Obligations.* The obligations of the Underwriters hereunder to purchase the Shares are subject to the accuracy, as of the date hereof and at all times through the Closing Date, and on each Option Closing Date (as if made on the Closing Date or such Option Closing Date, as applicable), of and compliance with all representations, warranties and agreements of the Company contained herein, the performance by the Company of its obligations hereunder and the following additional conditions:

(a) If filing of the Final Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus, is required under the Securities Act or the Rules and Regulations, the Company shall have filed the Final Prospectus (or such amendment or supplement) or such Issuer Free Writing Prospectus with the Commission in the manner and within the time period so required (without reliance on Rule 424(b)(8) or 164(b) under the Securities Act); the Registration Statement shall remain effective; no stop order suspending the effectiveness of the Registration Statement or any part thereof, any Rule 462 Registration Statement, or any amendment thereof, nor suspending or preventing the use of the Time of Sale

Disclosure Package, any Prospectus, the Final Prospectus or any Issuer Free Writing Prospectus shall have been issued; no proceedings for the issuance of such an order shall have been initiated or threatened by the Commission; any request of the Commission or the Underwriters for additional information (to be included in the Registration Statement, the Time of Sale Disclosure Package, any Prospectus, the Final Prospectus, any Issuer Free Writing Prospectus or otherwise) shall have been complied with to the satisfaction of the Underwriters.

(b) The Shares shall be approved for listing on NYSE American, subject to official notice of issuance and evidence of satisfactory distribution.

(c) FINRA shall have raised no objection to the fairness and reasonableness of the underwriting terms and arrangements.

(d) The Underwriters shall not have reasonably determined, and advised the Company, that the Registration Statement, the Time of Sale Disclosure Package, any Prospectus, the Final Prospectus, or any amendment thereof or supplement thereto, or any Issuer Free Writing Prospectus, contains an untrue statement of fact which, in the reasonable opinion of the Underwriters, is material, or omits to state a fact which, in the reasonable opinion of the Underwriters, is material and is required to be stated therein or necessary to make the statements therein not misleading.

(e) On or after the date hereof (i) no downgrading shall have occurred in the rating accorded any of the Company's securities by any "nationally recognized statistical organization," as that term is defined by the Commission for purposes of Rule 436(g)(2) under the Securities Act, and (ii) no such organization shall have publicly announced that it has under surveillance or review, with possible negative implications, its rating of any of the Company's securities.

(f) On the Closing Date and on each Option Closing Date, there shall have been furnished to the Underwriters the opinion and negative assurance letters of Somertons, PLLC counsel to the Company, each dated the Closing Date or the Option Closing Date, as applicable, and addressed to the Underwriters, in form and substance reasonably satisfactory to the Underwriters.

(g) On the Closing Date and on each Option Closing Date, there shall have been furnished to the Underwriters the negative assurance letter of Pryor Cashman LLP, counsel to the Underwriters, dated the Closing Date or the Option Closing Date, as applicable, and addressed to the Underwriters, in form and substance reasonably satisfactory to Underwriter.

(h) The Underwriters shall have received a letter of Wolf & Company, P.C. on the date hereof and on the Closing Date and on each Option Closing Date, addressed to the Underwriters, confirming that they are independent registered public accountants within the meaning of the Securities Act and are in compliance with the applicable requirements relating to the qualifications of accountants under Rule 2-01 of Regulation S-X of the Commission, and confirming, as of the date of each such letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in

the Registration Statement, the Time of Sale Disclosure Package and the Final Prospectus, as of a date not prior to the date hereof or more than five days prior to the date of such letter), the conclusions and findings of said firm with respect to the financial information and other matters required by the Underwriters.

(i) On the Closing Date and on each Option Closing Date, there shall have been furnished to the Underwriters a certificate, dated the Closing Date and on each Option Closing Date and addressed to the Underwriters, signed by the chief executive officer and the chief financial officer of the Company, in his capacity as an officer of the Company, to the effect that:

(i) The representations and warranties of the Company in this Agreement that are qualified by materiality or by reference to any Material Adverse Effect are true and correct in all respects, and all other representations and warranties of the Company in this Agreement are true and correct, in all material respects, as if made at and as of the Closing Date and on the Option Closing Date, and the Company has complied in all material respects with all the agreements and satisfied all the conditions on its part required to be performed or satisfied at or prior to the Closing Date or on the Option Closing Date, as applicable;

(ii) No stop order or other order (A) suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof, (B) suspending the qualification of the Shares for offering or sale, or (C) suspending or preventing the use of the Time of Sale Disclosure Package, any Prospectus, the Final Prospectus or any Issuer Free Writing Prospectus, has been issued, and no proceeding for that purpose has been instituted or, to their knowledge, is contemplated by the Commission or any state or regulatory body; and

(iii) There has been no occurrence of any event resulting or reasonably likely to result in a Material Adverse Effect during the period from and after the date of this Agreement and prior to the Closing Date or the Option Closing Date, as applicable.

(j) [Reserved].

(k) On or before the date hereof, the Underwriters shall have received duly executed lock-up agreement (each a “Lock-Up Agreement”) in the form set forth on **Exhibit A** hereto, by and between the Underwriters and each of the parties specified in Schedule IV.

(l) The Company shall have furnished to the Underwriters and its counsel such additional documents, certificates and evidence as the Underwriters or its counsel may have reasonably requested.

If any condition specified in this Section 6 shall not have been fulfilled when and as required to be fulfilled, this Agreement may be terminated by the Underwriters by notice to the Company at any time at or prior to the Closing Date or on the Option Closing Date, as applicable, and such termination shall be without liability of any party to any other party, except

that Section 5(b)(viii) (solely in the case that this Agreement is terminated by the Underwriters following the Closing Date but prior to the Option Closing Date), Section 9 and Section 10 shall survive any such termination and remain in full force and effect.

7. Indemnification and Contribution.

(a) The Company agrees to indemnify, defend and hold harmless the Underwriters, their affiliates, directors and officers and employees, and each person, if any, who controls the Underwriters within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities to which such party may become subject, under the Securities Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon (i) an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to Rule 430A of the Rules and Regulations, or arise out of or are based upon the omission from the Registration Statement, or alleged omission to state therein, a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances in which they were made, not misleading (ii) an untrue statement or alleged untrue statement of a material fact contained in the Time of Sale Disclosure Package, any Prospectus, the Final Prospectus, or any amendment or supplement thereto, any Issuer Free Writing Prospectus, or the Marketing Materials or in any other materials used in connection with the offering of the Shares, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, (iii) in whole or in part, any material inaccuracy in the representations and warranties of the Company contained herein, or (iv) in whole or in part, any material failure of the Company to perform its obligations hereunder or under law, and will reimburse such party for any legal or other expenses reasonably incurred by such party in connection with evaluating, investigating or defending against such loss, claim, damage, liability or action; *provided, however*, that such indemnity shall not inure to the benefit of an Underwriter (or any person controlling such Underwriter) in any such case to the extent that any such loss, claim, damage, liability or action arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, the Time of Sale Disclosure Package, any Prospectus, the Final Prospectus, or any amendment or supplement thereto or any Issuer Free Writing Prospectus, in reliance upon and in conformity with written information furnished to the Company by the related Underwriter specifically for use in the preparation thereof, which written information is described in Section 7(g).

(b) [Reserved].

(c) The Underwriters will indemnify, defend and hold harmless the Company, its directors and each officer of the Company who signs the Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any losses, claims, damages or liabilities to

which such party may become subject, under the Securities Act or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of the Underwriters), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, the Time of Sale Disclosure Package, any Prospectus, the Final Prospectus, or any amendment or supplement thereto or any Issuer Free Writing Prospectus, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, the Time of Sale Disclosure Package, any Prospectus, the Final Prospectus, or any amendment or supplement thereto or any Issuer Free Writing Prospectus in reliance upon and in conformity with written information furnished to the Company by the Underwriters specifically for use in the preparation thereof, which written information is described in Section 7(g), and will reimburse such party for any legal or other expenses reasonably incurred by such party in connection with evaluating, investigating, and defending against any such loss, claim, damage, liability or action. The obligation of the Underwriters to indemnify the Company (including any controlling person, director or officer thereof) shall be limited to the amount of the underwriting discount applicable to the Shares to be purchased by the Underwriters hereunder actually received by the Underwriters.

(d) Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the failure to notify the indemnifying party shall not relieve the indemnifying party from any liability that it may have to any indemnified party except to the extent such indemnifying party has been materially prejudiced by such failure. In case any such action shall be brought against any indemnified party, and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of the indemnifying party's election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof; *provided, however*, that if (i) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (ii) a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party will not have the right to direct the defense of such action on behalf of the indemnified party), or (iii) the indemnifying party has not in fact employed counsel reasonably satisfactory to the indemnified party to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, the indemnified party shall have the right to employ a single counsel to represent it in any claim in respect of which indemnity may be sought under

subsection (a) or (b) of this Section 7, in which event the reasonable fees and expenses of such separate counsel shall be borne by the indemnifying party or parties and reimbursed to the indemnified party as incurred.

The indemnifying party under this Section 7 shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party against any loss, claim, damage, liability or expense by reason of such settlement or judgment. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement, compromise or consent to the entry of judgment in any pending or threatened action, suit or proceeding in respect of which any indemnified party is a party or could be named and indemnity was or would be sought hereunder by such indemnified party, unless such settlement, compromise or consent (a) includes an unconditional release of such indemnified party from all liability for claims that are the subject matter of such action, suit or proceeding and (b) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.

(e) If the indemnification provided for in this Section 7 is unavailable or insufficient to hold harmless an indemnified party under subsection (a) or (b) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a) or (b) above, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering and sale of the Shares or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bears to the total underwriting discount received by the Underwriters, in each case as set forth in the table on the cover page of the Final Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters and the parties' relevant intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this subsection (e) were to be determined by pro rata allocation or by any other method of allocation that does not take account of the equitable considerations referred to in the first sentence of this subsection (e). The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this subsection (e) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending against any action or claim that is the subject of this subsection (e). Notwithstanding the provisions of this subsection (e), no Underwriter shall be required to contribute any amount in excess of the amount of the

underwriting discount applicable to the Shares to be purchased by such Underwriter hereunder actually received by such Underwriter. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' respective obligations to contribute as provided in this Section 7 are several in proportion to their respective underwriting commitments and not joint.

(f) The obligations of the Company under this Section 7 shall be in addition to any liability that the Company may otherwise have and the benefits of such obligations shall extend, upon the same terms and conditions, to each person, if any, who controls an Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act; and the obligations of the Underwriters under this Section 7 shall be in addition to any liability that the Underwriters may otherwise have and the benefits of such obligations shall extend, upon the same terms and conditions, to the Company, its officers, directors and each person who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act.

(g) For purposes of this Agreement, the Underwriters severally confirm, and the Company acknowledges, that there is no information concerning the Underwriters furnished in writing to the Company by the Underwriters specifically for preparation of or inclusion in the Registration Statement, the Time of Sale Disclosure Package, any Prospectus, the Final Prospectus or any Issuer Free Writing Prospectus, other than the statement set forth in the last paragraph on the cover page of the Prospectus, the marketing and legal names of the Underwriters, and the statements set forth in the "Underwriting" section of the Registration Statement, the Time of Sale Disclosure Package, and the Final Prospectus only insofar as such statements relate to the amount of selling concession and re-allowance, if any, or to over-allotment, stabilization and related activities that may be undertaken by the Underwriters.

8. Representations and Agreements to Survive Delivery. All representations, warranties, and agreements of the Company contained herein or in certificates delivered pursuant hereto, including, but not limited to, the agreements of the several Underwriters and the Company contained in Section 5(b)(viii) (solely in the case that this Agreement is terminated by the Underwriters following the Closing Date but prior to the Option Closing Date) and Section 7 hereof, shall remain operative and in full force and effect regardless of any investigation made by or on behalf of the Underwriters or any controlling person thereof, or the Company, any of its officers, directors, or controlling persons, and shall survive delivery of, and payment for, the Shares to and by the Underwriters hereunder.

9. Termination of this Agreement.

(a) The Representative shall have the right to terminate this Agreement by giving notice to the Company as hereinafter specified at any time at or prior to the Closing Date or any Option Closing Date (as to the Option Shares to be purchased on such Option Closing Date only), if in the discretion of the Representative, (i) there has occurred any material adverse change in the securities markets or any event, act or occurrence that has materially disrupted, or

in the opinion of the Representative, will in the future materially disrupt, the securities markets or there shall be such a material adverse change in general financial, political or economic conditions or the effect of international conditions on the financial markets in the United States is such as to make it, in the reasonable judgment of the Representative, inadvisable or impracticable to market the Shares or enforce contracts for the sale of the Shares (ii) trading in the Company's Common Stock shall have been suspended by the Commission or Nasdaq or trading in securities generally on the Nasdaq Stock Market, the NYSE or NYSE American, shall have been suspended, (iii) minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required, on the Nasdaq Stock Market, the NYSE or NYSE American, by such exchange or by order of the Commission or any other governmental authority having jurisdiction, (iv) a banking moratorium shall have been declared by federal or state authorities, (v) there shall have occurred any attack on, outbreak or escalation of hostilities or act of terrorism involving the United States, any declaration by the United States of a national emergency or war, any substantial change or development involving a prospective substantial change in the United States political, financial or economic conditions or any other calamity or crisis, or (vi) the Company suffers any material loss by strike, fire, flood, earthquake, accident or other calamity, whether or not covered by insurance, or (vii) in the reasonable judgment of the Representative, there has been, since the time of execution of this Agreement or since the respective dates as of which information is given in the Registration Statement, the Time of Sale Disclosure Package or the Final Prospectus, any material adverse change in the assets, properties, condition, financial or otherwise, or in the results of operations, business affairs or business prospects of the Company and its Subsidiaries considered as a whole, whether or not arising in the ordinary course of business. Any such termination shall be without liability of any party to any other party except that the provisions of Section 5(b)(viii) (solely in the case that this Agreement is terminated by the Underwriters following the Closing Date but prior to the Option Closing Date) and Section 7 hereof shall at all times be effective and shall survive such termination.

(b) If the Representative elects to terminate this Agreement as provided in this Section, the Company shall be notified promptly by the Representative by telephone, confirmed by letter.

10. Notices. Except as otherwise provided herein, all communications hereunder shall be in writing and, if to the Underwriter, shall be mailed, delivered or telecopied to the parties as follows:

if to the Representative:

Roth Capital Partners, LLC
800 San Clemente Drive, Suite 400
Newport Beach, CA 92660
E-mail: rstephenson@roth.com
Attention: Managing Director

with copies to:

Pryor Cashman LLP
7 Times Square
New York, New York 10036
E-mail: ali.panjwani@pryorcashman.com
Attention: M. Ali Panjwani, Esq.

if to the Company:

Tecogen Inc.
76 Treble Cove Road Building 1
North Billerica, MA 01862
E-mail: Abinand.rangesh@tecogen.com
Attention: Abinand Rangesh

with copies to:

Somertons, PLLC
1025 Connecticut Avenue, N.W.
Suite 1000
Washington, D.C. 20036
Attention: Neil R.E. Carr
E-mail: neil.carr@somertons.com

or in each case to such other address as the person to be notified may have requested in writing. Any party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose.

11. *Persons Entitled to Benefit of Agreement.* This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns and the controlling persons, officers and directors referred to in Section 7. Nothing in this Agreement is intended or shall be construed to give to any other person, firm or corporation any legal or equitable remedy or claim under or in respect of this Agreement or any provision herein contained. The term "successors and assigns" as herein used shall not include any purchaser, as such purchaser, of any of the Shares from the Underwriters.

12. *Absence of Fiduciary Relationship.* The Company acknowledges and agrees that: (a) the Underwriters have been retained solely to act as underwriter in connection with the sale of the Shares and that no fiduciary, advisory or agency relationship between the Company and the Underwriters has been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Underwriters have advised or is advising the Company on other matters; (b) the price and other terms of the Shares set forth in this Agreement were established by the Company following discussions and arms-length negotiations with the

Underwriters and the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement; (c) it has been advised that the Underwriters and its affiliates are engaged in a broad range of transactions that may involve interests that differ from those of the Company and that no Underwriter has any obligation to disclose such interest and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; and (d) it has been advised that the Underwriters are acting, in respect of the transactions contemplated by this Agreement, solely for the benefit of the Underwriters, and not on behalf of the Company.

13. Amendments and Waivers. No supplement, modification or waiver of this Agreement shall be binding unless executed in writing by the party to be bound thereby. The failure of a party to exercise any right or remedy shall not be deemed or constitute a waiver of such right or remedy in the future. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (regardless of whether similar), nor shall any such waiver be deemed or constitute a continuing waiver unless otherwise expressly provided.

14. Partial Unenforceability. The invalidity or unenforceability of any section, paragraph, clause or provision of this Agreement shall not affect the validity or enforceability of any other section, paragraph, clause or provision.

15. Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

16. Submission to Jurisdiction. The Company irrevocably (a) submits to the jurisdiction of the Supreme Court of the State of New York, Borough of Manhattan or the United States District Court for the Southern District of New York for the purpose of any suit, action, or other proceeding arising out of this Agreement, or any of the agreements or transactions contemplated by this Agreement, the Registration Statement, the Time of Sale Disclosure Package, any Prospectus and the Final Prospectus (each a "Proceeding"), (b) agrees that all claims in respect of any Proceeding may be heard and determined in any such court, (c) waives, to the fullest extent permitted by law, any immunity from jurisdiction of any such court or from any legal process therein, (d) agrees not to commence any Proceeding other than in such courts, and (e) waives, to the fullest extent permitted by law, any claim that such Proceeding is brought in an inconvenient forum. THE COMPANY (ON BEHALF OF ITSELF AND, TO THE FULLEST EXTENT PERMITTED BY LAW, ON BEHALF OF ITS RESPECTIVE EQUITY HOLDERS AND CREDITORS) HEREBY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY CLAIM BASED UPON, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT AND THE TRANSACTIONS CONTEMPLATED BY THIS AGREEMENT, THE REGISTRATION STATEMENT, THE TIME OF SALE DISCLOSURE PACKAGE, ANY PROSPECTUS AND THE FINAL PROSPECTUS.

17. Counterparts. This Agreement may be executed and delivered (including by facsimile transmission or electronic mail) in one or more counterparts and, if executed in more

than one counterpart, the executed counterparts shall each be deemed to be an original and all such counterparts shall together constitute one and the same instrument.

18. Entire Agreements. This Agreement, together with the exhibits and schedules hereto, contain the entire understanding of the parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules.

19. Gender. Words used herein regardless of the number and gender specifically used, shall be deemed and construed to include any other number, singular or plural, and any other gender, masculine, feminine or neuter, as the context requires.

[Signature Page Follows]

Please sign and return to the Company the enclosed duplicates of this letter whereupon this letter will become a binding agreement between the Company and the Underwriters in accordance with its terms.

Very truly yours,

TECOGEN INC.

By: /s/ Abinand Ranges

Name: Abinand Ranges

Title: CEO

Confirmed as of the date first above-mentioned
by the Representative.

ROTH CAPITAL PARTNERS, LLC

By: /s/ Aaron Gurewitz

Name: Aaron M. Gurewitz

Title: President, Head of Investment Banking

[Signature page to Underwriting Agreement]

SCHEDULE I

Name	Number of Firm Shares to be Purchased	Number of Option Shares to be Purchased
Roth Capital Partners, LLC	3,500,000	Up to 485,000
Total	3,500,000	Up to 485,000

SCHEDULE II

Final Term Sheet

Issuer:	Tecogen Inc. (the “Company”)
Symbol:	TGEN
Securities:	3,500,000 shares of common stock, par value \$.001 per share (the “Common Stock”), of the Company
Over-allotment option:	Up to an additional 485,000 shares of Common Stock of the Company at a price net of the underwriting discount of \$4.65 per share
Public offering price:	\$5.00 per share of Common Stock
Underwriting discount:	\$4.65 per Firm Share
Expected net proceeds to the Company:	Approximately \$16,275,000 (\$18,530,250 if the overallotment option is exercised in full) (after deducting the underwriting discount).
Trade date:	7/18/2025
Settlement date:	7/21/2025
Underwriters:	Roth Capital Partners, LLC

SCHEDULE III

Free Writing Prospectus

None.

SCHEDULE IV

List of officers, directors and shareholders executing lock-up agreements

Abinand Ranges
Robert A. Panora
John K. Whiting, IV
Stephen Lafaille
Roger P. Deschenes
John Hatsopoulos
Earl R. Lewis, III
Angelina Galiteva
Susan Hirsch
John Albertine
Ahmed Ghoniem

EXHIBIT A

Form of Lock-Up Agreement

_____, 2025

Roth Capital Partners, LLC
888 San Clemente Drive
Newport Beach, CA 92660

Ladies and Gentlemen:

The undersigned understands that you, as the representative (the “Representative”) of the several underwriters named therein, propose to enter into an Underwriting Agreement (the “Underwriting Agreement”) with Tecogen Inc., a Delaware corporation (the “Company”), relating to a proposed offering of securities of the Company (the “Offering”) including shares of the Common Stock, \$.001 (the “Common Stock”). Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Underwriting Agreement.

In consideration of the foregoing, and in order to induce you to participate in the Offering, and for other good and valuable consideration receipt of which is hereby acknowledged, the undersigned hereby agrees that, without the prior written consent of the Representative (which consent may be granted or withheld in its sole discretion), the undersigned will not, during the period (the “Lock-Up Period”) beginning on the date hereof and ending on the date 90 days after the date of the final prospectus relating to the Offering (the “Final Prospectus”), (1) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, or file (or participate in the filing of) a registration statement with the Securities and Exchange Commission (other than one the Company is permitted by the Underwriting Agreement to file) in respect of, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for shares of Common Stock (including without limitation, shares of Common Stock which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations of the Securities and Exchange Commission and securities which may be issued upon exercise of a stock option or warrant), (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the shares of, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of shares of Common Stock or such other securities, in cash or otherwise, (3) make any demand for or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for shares of Common Stock, or (4) publicly announce an intention to effect any transaction specific in clause (1), (2) or (3) above.

Notwithstanding the foregoing, the restrictions set forth in clause (1) and (2) above shall not apply to (a) the sale of the undersigned’s Common Stock pursuant to the Underwriting Agreement, (b) transfers (i) as a bona fide gift or gifts, including but not limited to by will or

other testamentary document, or intestacy to the legal representative, heir, or beneficiary of the undersigned, provided that the donee or donees, legal representative, heir(s), beneficiary(ies) thereof agree to be bound in writing by the restrictions set forth herein, or (ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, (c) the acquisition or exercise of any stock option issued pursuant to the Company's existing stock option plan, including any exercise effected by the delivery of shares of Common Stock of the Company held by the undersigned, (c) any transactions effectuated pursuant to a trading plan that satisfies all of the requirements of Rule 10b5-1 under the Exchange Act ("10b5-1 Plan") existing on the date hereof and disclosed to the Representative, (d) the establishment of a 10b5-1 Plan, so long as no sales may occur thereunder during the Lock-Up Period. For purposes of this Lock-Up Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

The foregoing restrictions are expressly agreed to preclude the undersigned from engaging in any hedging or other transaction which is designed to or reasonably expected to lead to or result in a sale or disposition of shares of Common Stock even if such securities would be disposed of by someone other than the undersigned. Such prohibited hedging or other transactions would include without limitation any short sale or any purchase, sale or grant of any right (including without limitation any put option or put equivalent position or call option or call equivalent position) with respect to any of the shares of Common Stock or with respect to any security that includes, relates to, or derives any significant part of its value from such shares.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Agreement. All authority herein conferred or agreed to be conferred and any obligations of the undersigned shall be binding upon the successors, assigns, heirs or personal representatives of the undersigned.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar or depositary against the transfer of the undersigned's shares of Common Stock except in compliance with the foregoing restrictions.

If the undersigned is an officer or director of the Company, (i) the Representative agrees that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of Common Shares, the Representative will notify the Company of the impending release or waiver, and (ii) the Company will agree in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by the Representative hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (a) the release or waiver is effected solely to permit a transfer not for consideration and (b) the transferee has agreed in writing to be bound by the same terms described in this letter to the extent and for the duration that such terms remain in effect at the time of the transfer.

The undersigned understands that, if the Registration Statement does not become SEC effective, or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the securities to be sold thereunder, the undersigned shall be released from all obligations under this Lock-Up Agreement.

This Lock-Up Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles or policies thereof. The undersigned irrevocably (i) submits to the jurisdiction of the Supreme Court of the State of New York, Borough of Manhattan and the United States District Court for the Southern District of New York, for the purpose of any suit, action, or other proceeding arising out of this Lock-Up Agreement (each a "Proceeding"), (ii) agrees that all claims in respect of any Proceeding may be heard and determined in any such court, (iii) waives, to the fullest extent permitted by law, any immunity from jurisdiction of any such court or from any legal process therein, (iv) agrees not to commence any Proceeding other than in such courts, and (v) waives, to the fullest extent permitted by law, any claim that such Proceeding is brought in an inconvenient forum.

Very truly yours,

Name:

Disclosure Schedule

Schedule 3(a)(viii)

None.

Schedule 3(a)(xxv)

None.

Schedule 3(a)(xxvi)

None.

TECOGEN INC. ANNOUNCES PRICING OF PUBLIC OFFERING

NORTH BILLERICA, Massachusetts, July 18, 2025 – Tecogen Inc. (“Tecogen” or “Company”), (NYSE American: TGEN), a leading manufacturer of clean energy products, today announced the pricing of an underwritten public offering of 3,500,000 shares of its common stock at a price to the public of \$5 per share. The gross proceeds from the offering to Tecogen are expected to be approximately \$17,500,000, before deducting underwriting discounts and commissions and other offering expenses. The offering is expected to close on or about July 21, 2025, subject to customary closing conditions. In addition, Tecogen has granted the underwriters a 45-day option to purchase up to 485,000 additional shares of common stock at the public offering price, less the underwriting discounts and commissions.

Roth Capital Partners is acting as the sole manager for the offering.

Tecogen intends to use the net proceeds from the offering for continued product development, increased sales and marketing activities, sales, marketing, additional human resources, capital expenditures, and other costs and expenses it may incur in connection with its anticipated expansion into the data center market, and for general working capital and corporate purposes.

The securities described above are being offered pursuant to a Registration Statement on Form S-1 (File No. 333-288668), that was filed with the Securities and Exchange Commission (“SEC”) on July 14, 2025, as amended on July 16, 2025, and declared effective by the SEC on July 17, 2025, and a Registration Statement on Form S-1 (File No. 333-288740) that became effective on July 17, 2025. The offering is being made by means of a written preliminary prospectus that forms a part of the registration statement. A final prospectus will be filed with the SEC. When available, copies of the preliminary and final prospectus may also be obtained by contacting Roth Capital Partners, LLC, at 888 San Clemente Drive, Newport Beach, CA 92660, telephone (800) 678-9147 or by email at rothecm@roth.com; or by accessing the SEC’s website at www.sec.gov.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy the securities being offered, nor shall there be any sale of the securities being offered in any state or other jurisdiction in which such offer, solicitation, or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or other jurisdiction.

About Tecogen

Tecogen Inc. designs, manufactures, sells, installs, and maintains high efficiency, ultra-clean, cogeneration products including engine-driven combined heat and power, air conditioning systems, and high-efficiency water heaters for residential, commercial, recreational and industrial use. The company provides cost effective, environmentally friendly and reliable products for energy production that nearly eliminate criteria pollutants and significantly reduce a customer’s carbon footprint. In business for over 35 years, Tecogen has shipped more than 3,200 units, supported by an established network of engineering, sales, and service personnel in key markets in North America. For more information, please visit www.tecogen.com.

Forward Looking Statements

This press release contains “*forward-looking statements*” which may describe strategies, goals, outlooks or other non-historical matters, or projected revenues, income, returns or other financial measures, that may include words such as “*believe*,” “*expect*,” “*anticipate*,” “*intend*,” “*plan*,” “*estimate*,” “*project*,”

"target," "potential," "will," "should," "could," "likely," or "may" and similar expressions intended to identify forward-looking statements. Examples of forward-looking statements include, among other things, statements regarding the expected gross proceeds from the offering, the anticipated uses of the proceeds from the offering, and completion and timing of the public offering. Tecogen intends such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. These statements are only predictions and involve known and unknown risks, uncertainties, and other factors and actual results may differ from those indicated by those forward-looking statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

Important factors that could cause the actual results to differ materially from those indicated in the forward looking statements include the risks and uncertainties described in our Annual Report on Form 10-K for the year ended December 31, 2024, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2025, and in our Current reports on Form 8-K, under "*Risk Factors*," and elsewhere therein and in the registration statement and preliminary prospectus relating to the offering. Among the factors that could cause actual results to differ materially from forward looking statements include the following: the expected gross proceeds from the offering, the anticipated use of proceeds of the offering, completion and timing of the public offering. Forward-looking statements speak only as of the date on which they are made. Tecogen undertakes no obligation to update or revise any forward-looking statements except as required under applicable law.

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