

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

Form S-3  
REGISTRATION STATEMENT  
*Under*  
THE SECURITIES ACT OF 1933

**HighPeak Energy, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**1381**  
(Primary Standard Industrial  
Classification Code Number)

**84-3533602**  
(I.R.S. Employer  
Identification No.)

**421 W. 3rd Street, Suite 1000**  
**Fort Worth, Texas 76102**  
**(817) 850-9200**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Michael Hollis**  
**Chief Executive Officer**  
**421 W. 3rd Street, Suite 1000**  
**Fort Worth, Texas 76102**  
**(817) 850-9200**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:  
**Sarah K. Morgan**  
**Jackson A. O'Maley**  
**Vinson & Elkins L.L.P.**  
**845 Texas Avenue, Suite 4700**  
**Houston, Texas 77002**  
**(713) 758-2222**

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer   
Non-accelerated filer

Accelerated filer   
Smaller reporting company   
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

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**This registration statement shall hereafter become effective in accordance with the provisions of section 8(a) of the Securities Act of 1933.**

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## EXPLANATORY NOTE

This registration statements contains two prospectuses:

- a base prospectus which covers the offering, issuance and sale of by us of up to \$300,000,000 in the aggregate of our shares of common stock from time to time in one or more offerings; and
  - a resale prospectus that covers:
    - i. the resale by the selling securityholders of an aggregate of 79,706,576 shares of common stock of the Company issued pursuant to the Business Combination Agreement, dated as of May 4, 2020 (the “Business Combination Agreement”) as amended from time to time, by and among Pure, the Company, Pure Acquisition Merger Sub, Inc., HighPeak I, HighPeak II, HPK Energy, LLC, and solely for the limited purposes specified therein, HighPeak Energy Management, LLC in connection with the closing of the business combination on August 21, 2020 (the “Closing”) between the Company and Pure Acquisition Corp. (“Pure”), and through related transactions and any subsequent transfers by selling securityholders; and
    - ii. the resale by the selling securityholders of an aggregate of 29,057,783 shares of common stock of the Company, including 7,776,549 shares of common stock issued pursuant to that certain Amended & Restated Forward Purchase Agreement, dated as of July 24, 2020 (the “Forward Purchase Agreement”).
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The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

**Subject to Completion, dated November 4, 2025**

**PROSPECTUS**



**HighPeak Energy, Inc.**

**\$300,000,000**

Common Stock

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From time to time we may offer and sell shares of our common stock, par value \$0.0001 per share ("common stock"). The aggregate initial offering price of all shares of common stock sold by us under this prospectus will not exceed \$300,000,000.

We may offer and sell these securities from time to time in amounts, at prices and on terms to be determined by market conditions and other factors at the time of our offerings. This prospectus provides you with a general description of these securities and the general manner in which we will offer the securities. Each time securities are offered, we will provide a prospectus supplement that will contain specific information about the terms of that offering. Any prospectus supplement may also add, update or change information contained in this prospectus.

Our common stock is traded on the Nasdaq Global Market (the "Nasdaq") under the symbol "HPK." On October 30, 2025 closing price of our common stock was \$6.36.

**We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012, and, as such, have elected to avail ourselves of certain reduced public company reporting requirements for this prospectus and future filings.**

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**You should read carefully this prospectus, the documents incorporated by reference in this prospectus and any prospectus supplement before you invest. See "Risk Factors" beginning on page 5 of this prospectus for information on certain risks related to the purchase of our securities.**

We may sell the securities directly or to or through underwriters or dealers, and also to other purchasers or through agents. The names of any underwriters or agents that are included in a sale of securities to you, and any applicable commissions or discounts, will be stated in any accompanying prospectus supplement. In addition, the underwriters, if any, may over-allot a portion of the securities.

**Neither the U.S. Securities and Exchange Commission (the "SEC") nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

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**The date of this prospectus is                      , 2025.**

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## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the SEC using a “shelf” registration process. Under this shelf registration process, we may offer and sell from time to time the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities that are registered hereunder that may be offered by us. Each time we offer the securities, we will provide you with a prospectus supplement that will describe, among other things, the specific amounts and prices of the securities being offered and the terms of the offering.

Any prospectus supplement may add, update, or change information contained in this prospectus. Any statement that we make in this prospectus will be modified or superseded by any inconsistent statement made by us in any prospectus supplement. The information in this prospectus is accurate as of its date. Additional information, including our financial statements and the notes thereto, is incorporated in this prospectus by reference to our reports filed with the SEC. Therefore, before you invest in our securities, you should carefully read this prospectus and any prospectus supplement relating to the securities offered to you together with the additional information incorporated by reference in this prospectus and any prospectus supplement (including the documents described under the heading “Where You Can Find More Information” and “Documents Incorporated by Reference” in both this prospectus and any prospectus supplement).

**You should rely only on the information contained in or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. Neither we nor anyone acting on our behalf is making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information incorporated by reference or provided in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents.**

Unless the context otherwise requires, throughout this prospectus and any applicable prospectus supplement, the words “we,” “us,” the “registrant,” “the Company,” or “HighPeak Energy” refer to HighPeak Energy, Inc.; and the term “securities” refers to the shares of our common stock registered hereunder.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement with the SEC under the Securities Act of 1933, as amended (the "Securities Act"), that registers the offer and sale of the securities covered by this prospectus. The registration statement, including the exhibits attached thereto and incorporated by reference therein, contains additional relevant information about us. In addition, we file annual, quarterly and other reports and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Our SEC filings are available on the SEC's website at [www.sec.gov](http://www.sec.gov).

We make available free of charge on or through our website, [www.highpeakenergy.com](http://www.highpeakenergy.com), our filings with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. We make our website content available for information purposes only. Information contained on our website is not incorporated by reference into this prospectus and does not constitute a part of this prospectus.

## DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” the information we have filed with the SEC. This means that we can disclose important information to you without actually including the specific information in this prospectus by referring you to other documents filed separately with the SEC. The information incorporated by reference is an important part of this prospectus. Information that we later provide to the SEC, and which is deemed to be “filed” with the SEC, will automatically update information previously filed with the SEC, and may update or replace information in this prospectus and information previously filed with the SEC.

We incorporate by reference the documents listed below and any filings we make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act (excluding information deemed to be furnished and not filed with the SEC), after the date on which the registration statement was initially filed with the SEC (including all such documents that we may file with the SEC after the date the registration statement was initially filed and prior to the effectiveness of the registration statement) until all offerings under the registration statement of which this prospectus forms a part are completed or terminated:

- our [Annual Report on Form 10-K](#) for the year ended December 31, 2024 filed on March 10, 2025, including those portions of our definitive proxy statement on [Schedule 14A](#), filed on April 16, 2025, incorporated by reference therein;
- our Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2025](#) and [June 30, 2025](#), filed on May 12, 2025 and August 11, 2025, respectively;
- our Current Reports on Form 8-K filed on [June 3, 2025](#), [June 30, 2025](#), [August 4, 2025](#), [September 15, 2025](#) and [September 16, 2025](#); and
- the description of our common stock contained in our [Registration Statement on Form 8-A12B](#) filed on August 19, 2020, as amended by the Amendment No. 1 on [Form 8-A12B/A](#) filed on August 20, 2020, including any amendments or reports that we may file in the future for the purpose of updating such description.

These reports contain important information about us, our financial condition and our results of operations.

You may obtain copies of any of the documents incorporated by reference in this prospectus from the SEC through the SEC’s website at the address provided above. You also may request a copy of any document incorporated by reference in this prospectus (including exhibits to those documents specifically incorporated by reference in this prospectus), at no cost, by contacting us at:

**HighPeak Energy, Inc.**  
**Attention: Investor Relations**  
**421 W. 3rd Street, Suite 1000**  
**Fort Worth, Texas 76012**  
**(817) 850-9200**

## CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The information in this prospectus includes “forward-looking statements” within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act. All statements other than statements of historical facts included or incorporated by reference in this prospectus, including, without limitation, statements regarding HighPeak Energy’s future financial position, business strategy, budgets, projected revenues, projected costs, and plans and objectives of management for future operations are forward-looking statements. Such forward-looking statements are based on the beliefs of management, as well as assumptions made by, and information currently available to, the Company’s management. In addition, forward-looking statements generally can be identified by the use of forward-looking terminology such as “believes,” “plans,” “expects,” “anticipates,” “forecasts,” “intends,” “continue,” “may,” “will,” “could,” “should,” “future,” “potential,” “estimate” or the negative of such terms and similar expressions as they relate to the Company are intended to identify forward-looking statements which are generally not historical in nature. The forward-looking statements are based on management’s current expectations, assumptions, estimates and projections about the Company and the industry in which the Company operates. Although the Company believes that the expectations and assumptions reflected in the forward-looking statements are reasonable as and when made, they involve risks and uncertainties that are difficult to predict and, in many cases, beyond the Company’s control. In addition, the Company may be subject to currently unforeseen risks that may have a materially adverse effect on it. Accordingly, no assurances can be given that the actual events and results will not be materially different from the anticipated results described in the forward-looking statements. Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date hereof. The Company undertakes no duty to publicly update these statements except as required by law. Important factors that could cause actual results to differ materially from the Company’s expectations include, but are not limited to, the Company’s assumptions regarding the following factors.

In addition, HighPeak Energy cautions you that forward-looking statements regarding HighPeak Energy, which are contained in this prospectus, are also subject to the following factors:

- the supply and demand for and market prices of crude oil, NGL, natural gas and other products or services, and the associated impact of our hedging policies relating thereto;
- inflation rates, the impacts of associated monetary policy responses, including increased or decreased interest rates and resulting pressures on economic growth, U.S. trade policy and the imposition of and changes to tariffs;
- political instability or armed conflict in crude oil or natural gas producing regions, such as the ongoing wars between Russia and Ukraine and the Israel-Hamas conflict;
- volatility in the political, legal and regulatory environments;
- political and regulatory uncertainties;
- our liquidity, cash flow and access to capital;
- the availability of capital resources;
- our ability to refinance or pay, when due, the principal of, interest or other amounts due in respect of our indebtedness;
- production and reserve levels;
- drilling and completion risks;
- economic and competitive conditions;
- the impacts of revising our drilling plan during the year transitioning to an increased or decreased rig count from time to time;

- severe weather conditions;
- epidemics or pandemics, including the effects of public health concerns and the impact of continued actions taken by governmental authorities and other third parties in response to a pandemic and their impact on commodity prices, supply and demand considerations, and storage capacity;
- the availability of goods and services and supply chain issues;
- legislative, regulatory, or policy changes;
- regulatory and related policy actions intended by federal, state and/or local governments to reduce fossil fuel use and associated carbon emissions, to drive the substitution of renewable forms of energy for crude oil and natural gas, which may over time reduce demand for crude oil, NGL and natural gas, including as a result of the Inflation Reduction Act of 2022 (“IRA 2022”) or otherwise;
- our ability to predict and manage the effects of actions of OPEC or OPEC+ and agreements to set and maintain production levels;
- cyber-attacks;
- occurrence of property acquisitions or divestitures;
- the integration of acquisitions;
- capital markets and our ability to access such markets on attractive terms or at all, and related risks such as general credit, liquidity, market and interest-rate risks; and
- the results of our ongoing strategic alternatives process.

Should one or more of the risks or uncertainties described in this prospectus occur, or should underlying assumptions prove incorrect, actual results and plans could differ materially from those expressed in any forward-looking statements. Additional information concerning these and other factors that may impact the operations and projections discussed herein can be found in the section entitled “Risk Factors” herein and in HighPeak Energy’s periodic filings with the SEC. HighPeak Energy’s SEC Filings are available publicly on the SEC’s website at [www.sec.gov](http://www.sec.gov).

## ABOUT HIGHPEAK ENERGY, INC.

HighPeak Energy, Inc., a Delaware corporation, formed in October 2019, is an independent crude oil and natural gas exploration and production company that explores for, develops and produces crude oil, NGL and natural gas in the Permian Basin in West Texas, more specifically, the Midland Basin. The Company's assets are located primarily in Howard and Borden Counties, Texas, and to a lesser extent Scurry and Mitchell Counties, which lie within the northeastern part of the crude oil-rich Midland Basin. As of June 30, 2025, the assets consisted of two highly contiguous leasehold positions of approximately 154,858 gross (143,826 net) acres, approximately 68% of which were held by production, with an average working interest of 93%. Our acreage is composed of two core areas, Flat Top primarily in the northern portion of Howard County extending into southern Borden County, southwest Scurry County and northwest Mitchell County and Signal Peak in the southern portion of Howard County. We operate approximately 98% of the net acreage across the Company's assets and more than 90% of the net operated acreage provides for horizontal wells with lateral lengths of 10,000 feet or greater. For the six months ended June 30, 2025, approximately 86% and 14% of sales volumes from the assets were attributable to liquids (both crude oil and NGL) and natural gas, respectively. As of June 30, 2025, HighPeak Energy was developing its properties using one (1) drilling rig and one (1) frac crew and expects to average one to two (1-2) drilling rigs and approximately one (1) frac crew during the remainder of 2025 under our current development plan.

Our principal executive offices are located at 421 W 3rd Street, Suite 1000, Fort Worth, Texas 76102, and our telephone number is (817) 850-9200. Our website address is [www.highpeakenergy.com](http://www.highpeakenergy.com). The information on our website is not part of this prospectus.

### Implications of Being an Emerging Growth Company

We are an "emerging growth company" as defined in the JOBS Act enacted in April 2012. As a result, we may take advantage of reduced reporting requirements that are otherwise applicable to public companies, including delaying auditor attestation of internal control over financial reporting, providing only two years of audited financial statements and related Management's Discussion and Analysis of Financial Condition and Results of Operations, and reducing executive compensation disclosures.

We will remain an emerging growth company until the earlier to occur of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of our business combination, which was August 21, 2025, (b) in which we have total annual gross revenue of at least \$1.235 billion, or (c) in which we are deemed to be a "large accelerated filer" under the rules of the SEC, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior July 31st and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. Additionally, we are subject to an extended transition period for complying with new or revised accounting standards. As a result, the information that we provide to our stockholders may be different than what you might receive from other public reporting companies in which you hold equity interests.

## RISK FACTORS

An investment in our securities involves a significant degree of risk. Before you invest in our securities, you should carefully consider those risk factors included in our most recent Annual Report on Form 10-K, any subsequently filed Quarterly Reports on Form 10-Q and any subsequently filed Current Reports on Form 8-K, each of which is incorporated herein by reference, and those risk factors that may be included in any applicable prospectus supplement, together with all of the other information included in this prospectus, any prospectus supplement and the documents we incorporate by reference, in evaluating an investment in our securities. If any of these risks were actually to occur, our business, financial condition or results of operations could be materially adversely affected. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations and financial condition. Please read “Cautionary Note Regarding Forward-Looking Statements.”

#### USE OF PROCEEDS

Unless otherwise specified in an accompanying prospectus supplement, we will use the net proceeds we receive from the sale of the securities covered by this prospectus for general corporate purposes, which may include, among other things, paying or refinancing all or a portion of our indebtedness at the time, and funding acquisitions, capital expenditures and working capital.

The actual application of the net proceeds from the sale of any particular offering of securities using this prospectus will be described in the applicable prospectus supplement relating to such offering.

## DESCRIPTION OF SECURITIES

*The following description of our common stock is not complete and may not contain all the information you should consider before investing in our common stock. This description is a summary of certain provisions contained in, and is qualified in its entirety by reference to, our second amended and restated certificate of incorporation (the "A&R Charter"), and our amended and restated bylaws (the "Bylaws").*

### Authorized and Outstanding Common Stock

The A&R Charter authorizes the issuance of 600,000,000 shares of our common stock and 10,000,000 shares of preferred stock, par value \$0.0001 per share. The outstanding shares of our common stock are duly authorized, validly issued, fully paid and non-assessable. Common stockholders of record are entitled to one vote for each share held on all matters to be voted on by stockholders. As of the date of this prospectus there were 125,587,093 shares of our common stock issued and outstanding.

Please see our Registration Statement on Form 8-A12B (File No. 001-39464) filed August 19, 2020, as amended by Amendment No. 1 on Form 8-A12B/A filed on August 20, 2020, including any amendments or reports that we may file in the future for the purpose of updating such description, which is incorporated by reference herein, for a description of our common stock.

### Transfer Agent and Registrar

The Transfer Agent for HighPeak Energy's common stock is Continental Stock Transfer & Trust Company ("Continental"). HighPeak Energy has agreed to indemnify Continental in its roles as Transfer Agent, its agents and each of its stockholders, directors, officers and employees against all liabilities, including judgments, costs and reasonable counsel fees that may arise out of acts performed or omitted for its activities in that capacity, except for any liability due to any gross negligence, willful misconduct or bad faith of the indemnified person or entity.

### Certain Anti-Takeover Provisions of Delaware Law and HighPeak Energy's A&R Charter and Bylaws

HighPeak Energy is subject to the provisions of Section 203 of the Delaware General Corporation Law ("DGCL") regulating corporate takeovers. This statute prevents certain Delaware corporations, under certain circumstances, from engaging in a "business combination" with:

- a stockholder who owns 15% or more of HighPeak Energy's outstanding voting stock (otherwise known as an "interested stockholder");
- an affiliate of an interested stockholder; or
- an associate of an interested stockholder, for three years following the date that the stockholder became an interested stockholder.

A "business combination" includes a merger or sale of more than 10% of HighPeak Energy's assets. However, the above provisions of Section 203 do not apply if:

- the board of directors of HighPeak Energy (the "Board") approves the transaction that made the stockholder an "interested stockholder," prior to the date of the transaction;
- after the completion of the transaction that resulted in the stockholder becoming an interested stockholder, that stockholder owned at least 85% of HighPeak Energy's voting stock outstanding at the time the transaction commenced, other than statutorily excluded shares of voting common stock; or
- on or subsequent to the date of the transaction, the business combination is approved by the Board and authorized at a meeting of HighPeak Energy's stockholders, and not by written consent, by an affirmative vote of at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

HighPeak Energy's authorized but unissued voting common stock and preferred stock are available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved voting common stock and preferred stock could render more difficult or discourage an attempt to obtain control of HighPeak Energy by means of a proxy contest, tender offer, merger or otherwise.

### ***Written Consent by Stockholders***

HighPeak Energy's A&R Charter provides that prior to the first date in which HighPeak Pure Acquisition, LLC ("Sponsor"), HighPeak Energy Partners, LP, HighPeak Energy Partners II, LP and each of their respective affiliates and certain permitted transferees (collectively, the "HighPeak Group") no longer collectively beneficially owns more than 50% of the outstanding HighPeak Energy voting securities, HighPeak Energy stockholders may take action by written consent of the holders of not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Before such time, any action required or permitted to be taken by HighPeak Energy's stockholders that is approved in advance by the Board may be effected without a meeting, without prior notice and without a vote of stockholders, if a consent or consents in writing, setting forth the action so taken, is or are signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. If any such action by written consent is taken then HighPeak Energy will notify its stockholders of the same.

### ***Special Meeting of Stockholders***

The Bylaws provide that special meetings of its stockholders may be called only by a majority vote of the entire Board, by HighPeak Energy's President or by HighPeak Energy's Chairman.

### ***Advance Notice Requirements for Stockholder Proposals and Director Nominations***

The Bylaws provide that stockholders seeking to bring business before HighPeak Energy's annual meeting of stockholders, or to nominate candidates for election as directors at HighPeak Energy's annual meeting of stockholders, must provide timely notice of their intent in writing. To be timely, a stockholder's notice will need to be received by the Company's secretary at HighPeak Energy's principal executive offices not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the anniversary date of the immediately preceding annual meeting of stockholders. Pursuant to Rule 14a-8 of the Exchange Act, proposals seeking inclusion in HighPeak Energy's Annual Proxy Statement must comply with the notice periods contained therein. The Bylaws also specify certain requirements as to the form and content of a stockholders' meeting. These provisions may preclude HighPeak Energy's stockholders from bringing matters before HighPeak Energy's annual meeting of stockholders or from making nominations for directors at HighPeak Energy's annual meeting of stockholders.

### ***Exclusive Forum***

The A&R Charter provides that a stockholder bringing a claim subject to Article 8 of the A&R Charter will be required to bring that claim in the Court of Chancery in the State of Delaware, subject to the Court of Chancery in the State of Delaware having personal jurisdiction over the defendants. The forum selection provision is not intended to apply to claims arising under the Securities Act or the Exchange Act. To the extent the provision could be constructed to apply to such claims, there is uncertainty as to whether a court would enforce such provision in connection with such claims. The A&R Charter also provides that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of, and to have consented to, the provisions of Article 8 of the A&R Charter. Stockholders will not be deemed, by operation of Article 8 of the A&R Charter alone, to have waived claims arising under the federal securities laws and the rules and regulations promulgated thereunder. The enforceability of similar exclusive forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with one or more actions or proceedings described above, a court could rule that this provision in the A&R Charter is inapplicable or unenforceable.

If any action the subject matter of which is within the scope of the forum selection provision described in the preceding paragraph is filed in a court other than the Court of Chancery (or, if the Court of Chancery does not have jurisdiction, another state court or a federal court located within the State of Delaware) (a "Foreign Action") in the name of any stockholder, such stockholder shall be deemed to have consented to (i) the personal jurisdiction of the state and federal courts located within the State of Delaware in connection with any action brought in any such court to enforce the forum selection provision (a "Foreign Enforcement Action") and (ii) having service of process made upon such stockholder in any such Foreign Enforcement Action by service upon such stockholder's counsel in the Foreign Action as agent for such stockholder.

## Rule 144

Pursuant to Rule 144, a person who has beneficially owned restricted shares of HighPeak Energy's voting common stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of HighPeak Energy's affiliates at the time of, or at any time during the three months preceding, a sale and (ii) HighPeak Energy is subject to the Exchange Act periodic reporting requirements for at least three months before the sale and has filed all required reports under Section 13 or 15(d) of the Exchange Act during the twelve months (or such shorter period as HighPeak Energy was required to file reports) preceding the sale.

Persons who have beneficially owned restricted shares of HighPeak Energy's voting common stock for at least six months but who are HighPeak Energy's affiliates at the time of, or at any time during the three months preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of:

- 1% of the total number of shares of such securities then-outstanding; or
- the average weekly reported trading volume of such securities during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales by HighPeak Energy's affiliates under Rule 144 are also limited by manner of sale provisions and notice requirements and to the availability of current public information about us.

### *Restrictions on the Use of Rule 144 by Shell Companies or Former Shell Companies*

Rule 144 is not available for the resale of securities initially issued by shell companies (other than business combination related shell companies) or issuers that have been at any time previously a shell company. However, Rule 144 also includes an important exception to this prohibition if the following conditions are met:

- the issuer of the securities that was formerly a shell company has ceased to be a shell company;
- the issuer of the securities is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act;
- the issuer of the securities has filed all Exchange Act reports and materials required to be filed, as applicable, during the preceding twelve months (or such shorter period that the issuer was required to file such reports and materials), other than Current Reports on Form 8-K; and
- at least one year has elapsed from the time that the issuer filed current Form 10 type information with the SEC reflecting its status as an entity that is not a shell company.

### **Listing of Securities**

HighPeak Energy's common stock is listed for trading on the Nasdaq under the symbol "HPK."

## PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus in any one or more of the following ways from time to time:

- to or through one or more underwriters, initial purchasers, brokers, or dealers;
- through agents to investors or the public;
- in short or long transactions;
- through put or call option transactions relating to our common stock;
- directly to agents or other purchasers;
- in “at the market offerings” within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- through a combination of any such methods of sale; or
- through any other method described in the applicable prospectus supplement.

The applicable prospectus supplement will set forth the terms of the offering and the method of distribution and will identify any firms acting as underwriters, initial purchasers, dealers, or agents in connection with the offering, including:

- the terms of the offering;
- the names of any underwriters, dealers, or agents;
- the name or names of any managing underwriter or underwriters;
- the purchase price of the securities and the proceeds to us from the sale;
- any options (whether or not for over-allotments) under which the underwriters may purchase additional shares of common stock from us;
- any underwriting discounts, concessions, commissions, or agency fees and other items constituting compensation to underwriters, dealers, or agents;
- any delayed delivery arrangements;
- any public offering price;
- any discounts or concessions allowed or re-allowed or paid by underwriters or dealers to other dealers; or
- any securities exchange or market on which the common stock offered in the prospectus supplement may be listed.

If we use underwriters for a sale of securities, the underwriters will acquire the securities for their own account for resale to the public, either on a firm commitment basis or a best efforts basis. The underwriters may resell the securities in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer the securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. If an underwriter or underwriters are used in the sale of securities hereunder, an underwriting agreement will be executed with the underwriter or underwriters at the time an agreement for sale is reached. Unless we inform you otherwise in the applicable prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions. We may change from time to time any public offering price and any discounts or concessions the underwriters allow or pay to dealers.

During and after an offering through underwriters, the underwriters may purchase and sell the securities in the open market. These transactions may include overallocation and stabilizing transactions and purchases to cover syndicate short positions created in connection with the offering. The underwriters may also impose a penalty bid, which means that selling concessions allowed to syndicate members or other broker-dealers for the offered securities sold for their account may be reclaimed by the syndicate if the offered securities are repurchased by the syndicate in stabilizing or covering transactions. These activities may stabilize, maintain, or otherwise affect the market price of the offered securities, which may be higher than the price that might otherwise prevail in the open market. If commenced, the underwriters may discontinue these activities at any time.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell our securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

If dealers are used for the sale of securities, we, or an underwriter, will sell the securities to them as principals. The dealers may then resell those securities to the public at varying prices determined by the dealers at the time of resale. We will include in the applicable prospectus supplement the names of the dealers and the terms of the transaction.

We may also sell the securities through agents designated from time to time. In the applicable prospectus supplement, we will name any agent involved in the offer or sale of the offered securities, and we will describe any commissions payable to the agent. Unless we inform you otherwise in the applicable prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly in transactions not involving underwriters, dealers, or agents.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. We will describe the terms of any such sales in the prospectus supplement.

Underwriters, dealers, and agents that participate in the distribution of the securities may be underwriters as defined in the applicable securities laws and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the applicable securities laws. We will identify in the applicable prospectus supplement any underwriters, dealers, or agents and will describe their compensation. We may have agreements with the underwriters, dealers, and agents to indemnify them against specified civil liabilities, including liabilities under the applicable securities laws.

Underwriters, dealers, and agents may engage in transactions with or perform services for us in the ordinary course of their businesses for which they may receive customary fees and reimbursement of expenses.

We may use underwriters with whom we have a material relationship. We will describe the nature of such relationship in the applicable prospectus supplement.

Under the securities laws of some states, the securities offered by this prospectus may be sold in those states only through registered or licensed brokers or dealers.

We may enter into hedging transactions with broker-dealers and the broker-dealers may engage in short sales of the securities in the course of hedging the positions they assume with us, including, without limitation, in connection with distributions of the securities by those broker-dealers. We may enter into option or other transactions with broker-dealers that involve the delivery of the securities offered hereby to the broker-dealers, who may then resell or otherwise transfer those securities. We may also loan or pledge the securities offered hereby to a broker-dealer and the broker-dealer may sell the securities offered hereby so loaned or upon a default may sell or otherwise transfer the pledged securities offered hereby.

## LEGAL MATTERS

The validity of the issuance of the securities offered in this prospectus will be passed upon for us by Vinson & Elkins L.L.P., Houston, Texas. If certain legal matters in connection with an offering of the securities made by this prospectus and a related prospectus supplement are passed upon by counsel for the underwriters of such offering, that counsel will be named in the applicable prospectus supplement related to that offering.

## EXPERTS

The balance sheet of HighPeak Energy, Inc. as of December 31, 2024 and the related consolidated statements of operations, changes in stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2024 incorporated by reference in this prospectus have been audited by Weaver and Tidwell, L.L.P., independent registered public accounting firm, as stated in their report appearing herein and is included upon reliance of the report of such firm given upon their authority as experts in accounting and auditing.

The information included herein regarding estimated quantities of proved reserves of the Company, the future net revenues from those reserves and their present value as of December 31, 2024 and December 31, 2023, are based on the proved reserves report prepared by Cawley, Gillespie & Associates, Inc. These estimates are included herein in reliance upon the authority of such firm as an expert in these matters.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

**Subject to Completion, dated November 4, 2025**

**PROSPECTUS**



**HighPeak Energy, Inc.**

**Up to 108,764,359 Shares of Common Stock**

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The securities to be offered using this combined prospectus include the resale of up to 108,764,359 shares of our common stock, par value \$0.001 per share (“common stock”) by the selling stockholders named herein.

Pursuant to this prospectus, the selling securityholders are permitted to offer the securities from time to time, if and to the extent as they may determine, through public or private transactions or through other means described in the section of this prospectus entitled “Plan of Distribution” at prevailing market prices, at prices different than prevailing market prices or at privately negotiated prices. The selling securityholders may sell shares through agents they select or through underwriters and dealers they select. The selling securityholders also may sell their securities directly to investors. If the selling securityholders use agents, underwriters or dealers to sell their shares, we will name such agents, underwriters or dealers and describe any applicable commissions or discounts in a supplement to this prospectus if required.

We are registering the offer and sale of 29,057,783 shares of common stock pursuant to the registration rights afforded pursuant to the Forward Purchase Agreement. We are further registering the offer and sale of 79,706,576 shares of common stock pursuant to the registration rights afforded pursuant to that certain Registration Rights Agreement, dated as of August 21, 2020 (the “Registration Rights Agreement”) by and among the Company, Sponsor, HighPeak I, HighPeak II and certain other security holders named therein. We have agreed to bear all expenses incurred in connection with the registration of these securities. The selling securityholders will pay or assume underwriting fees, discounts and commissions or similar charges, if any, incurred in the sale of these securities.

The selling securityholders identified in this prospectus are offering all of the common stock included under this prospectus (as applicable to each selling securityholder) in the section entitled “Selling Securityholders.” We will not receive any proceeds from the sale of these securities by the selling securityholders.

Our common stock is traded on the Nasdaq Global Market (the “Nasdaq”) under the symbol “HPK”. On October 30, 2025, the closing price of our common stock was \$6.36.

**We are an “emerging growth company” as that term is used in the Jumpstart Our Business Startups Act of 2012, and, as such, have elected to avail ourselves of certain reduced public company reporting requirements for this prospectus and future filings.**

**You should read carefully this prospectus, the documents incorporated by reference in this prospectus and any prospectus supplement before you invest. See “Risk Factors” beginning on page 5 of this prospectus for information on certain risks related to the purchase of our securities.**

The selling securityholders may sell the securities directly or to or through underwriters or dealers, and also to other purchasers or through agents. The names of any underwriters or agents that are included in a sale of securities to you, and any applicable commissions or discounts, will be stated in any accompanying prospectus supplement. In addition, the underwriters, if any, may over-allot a portion of the securities.

**Neither the U.S. Securities and Exchange Commission (the “SEC”) nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

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**The date of this prospectus is                      , 2025.**

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## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the SEC using a “shelf” registration process. Under this shelf registration process, the selling securityholders may offer and sell from time to time the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities that are registered hereunder that may be offered by the selling securityholders. Each time we offer the securities, we and the selling securityholders will provide you with a prospectus supplement that will describe, among other things, the specific amounts and prices of the securities being offered and the terms of the offering.

Any prospectus supplement may add, update, or change information contained in this prospectus. Any statement that we make in this prospectus will be modified or superseded by any inconsistent statement made by us in any prospectus supplement. The information in this prospectus is accurate as of its date. Additional information, including our financial statements and the notes thereto, is incorporated in this prospectus by reference to our reports filed with the SEC. Therefore, before you invest in our securities, you should carefully read this prospectus and any prospectus supplement relating to the securities offered to you together with the additional information incorporated by reference in this prospectus and any prospectus supplement (including the documents described under the heading “Where You Can Find More Information” and “Documents Incorporated by Reference” in both this prospectus and any prospectus supplement).

**You should rely only on the information contained in or incorporated by reference in this prospectus or any prospectus supplement. Neither we nor the selling securityholders have authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. Neither we, the selling securityholders nor anyone acting on our behalf is making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information incorporated by reference or provided in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents.**

Unless the context otherwise requires, throughout this prospectus and any applicable prospectus supplement, the words “we,” “us,” the “registrant,” “the Company,” or “HighPeak Energy” refer to HighPeak Energy, Inc. and the term “securities” refers to the shares of our common stock registered hereunder.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement with the SEC under the Securities Act of 1933, as amended (the “Securities Act”), that registers the offer and sale of the securities covered by this prospectus. The registration statement, including the exhibits attached thereto and incorporated by reference therein, contains additional relevant information about us. In addition, we file annual, quarterly and other reports and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Our SEC filings are available on the SEC’s website at [www.sec.gov](http://www.sec.gov).

We make available free of charge on or through our website, [www.highpeakenergy.com](http://www.highpeakenergy.com), our filings with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. We make our website content available for information purposes only. Information contained on our website is not incorporated by reference into this prospectus and does not constitute a part of this prospectus.

## DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to “incorporate by reference” the information we have filed with the SEC. This means that we can disclose important information to you without actually including the specific information in this prospectus by referring you to other documents filed separately with the SEC. The information incorporated by reference is an important part of this prospectus. Information that we later provide to the SEC, and which is deemed to be “filed” with the SEC, will automatically update information previously filed with the SEC, and may update or replace information in this prospectus and information previously filed with the SEC.

We incorporate by reference the documents listed below and any filings we make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of Exchange Act (excluding information deemed to be furnished and not filed with the SEC), after the date on which the registration statement was initially filed with the SEC (including all such documents that we may file with the SEC after the date the registration statement was initially filed and prior to the effectiveness of the registration statement) until all offerings under the registration statement of which this prospectus forms a part are completed or terminated:

- our [Annual Report on Form 10-K](#) for the year ended December 31, 2024 filed on March 10, 2025, including those portions of our definitive proxy statement on [Schedule 14A](#), filed on April 16, 2025, incorporated by reference therein;
- our Quarterly Reports on Form 10-Q for the quarters ended [March 31, 2025](#) and [June 30, 2025](#), filed on May 12, 2025 and August 11, 2025, respectively;
- our Current Reports on Form 8-K filed on [June 3, 2025](#), [June 30, 2025](#), [August 4, 2025](#), [September 15, 2025](#) and [September 16, 2025](#); and
- the description of our common stock contained in our Registration Statement on [Form 8-A12B](#) filed on August 19, 2020, as amended by the Amendment No. 1 on [Form 8-A12B/A](#) filed on August 20, 2020, including any amendments or reports that we may file in the future for the purpose of updating such description.

These reports contain important information about us, our financial condition and our results of operations.

You may obtain copies of any of the documents incorporated by reference in this prospectus from the SEC through the SEC’s website at the address provided above. You also may request a copy of any document incorporated by reference in this prospectus (including exhibits to those documents specifically incorporated by reference in this prospectus), at no cost, by contacting us at:

**HighPeak Energy, Inc.**  
**Attention: Investor Relations**  
**421 W. 3rd Street, Suite 1000**  
**Fort Worth, Texas 76012**  
**(817) 850-9200**

## CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The information in this prospectus includes “forward-looking statements” within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act. All statements other than statements of historical facts included or incorporated by reference in this prospectus, including, without limitation, statements regarding HighPeak Energy’s future financial position, business strategy, budgets, projected revenues, projected costs, and plans and objectives of management for future operations are forward-looking statements. Such forward-looking statements are based on the beliefs of management, as well as assumptions made by, and information currently available to, the Company’s management. In addition, forward-looking statements generally can be identified by the use of forward-looking terminology such as “believes,” “plans,” “expects,” “anticipates,” “forecasts,” “intends,” “continue,” “may,” “will,” “could,” “should,” “future,” “potential,” “estimate” or the negative of such terms and similar expressions as they relate to the Company are intended to identify forward-looking statements which are generally not historical in nature. The forward-looking statements are based on management’s current expectations, assumptions, estimates and projections about the Company and the industry in which the Company operates. Although the Company believes that the expectations and assumptions reflected in the forward-looking statements are reasonable as and when made, they involve risks and uncertainties that are difficult to predict and, in many cases, beyond the Company’s control. In addition, the Company may be subject to currently unforeseen risks that may have a materially adverse effect on it. Accordingly, no assurances can be given that the actual events and results will not be materially different from the anticipated results described in the forward-looking statements. Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date hereof. The Company undertakes no duty to publicly update these statements except as required by law. Important factors that could cause actual results to differ materially from the Company’s expectations include, but are not limited to, the Company’s assumptions regarding the following factors.

In addition, HighPeak Energy cautions you that forward-looking statements regarding HighPeak Energy, which are contained in this prospectus, are also subject to the following factors:

- the supply and demand for and market prices of crude oil, NGL, natural gas and other products or services, and the associated impact of our hedging policies relating thereto;
- inflation rates, the impacts of associated monetary policy responses, including increased or decreased interest rates and resulting pressures on economic growth, U.S. trade policy and the imposition of and changes to tariffs;
- political instability or armed conflict in crude oil or natural gas producing regions, such as the ongoing wars between Russia and Ukraine and the Israel-Hamas conflict;
- volatility in the political, legal and regulatory environments;
- political and regulatory uncertainties;
- our liquidity, cash flow and access to capital;
- the availability of capital resources;
- our ability to refinance or pay, when due, the principal of, interest or other amounts due in respect of our indebtedness;
- production and reserve levels;
- drilling and completion risks;
- economic and competitive conditions;
- the impacts of revising our drilling plan during the year transitioning to an increased or decreased rig count from time to time;

- severe weather conditions;
- epidemics or pandemics, including the effects of public health concerns and the impact of continued actions taken by governmental authorities and other third parties in response to a pandemic and their impact on commodity prices, supply and demand considerations, and storage capacity;
- the availability of goods and services and supply chain issues;
- legislative, regulatory, or policy changes;
- regulatory and related policy actions intended by federal, state and/or local governments to reduce fossil fuel use and associated carbon emissions, to drive the substitution of renewable forms of energy for crude oil and natural gas, which may over time reduce demand for crude oil, NGL and natural gas, including as a result of the Inflation Reduction Act of 2022 (“IRA 2022”) or otherwise;
- our ability to predict and manage the effects of actions of OPEC and OPEC+ and agreements to set and maintain production levels;
- cyber-attacks;
- occurrence of property acquisitions or divestitures;
- the integration of acquisitions;
- capital markets and our ability to access such markets on attractive terms or at all, and related risks such as general credit, liquidity, market and interest-rate risks; and
- the results of our ongoing strategic alternatives process.

Should one or more of the risks or uncertainties described in this prospectus occur, or should underlying assumptions prove incorrect, actual results and plans could differ materially from those expressed in any forward-looking statements. Additional information concerning these and other factors that may impact the operations and projections discussed herein can be found in the section entitled “Risk Factors” herein and in HighPeak Energy’s periodic filings with the SEC. HighPeak Energy’s SEC Filings are available publicly on the SEC’s website at [www.sec.gov](http://www.sec.gov).

## ABOUT HIGHPEAK ENERGY, INC.

HighPeak Energy, Inc., a Delaware corporation, formed in October 2019, is an independent crude oil and natural gas exploration and production company that explores for, develops and produces crude oil, NGL and natural gas in the Permian Basin in West Texas, more specifically, the Midland Basin. The Company's assets are located primarily in Howard and Borden Counties, Texas, and to a lesser extent Scurry and Mitchell Counties, which lie within the northeastern part of the crude oil-rich Midland Basin. As of June 30, 2025, the assets consisted of two highly contiguous leasehold positions of approximately 154,858 gross (143,826 net) acres, approximately 68% of which were held by production, with an average working interest of 93%. Our acreage is composed of two core areas, Flat Top primarily in the northern portion of Howard County extending into southern Borden County, southwest Scurry County and northwest Mitchell County and Signal Peak in the southern portion of Howard County. We operate approximately 98% of the net acreage across the Company's assets and more than 90% of the net operated acreage provides for horizontal wells with lateral lengths of 10,000 feet or greater. For the six months ended June 30, 2025, approximately 86% and 14% of sales volumes from the assets were attributable to liquids (both crude oil and NGL) and natural gas, respectively. As of June 30, 2025, HighPeak Energy was developing its properties using one (1) drilling rig and one (1) frac crew and expects to average one to two (1-2) drilling rigs and approximately one (1) frac crew during the remainder of 2025 under our current development plan. Our principal executive offices are located at 421 W 3rd Street, Fort Worth, Texas 76102, and our telephone number is (817) 850-9200. Our website address is [www.highpeakenergy.com](http://www.highpeakenergy.com). The information on our website is not part of this prospectus.

Our principal executive offices are located at 421 W 3rd Street, Suite 1000, Fort Worth, Texas 76102, and our telephone number is (817) 850-9200. Our website address is [www.highpeakenergy.com](http://www.highpeakenergy.com). The information on our website is not part of this prospectus.

### Implications of Being an Emerging Growth Company

We are an "emerging growth company" as defined in the JOBS Act enacted in April 2012. As a result, we may take advantage of reduced reporting requirements that are otherwise applicable to public companies, including delaying auditor attestation of internal control over financial reporting, providing only two years of audited financial statements and related Management's Discussion and Analysis of Financial Condition and Results of Operations, and reducing executive compensation disclosures.

We will remain an emerging growth company until the earlier to occur of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of our business combination, which will be August 21, 2025, (b) in which we have total annual gross revenue of at least \$1.235 billion, or (c) in which we are deemed to be a "large accelerated filer" under the rules of the SEC, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior July 31st and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. Additionally, we are subject to an extended transition period for complying with new or revised accounting standards. As a result, the information that we provide to our stockholders may be different than what you might receive from other public reporting companies in which you hold equity interests.

## RISK FACTORS

An investment in our securities involves a significant degree of risk. Before you invest in our securities, you should carefully consider those risk factors included in our most recent Annual Report on Form 10-K, any subsequently filed Quarterly Reports on Form 10-Q and any subsequently filed Current Reports on Form 8-K, each of which is incorporated herein by reference, and those risk factors that may be included in any applicable prospectus supplement, together with all of the other information included in this prospectus, any prospectus supplement and the documents we incorporate by reference, in evaluating an investment in our securities. If any of these risks were actually to occur, our business, financial condition or results of operations could be materially adversely affected. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations and financial condition. Please read “Cautionary Note Regarding Forward-Looking Statements.”

#### USE OF PROCEEDS

We will not receive any proceeds from the sale of common stock to be offered by the selling securityholders pursuant to this prospectus. Any proceeds from the sales of common stock under this prospectus will be received by the selling securityholders. However, pursuant to the Registration Rights Agreement, we will pay the expenses, other than underwriting discounts and commissions and brokerage fees, associated with the sales of common stock sold by the selling securityholders pursuant to this prospectus.

## DESCRIPTION OF SECURITIES

*The following description of our common stock is not complete and may not contain all the information you should consider before investing in our common stock. This description is a summary of certain provisions contained in, and is qualified in its entirety by reference to, our second amended and restated certificate of incorporation (the "A&R Charter"), and our amended and restated bylaws (the "Bylaws").*

### Authorized and Outstanding Common Stock

The A&R Charter authorizes the issuance of 600,000,000 shares of our common stock and 10,000,000 shares of preferred stock, par value \$0.0001 per share. The outstanding shares of our common stock are duly authorized, validly issued, fully paid and non-assessable. Common stockholders of record are entitled to one vote for each share held on all matters to be voted on by stockholders. As of the date of this prospectus, there were 125,587,093 shares of our common stock issued and outstanding.

Please see our registration statement on Form 8-A12B (File No. 001-39464) filed August 19, 2020, as amended by the Amendment No. 1 on Form 8-A12B/A filed on August 20, 2020, including any amendments or reports that we may file in the future for the purpose of updating such description, which is incorporated by reference herein, for a description of our common stock.

### Transfer Agent and Registrar

The Transfer Agent for HighPeak Energy's common stock is Continental. HighPeak Energy has agreed to indemnify Continental in its roles as Transfer Agent, its agents and each of its stockholders, directors, officers and employees against all liabilities, including judgments, costs and reasonable counsel fees that may arise out of acts performed or omitted for its activities in that capacity, except for any liability due to any gross negligence, willful misconduct or bad faith of the indemnified person or entity.

### Certain Anti-Takeover Provisions of Delaware Law and HighPeak Energy's A&R Charter and Bylaws

HighPeak Energy is subject to the provisions of Section 203 of the Delaware General Corporation Law ("DGCL") regulating corporate takeovers. This statute prevents certain Delaware corporations, under certain circumstances, from engaging in a "business combination" with:

- a stockholder who owns 15% or more of HighPeak Energy's outstanding voting stock (otherwise known as an "interested stockholder");
- an affiliate of an interested stockholder; or
- an associate of an interested stockholder, for three years following the date that the stockholder became an interested stockholder.

A "business combination" includes a merger or sale of more than 10% of HighPeak Energy's assets. However, the above provisions of Section 203 do not apply if:

- the board of directors of HighPeak Energy (the "Board") approves the transaction that made the stockholder an "interested stockholder," prior to the date of the transaction;
- after the completion of the transaction that resulted in the stockholder becoming an interested stockholder, that stockholder owned at least 85% of HighPeak Energy's voting stock outstanding at the time the transaction commenced, other than statutorily excluded shares of voting common stock; or
- on or subsequent to the date of the transaction, the business combination is approved by the Board and authorized at a meeting of HighPeak Energy's stockholders, and not by written consent, by an affirmative vote of at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

HighPeak Energy's authorized but unissued voting common stock and preferred stock are available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved voting common stock and preferred stock could render more difficult or discourage an attempt to obtain control of HighPeak Energy by means of a proxy contest, tender offer, merger or otherwise.

#### *Written Consent by Stockholders*

HighPeak Energy's A&R Charter provides that prior to the first date in which Sponsor, HighPeak Energy Partners, LP, HighPeak Energy Partners II, LP, and each of their respective affiliates and certain permitted transferees (collectively, the "HighPeak Group") no longer collectively beneficially owns more than 50% of the outstanding HighPeak Energy voting securities, HighPeak Energy stockholders may take action by written consent of the holders of not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. Before such time, any action required or permitted to be taken by HighPeak Energy's stockholders that is approved in advance by the Board may be effected without a meeting, without prior notice and without a vote of stockholders, if a consent or consents in writing, setting forth the action so taken, is or are signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. If any such action by written consent is taken then HighPeak Energy will notify its stockholders of the same.

#### *Special Meeting of Stockholders*

The Bylaws provide that special meetings of its stockholders may be called only by a majority vote of the entire Board, by HighPeak Energy's President or by HighPeak Energy's Chairman.

#### *Advance Notice Requirements for Stockholder Proposals and Director Nominations*

The Bylaws provide that stockholders seeking to bring business before HighPeak Energy's annual meeting of stockholders, or to nominate candidates for election as directors at HighPeak Energy's annual meeting of stockholders, must provide timely notice of their intent in writing. To be timely, a stockholder's notice will need to be received by the Company's secretary at HighPeak Energy's principal executive offices not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the anniversary date of the immediately preceding annual meeting of stockholders. Pursuant to Rule 14a-8 of the Exchange Act, proposals seeking inclusion in HighPeak Energy's Annual Proxy Statement must comply with the notice periods contained therein. The Bylaws also specify certain requirements as to the form and content of a stockholders' meeting. These provisions may preclude HighPeak Energy's stockholders from bringing matters before HighPeak Energy's annual meeting of stockholders or from making nominations for directors at HighPeak Energy's annual meeting of stockholders.

#### *Exclusive Forum*

The A&R Charter provides that a stockholder bringing a claim subject to Article 8 of the A&R Charter will be required to bring that claim in the Court of Chancery in the State of Delaware, subject to the Court of Chancery in the State of Delaware having personal jurisdiction over the defendants. The forum selection provision is not intended to apply to claims arising under the Securities Act or the Exchange Act. To the extent the provision could be constructed to apply to such claims, there is uncertainty as to whether a court would enforce such provision in connection with such claims. The A&R Charter also provides that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of, and to have consented to, the provisions of Article 8 of the A&R Charter. Stockholders will not be deemed, by operation of Article 8 of the A&R Charter alone, to have waived claims arising under the federal securities laws and the rules and regulations promulgated thereunder. The enforceability of similar exclusive forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with one or more actions or proceedings described above, a court could rule that this provision in the A&R Charter is inapplicable or unenforceable.

If any action the subject matter of which is within the scope of the forum selection provision described in the preceding paragraph is filed in a court other than the Court of Chancery (or, if the Court of Chancery does not have jurisdiction, another state court or a federal court located within the State of Delaware) (a "Foreign Action") in the name of any stockholder, such stockholder shall be deemed to have consented to (i) the personal jurisdiction of the state and federal courts located within the State of Delaware in connection with any action brought in any such court to enforce the forum selection provision (a "Foreign Enforcement Action") and (ii) having service of process made upon such stockholder in any such Foreign Enforcement Action by service upon such stockholder's counsel in the Foreign Action as agent for such stockholder.

## Rule 144

Pursuant to Rule 144, a person who has beneficially owned restricted shares of HighPeak Energy's voting common stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of HighPeak Energy's affiliates at the time of, or at any time during the three months preceding, a sale and (ii) HighPeak Energy is subject to the Exchange Act periodic reporting requirements for at least three months before the sale and has filed all required reports under Section 13 or 15(d) of the Exchange Act during the twelve months (or such shorter period as HighPeak Energy was required to file reports) preceding the sale.

Persons who have beneficially owned restricted shares of HighPeak Energy's voting common stock for at least six months but who are HighPeak Energy's affiliates at the time of, or at any time during the three months preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of:

- 1% of the total number of shares of such securities then-outstanding; or
- the average weekly reported trading volume of such securities during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales by HighPeak Energy's affiliates under Rule 144 are also limited by manner of sale provisions and notice requirements and to the availability of current public information about us.

### *Restrictions on the Use of Rule 144 by Shell Companies or Former Shell Companies*

Rule 144 is not available for the resale of securities initially issued by shell companies (other than business combination related shell companies) or issuers that have been at any time previously a shell company. However, Rule 144 also includes an important exception to this prohibition if the following conditions are met:

- the issuer of the securities that was formerly a shell company has ceased to be a shell company;
- the issuer of the securities is subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act;
- the issuer of the securities has filed all Exchange Act reports and materials required to be filed, as applicable, during the preceding twelve months (or such shorter period that the issuer was required to file such reports and materials), other than Current Reports on Form 8-K; and
- at least one year has elapsed from the time that the issuer filed current Form 10 type information with the SEC reflecting its status as an entity that is not a shell company.

### **Listing of Securities**

HighPeak Energy's common stock is listed for trading on the Nasdaq under the symbols "HPK".

## SELLING SECURITYHOLDERS

Up to 29,057,783 shares of our common stock may be offered for resale by certain selling securityholders under this prospectus, including up to 7,776,549 shares of our common stock owned by the selling securityholders named herein pursuant to the Forward Purchase Agreement. Further, 79,706,576 shares of our common stock may be offered for resale by certain selling securityholders under this prospectus pursuant to the Registration Rights Agreement, dated as of August 21, 2020, by and among HighPeak Energy, Sponsor, HighPeak I, HighPeak II, LP and certain other security holders named therein (the “Registration Rights Agreement”).

The following table sets forth the number of shares of our common stock being offered by the selling securityholders (as applicable), including their donees, pledgees, transferees or other successors-in-interest, subject to the transfer restrictions described in this prospectus and the documents incorporated by reference herein, based on the assumptions that: (i) all shares of our common stock, and (ii) no other shares of our common stock will be acquired prior to completion of this offering by the selling securityholders. The following table also sets forth the number of shares known to us, based upon written representations by the selling securityholders, to be beneficially owned by the selling securityholders (as applicable) as of the date of this prospectus. The selling securityholders are not making any representation that any shares of our common stock covered by this prospectus will be offered for sale. The selling securityholders reserve the right to accept or reject, in whole or in part, any proposed sale of the shares of our common stock. For purposes of the table below, we assume that all of the shares of our common stock covered by this prospectus will be sold. As of the date of this prospectus, the selling securityholders have advised us that they do not currently have any plan of distribution with respect to their shares. Unless otherwise indicated, the address of each selling securityholders named in the table below is 421 W. 3rd Street, Suite 1000, Fort Worth, Texas 76102.

Name and Address of Selling Securityholders	Shares of Common Stock Beneficially Owned Prior to Offering	Number of Shares of Common Stock Available Pursuant to this Prospectus	Number of Shares of Common Stock Beneficially Owned After the Offering	Percentage of Shares of Common Stock Beneficially Owned After the Offering
John Paul DeJoria Family Trust (2)	15,457,152	15,457,152(1)	—	—
DeJoria Dynasty Trust (3)	516,500	516,500(1)	—	—
Jack Hightower (4)	13,084,131	13,084,131(1)	—	—
HighPeak Pure Acquisition, LLC (5)	3,323,522(5)	3,323,522(7)	—	—
HighPeak Energy, LP (8)	39,642,461(6)	39,642,461(7)	—	—
HighPeak Energy II, LP (9)	36,740,593(6)	36,740,593(7)	—	—

- (1) Represents the number of shares of our common stock being registered on behalf of the selling securityholders pursuant to this registration statement.
- (2) Represents 13,868,672 shares of our common stock owned by The John Paul DeJoria Family Trust, and an additional 1,588,480 shares of our common stock which may be acquired from HighPeak Pure Acquisition, LLC. The address of the John Paul DeJoria Family Trust is 109 West 7th Street, Suite 200, Georgetown, Texas 78626.
- (3) Represents 516,500 shares of our common stock owned by DeJoria Dynasty Trust. The address of the DeJoria Dynasty Trust is 109 West 7th Street, Suite 200, Georgetown, Texas 78626.
- (4) Represents (i) 7,117,995 shares of our common stock issuable upon the exercise of stock options that have been vested as of September 15, 2025, (ii) 1,385,500 shares of restricted stock units that fully vested as of the Mr. Hightower’s retirement from the Company, of which 545,195 shares of common stock were withheld by the Company to satisfy Mr. Hightower’s tax withholding obligations, resulting in a net issuance to Mr. Hightower of 840,305 shares of common stock, (iii) 1,532,478 shares of common stock distributed by HighPeak Pure Acquisition, LLC to Mr. Hightower, and (iv) 2,336 shares of common stock beneficially owned by Mr. Hightower’s family member.
- (5) Represents 3,323,522 shares of our common stock issued to Sponsor pursuant to the Business Combination Agreement.
- (6) Includes the number of shares of our common stock issued pursuant to the Business Combination Agreement.
- (7) Represents shares of our common stock being registered on behalf of the applicable selling securityholders pursuant to their rights under the Registration Rights Agreement pursuant to this registration statement.
- (8) Represents 39,642,461 shares of our common stock issued to HighPeak Energy, LP, a Delaware limited partnership (“HighPeak I”) as merger consideration pursuant to the Business Combination Agreement. The general partner of HighPeak I is HighPeak Energy GP, LLC, a Delaware limited liability company (“HPE GP I”). The sole member of HPE GP I is HighPeak Energy Partners, LP, a Delaware limited partnership (“HPEP I”), whose general partner is HighPeak Energy Partners GP, LP, a Delaware limited partnership (“HPEP GP I”). The general partner of HPEP GP I is HighPeak GP, LLC, a Delaware limited liability company (“HP GP I”). HP GP I is managed by a three-member committee composed of Messrs. Michael Hollis, Daniel Silver and Ryan Hightower. A majority of the members of HP GP I and John Paul DeJoria Family Trust (“JPDFI”), upon 61 days prior written notice, has the right to appoint all managers to the board of managers of HP GP I. Pursuant to that certain Stockholders’ Agreement, dated as of August 21, 2020 (the “Stockholders’ Agreement”), HighPeak I designated Mr. Silver as its Designated Director (as defined therein) to serve on the Board.
- (9) Represents 36,740,593 shares of our common stock issued to HighPeak Energy II, LP, a Delaware limited partnership (“HighPeak II”) as merger consideration pursuant to the Business Combination Agreement. The general partner of HighPeak II is HighPeak Energy GP II, LLC, a Delaware limited liability company (“HPE GP II”). The sole member of HPE GP II is HighPeak Energy Partners II, LP, a Delaware limited partnership (“HPEP II”). The general partner of HPEP II is HighPeak Energy Partners GP II, LP, a Delaware limited partnership (“HPEP GP II”). The general partner of HPEP GP II is HighPeak Energy GP II, LLC, a Delaware limited liability company (“HP GP II”). HP GP II is managed by a three-member committee composed of Messrs. Hollis, Silver and Hightower. A majority of the members of HP GP II and JPDFI, upon 61 days prior written notice, have the right to appoint all managers to the board of managers of HP GP II. Pursuant to that certain Stockholders’ Agreement, HighPeak II designated Mr. Silver as its Designated Director (as defined therein) to serve on the Board.

## PLAN OF DISTRIBUTION

This prospectus includes the registration for resale of (i) 79,706,576 shares of common stock issued as merger consideration in connection with the business combination and (ii) 7,776,549 shares of common stock issued pursuant to the terms Forward Purchase Agreement. As of the date of this prospectus, the selling securityholders have advised us that they do not currently have any plan of distribution. Unless the context otherwise requires, as used in this prospectus, "selling securityholders" includes the selling securityholders named in the table included in the section above entitled "Selling Securityholders" and donees, pledgees, transferees or other successors-in-interest selling securities received from the selling securityholders as a gift, pledge, partnership distribution or other transfer after the date of this prospectus.

The selling securityholders may offer and sell all or a portion of the securities covered by this prospectus from time to time, in one or more or any combination of the following transactions:

- on the Nasdaq, in the over-the-counter market or on any other national securities exchange on which our securities are listed or traded;
- in privately negotiated transactions;
- in underwritten transactions;
- in a block trade in which a broker-dealer will attempt to sell the offered securities as agent but may purchase and resell a portion of the block as principal to facilitate the transaction;
- through purchases by a broker-dealer as principal and resale by the broker-dealer for its account pursuant to this prospectus;
- in ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- through the writing of options (including put or call options), whether the options are listed on an options exchange or otherwise;
- through the distribution of the securities by any selling securityholder to its partners, members or stockholders;
- in short sales entered into after the effective date of the registration statement of which this prospectus is a part; and
- "at the market" or through market makers or into an existing market for the securities.

The selling securityholders may sell the securities at prices then prevailing, related to the then prevailing market price or at negotiated prices. The offering price of the securities from time to time will be determined by us and by the selling securityholders and, at the time of the determination, may be higher or lower than the market price of our securities on the Nasdaq or any other exchange or market.

The selling securityholders may also sell our securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The shares may be sold directly or through broker-dealers acting as principal or agent, or pursuant to a distribution by one or more underwriters on a firm commitment or best-efforts basis. The selling securityholders may also enter into hedging transactions with broker-dealers. In connection with such transactions, broker-dealers of other financial institutions may engage in short sales of our securities in the course of hedging the positions they assume with us and with the selling securityholders. The selling securityholders may also enter into options or other transactions with broker-dealers or other financial institutions which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction). The selling securityholders also may resell all or a portion of the securities in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule. In connection with an underwritten offering, underwriters or agents may receive compensation in the form of discounts, concessions or commissions from the selling securityholders or from purchasers of the offered securities for whom they may act as agents. In addition, underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents. The selling securityholders and any underwriters, dealers or agents participating in a distribution of the securities may be deemed to be "underwriters" within the meaning of the Securities Act, and any profit on the sale of the securities by the selling securityholders and any commissions received by broker-dealers may be deemed to be underwriting commissions under the Securities Act.

The selling securityholders may agree to indemnify an underwriter, broker-dealer or agent against certain liabilities related to the sale of the securities, including liabilities under the Securities Act. The selling securityholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their securities. Upon our notification by a selling securityholder that any material arrangement has been entered into with an underwriter or broker-dealer for the sale of securities through a block trade, special offering, exchange distribution, secondary distribution or a purchase by an underwriter or broker-dealer, we will file a supplement to this prospectus, if required, pursuant to Rule 424(b) under the Securities Act, disclosing certain material information, including:

- the name of the selling securityholder;
- the number of securities being offered;
- the terms of the offering;
- the names of the participating underwriters, broker-dealers or agents;
- any discounts, commissions or other compensation paid to underwriters or broker-dealers and any discounts, commissions or concessions allowed or reallocated or paid by any underwriters to dealers;
- the public offering price; and
- other material terms of the offering.

In addition, upon being notified by a selling securityholder that a donee, pledgee, transferee or other successor-in-interest intends to sell securities, we will, to the extent required, promptly file a supplement to this prospectus to name specifically such person as a selling securityholder.

The selling securityholders are subject to the applicable provisions of the Exchange Act and the rules and regulations under the Exchange Act, including Regulation M. This regulation may limit the timing of purchases and sales of any of the securities offered in this prospectus by the selling securityholders. The anti-manipulation rules under the Exchange Act may apply to sales of securities in the market and to the activities of the selling securityholders and their affiliates. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of the securities to engage in market-making activities for the particular securities being distributed for a period of up to five business days before the distribution. The restrictions may affect the marketability of the securities and the ability of any person or entity to engage in market-making activities for the securities.

In compliance with guidelines of the Financial Industry Regulatory Authority ("FINRA"), the maximum compensation or discount to be received by any FINRA member or independent broker or dealer may not exceed 8% of the aggregate amount of securities offered pursuant to this prospectus.

To the extent required, this prospectus may be amended and/or supplemented from time to time to describe a specific plan of distribution. Instead of selling the securities under this prospectus, the selling securityholders may sell the securities in compliance with the provisions of Rule 144 under the Securities Act, if available, or pursuant to other available exemptions from the registration requirements of the Securities Act.

Under the Registration Rights Agreement entered into with the selling securityholders, we agreed to use our commercially reasonable efforts to keep the registration statement of which this prospectus constitutes a part continuously effective under the Securities Act until the date that all Registrable Securities (as defined in the Registration Rights Agreement) covered by this registration statement have ceased to be Registrable Securities.

## LEGAL MATTERS

The validity of the issuance of the securities offered in this prospectus will be passed upon for us by Vinson & Elkins L.L.P., Houston, Texas. If certain legal matters in connection with an offering of the securities made by this prospectus and a related prospectus supplement are passed upon by counsel for the underwriters of such offering, that counsel will be named in the applicable prospectus supplement related to that offering.

## EXPERTS

The balance sheet of HighPeak Energy, Inc. as of December 31, 2024 and the related consolidated statements of operations, changes in stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2024 included in this prospectus have been audited by Weaver and Tidwell, L.L.P., independent registered public accounting firm, as stated in their report appearing herein and is included upon reliance of the report of such firm given upon their authority as experts in accounting and auditing.

The information included herein regarding estimated quantities of proved reserves of the Company, the future net revenues from those reserves and their present value as of December 31, 2024 and December 31, 2023, are based on the proved reserves report prepared by Cawley, Gillespie & Associates, Inc. These estimates are included herein in reliance upon the authority of such firm as an expert in these matters.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

**Item 14. Other Expenses of Issuance and Distribution.**

Set forth below are the expenses (other than underwriting discounts and commissions) expected to be incurred in connection with the offering of the securities registered hereby.

SEC registration fee	\$	136,959.48	*
Printing and engraving expenses			*
Accounting fees and expenses			*
Legal fees and expenses			*
Transfer agent and registrar fees			*
Miscellaneous			*
Total	\$		*

\* To be provided by amendment.

**Item 15. Indemnification of Directors and Officers.**

Section 145 of the DGCL authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act.

HighPeak Energy's A&R Charter provides for indemnification of its directors, officers, employees and other agents to the maximum extent permitted by the DGCL, and the Bylaws provide for indemnification of its directors, officers, employees and other agents to the maximum extent permitted by the DGCL. Further, the Bylaws permit HighPeak Energy to secure insurance on behalf of any officer, director or employee for any liability arising out of his or her actions regardless of whether Delaware law would permit indemnification. The Company has purchased a policy of directors' and officers' liability insurance that insures the Company's directors and officers against the cost of defense, settlement or payment of a judgement in some circumstances and insures the Company against the Company's obligations to indemnify the directors and officers.

These provisions may discourage stockholders from bringing a lawsuit against the Company's directors for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such action, if successful, might otherwise benefit us and our stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent the Company pays the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

In addition, HighPeak Energy has entered into indemnification agreements with each of its directors and officers. These agreements require us to indemnify these individuals to the fullest extent permitted under Delaware law and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified.

**Item 16. Exhibits.**

The following documents are filed as exhibits to this registration statement, including those exhibits incorporated herein by reference to a prior filing of HighPeak Energy, Inc. under the Securities Act or the Exchange Act as indicated in parentheses:

Exhibit Number	Description
1.1*	Form of Underwriting Agreement.
2.1+	<a href="#">Business Combination Agreement, dated as of May 4, 2020, by and among Pure Acquisition Corp., HighPeak Energy, Inc., Pure Acquisition Merger Sub, Inc., HighPeak Energy, LP, HighPeak Energy II, LP, HighPeak Energy III, LP, HPK Energy, LLC, and, solely for limited purposes specified therein, HighPeak Energy Management, LLC (incorporated by reference to Annex A to the Company's Registration Statement on Form S-4 and Form S-1 (File No. 333-235313) filed with the SEC on August 5, 2020).</a>
2.2	<a href="#">First Amendment to Business Combination Agreement, dated as of June 12, 2020, by and among Pure Acquisition Corp., HighPeak Energy, Inc., Pure Acquisition Merger Sub, Inc., HighPeak Energy, LP, HighPeak Energy II, LP, HighPeak Energy III, LP, HPK Energy, LLC and HighPeak Energy Management, LLC (incorporated by reference to Annex A-I to the Company's Registration Statement on Form S-4 and Form S-1 (File No. 333-235313) filed with the SEC on August 5, 2020).</a>
2.3	<a href="#">Second Amendment to Business Combination Agreement, dated as of July 1, 2020, by and among Pure Acquisition Corp., HighPeak Energy, Inc., Pure Acquisition Merger Sub, Inc., HighPeak Energy, LP, HighPeak Energy II, LP, HighPeak Energy III, LP, HPK Energy, LLC and HighPeak Energy Management, LLC (incorporated by reference to Annex A-II to the Company's Registration Statement on Form S-4 and Form S-1 (File No. 333-235313) filed with the SEC on August 5, 2020).</a>
2.4	<a href="#">Third Amendment to Business Combination Agreement, dated as of July 24, 2020, by and among Pure Acquisition Corp., HighPeak Energy, Inc., Pure Acquisition Merger Sub, Inc., HighPeak Energy, LP, HighPeak Energy II, LP, HighPeak Energy III, LP, HPK Energy, LLC and HighPeak Energy Management, LLC (incorporated by reference to Annex A-III to the Company's Registration Statement on Form S-4 and Form S-1 (File No. 333-235313) filed with the SEC on August 5, 2020).</a>
4.1#	<a href="#">Registration Rights Agreement, dated as of August 21, 2020, by and among HighPeak Energy, Inc., HighPeak Pure Acquisition, LLC, HighPeak Energy, LP, HighPeak Energy II, LP, HighPeak Energy III, LP and certain other security holders named therein (incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K (File No. 001-39464) filed with the SEC on August 27, 2020).</a>
4.2	<a href="#">Stockholders' Agreement, dated as of August 21, 2020, by and among HighPeak Energy, Inc., HighPeak Pure Acquisition, LLC, HighPeak Energy, LP, HighPeak Energy II, LP, HighPeak Energy III, LP, Jack Hightower and certain directors of Pure Acquisition Corp. (incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K (File No. 001-39464) filed with the SEC on August 27, 2020).</a>
5.1**	<a href="#">Opinion of Vinson &amp; Elkins L.L.P. as to the legality of the securities being registered.</a>
23.1**	<a href="#">Consent of Weaver and Tidwell, L.L.P., independent registered public accounting firm for HighPeak Energy, Inc.</a>
23.2**	<a href="#">Consent of Cawley, Gillespie &amp; Associates, Inc.</a>
23.3**	<a href="#">Consent of Vinson &amp; Elkins L.L.P. (included as part of its opinion filed as Exhibit 5.1).</a>
24.1**	<a href="#">Powers of Attorney (included on signatures pages of this registration statement).</a>
99.1	<a href="#">Reserve Report of HighPeak Energy as of December 31, 2024 (incorporated by reference to Exhibit 99.1 to the Company's Annual Report on Form 10-K (File No. 001-39464) filed with the SEC on March 6, 2024).</a>
107**	<a href="#">Calculation of Filing Fee Table.</a>

+ Certain schedules and similar attachments have been omitted pursuant to Item 601(a)(5) of Regulation S-K. HighPeak Energy agrees to furnish a supplemental copy of any omitted schedule or attachment to the SEC upon request.

\* To be filed by amendment or as an exhibit to a current report on Form 8-K of HighPeak Energy, Inc.

\*\* Filed herewith.

# Pursuant to Regulation S-K, Item 601(b)(2), the Exhibits and Schedules to Exhibit 4.1 above, as listed below, have not been filed. The Registrant agrees to furnish supplementally a copy of any omitted Exhibit or Schedule to the SEC upon request; provided, however, that the Registrant may request confidential treatment of omitted items.

Further, certain portions of these exhibits have been omitted and include a prominent statement on the first page that certain identified information has been excluded from the exhibit because it is both (i) not material and (ii) is the type that the registrant treats as private or confidential as required by Item 601(b)(2)(ii) of Regulation S-K. Information that was omitted has been noted in the exhibit with a placeholder identified by the mark "\*\*\*\*" to indicate where omissions have been made.

**Item 17. Undertakings.**

The undersigned registrant hereby undertakes:

- (a) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
  - (ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of a prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
  - (iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(i), (a)(ii) and (a)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (b) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
  - (c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
  - (d) That, for the purpose of determining liability under the Securities Act to any purchaser:
    - (i) each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
    - (ii) each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.
-

- (e) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
- (i) any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
  - (ii) any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
  - (iii) the portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
  - (iv) any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, as amended, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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## SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Fort Worth, State of Texas, on November 4, 2025.

### HIGHPEAK ENERGY, INC.

By: /s/ Michael Hollis  
Michael Hollis  
Chief Executive Officer

Each person whose signature appears below appoints Michael Hollis, Steven W. Tholen and Rodney L. Woodard, and each of them, any of whom may act without the joinder of the other, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and any Registration Statement (including any amendment thereto) for this offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or would do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities indicated below as of November 4, 2025.

<b>Name</b>	<b>Title</b>	<b>Date</b>
<u>/s/ Michael Hollis</u> Michael Hollis	Chief Executive Officer and Director (Principal Executive Officer)	November 4, 2025
<u>/s/ Steven W. Tholen</u> Steven W. Tholen	Chief Financial Officer (Principal Financial Officer)	November 4, 2025
<u>/s/ Keith Forbes</u> Keith Forbes	Vice President and Chief Accounting Officer (Principal Accounting Officer)	November 4, 2025
<u>/s/ Jason A. Edgeworth</u> Jason A. Edgeworth	Director	November 4, 2025
<u>/s/ Jay M. Chernosky</u> Jay M. Chernosky	Director	November 4, 2025
<u>/s/ Keith A. Covington</u> Keith A. Covington	Director	November 4, 2025
<u>/s/ Sharon F. Fulgham</u> Sharon F. Fulgham	Director	November 4, 2025
<u>/s/ Larry C. Oldham</u> Larry C. Oldham	Director	November 4, 2025
<u>/s/ Daniel Silver</u> Daniel Silver	Executive Vice President and Director	November 4, 2025

November 4, 2025

HighPeak Energy, Inc.  
421 W. 3rd Street, Suite 1000  
Fort Worth, Texas 76102

Re: HighPeak Energy, Inc. Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to HighPeak Energy, Inc., a Delaware corporation (the "Company"), with respect to certain legal matters in connection with the preparation and filing of a registration statement on Form S-3 (as amended from time to time, the "Registration Statement"), filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to Rule 415 under the Securities Act, relating to: (a) the offering, issuance and sale, from time to time, by the Company of up to \$300 million of shares of the Company's common stock, par value \$0.0001 per share ("Common Stock") (the "Primary Offering"); (b) the offering, issuance and sale, from time to time, by the selling securityholders identified in the Registration Statement of an aggregate of 108,764,359 shares of Common Stock (the "Outstanding Secondary Shares"). The securities described in the foregoing clauses (a) and (b) are collectively referred to herein as the "Securities."

We have also participated in the preparation of a Prospectus relating to the Securities (the "Primary Prospectus") and a Prospectus relating to the Outstanding Secondary Shares (the "Secondary Prospectus" and, together with the Primary Prospectus, the "Prospectuses") each of which is contained in the Registration Statement to which this opinion is an exhibit.

In rendering the opinions set forth herein, we have read and examined and relied on originals or copies, certified or otherwise identified to our satisfaction, of (a) the amended and restated certificate of incorporation and the amended and restated bylaws of the Company, (b) the Business Combination Agreement, dated May 4, 2020 (as subsequently amended, the "Business Combination Agreement"), by and among (i) Pure Acquisition Corp., (ii) the Company, (iii) Pure Acquisition Merger Sub, Inc., a Delaware corporation and then a wholly owned subsidiary of the Company, (iv) HighPeak Energy, LP, a Delaware limited partnership ("HighPeak I") and (v) HighPeak Energy II, LP, a Delaware limited partnership ("HighPeak II" and, together with HighPeak I, the "HighPeak Funds"), (vii) HPK Energy, LLC, a Delaware limited liability company and the general partner of HPK Energy, LP, a Delaware limited partnership, and an affiliate of HighPeak Pure Acquisition, LLC, a Delaware limited liability company ("HighPeak Acquisition") and (viii) solely for the limited purposes specified therein, HighPeak Energy Management, LLC, a Delaware limited liability company, (c) the Registration Statement and (d) such other certificates, statutes and other instruments and documents that we considered necessary or appropriate for the purpose of rendering the opinions set forth below. We have also reviewed such questions of law as we have deemed necessary or appropriate. As to matters of fact relevant to the opinions expressed herein, and as to factual matters arising in connection with our examination of corporate documents, records and other documents and writings, we have relied upon certificates and other communications of corporate officers of the Company, without further investigation as to the facts set forth therein.

**Vinson & Elkins LLP Attorneys at Law**  
Austin Dallas Denver Dubai Dublin Houston London  
Los Angeles New York Richmond San Francisco Tokyo Washington

Texas Tower, 845 Texas Avenue, Suite 4700  
Houston, TX 77002  
Tel +1.713.758.2222 Fax +1.713.758.2346 velaw.com

In our examination, we have assumed, without independent investigation (a) all information contained in all documents reviewed by us is true and correct; (b) the genuineness of the signatures on all documents that we have examined, (c) the legal capacity of all natural persons, (d) the authenticity of all documents supplied to us as originals, (e) the conformity to the authentic originals of all documents supplied to us as certified, photostatic, facsimile, electronic or otherwise reproduced copies, (f) the authenticity of the originals of such latter documents, (g) that the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective and such effectiveness shall not have been terminated or rescinded and (h) all Securities will be issued and sold, as applicable, in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and the applicable prospectus supplement to the applicable Prospectus, if any.

Based upon the foregoing and subject to the limitations, qualifications, exceptions and assumptions set forth herein, we are of the opinion that the Securities have been duly authorized and:

1. With respect to any shares of Common Stock issued in a Primary Offering, when both (A) the board of directors (the "Board") of the Company (or a committee thereof) has taken all necessary corporate action to approve the issuance of and the terms of the offering of the shares of Common Stock and related matters and (B) certificates representing the shares of Common Stock have been duly executed, countersigned, registered, and delivered (or non-certificated shares of Common Stock shall have been properly issued) either (i) in accordance with the applicable definitive purchase, underwriting, or similar agreement approved by the Board or such officers upon payment of the consideration therefor (not less than the par value of the Common Stock) provided for therein or (ii) upon conversion or exercise of any other Security, in accordance with the terms of such Security or the instrument governing such Security providing for such conversion or exercise as approved by the Board, for the consideration approved by the Board (not less than the par value of the Common Stock), then the shares of Common Stock will be legally issued, fully paid, and nonassessable; and
  2. the Outstanding Secondary Shares are validly issued, fully paid and non-assessable.
-

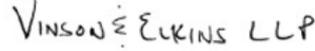
Our opinions expressed herein are limited in all respects to the General Corporation Law of the State of Delaware, which includes all applicable provisions of the Delaware Constitution and the reported judicial decisions interpreting such laws, and the federal laws of the United States of America. We do not express any opinion as to the applicability of, or the effect thereon, of the laws of any other jurisdiction, domestic or foreign.

We express no opinion as to any matter other than as set forth herein, and no opinion may be inferred or implied herefrom. Our opinion is given as of the date hereof, and we undertake no, and hereby disclaim any, obligation to advise you of any change in any matter set forth herein.

Our opinion that any document or Security is a valid and legally binding obligation of the Company is subject to (i) applicable bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium or other similar laws relating to or affecting the rights of creditors generally, (ii) general principles of equity, including without limitation concepts of materiality, reasonableness, good faith and fair dealing, and the possible unavailability of specific performance or injunctive relief and limitation of rights of acceleration, regardless of whether such enforceability is considered in a proceeding in equity or at law and (iii) limitations of rights to indemnification, exculpation and contribution which may be limited by applicable law or equitable principles. We also express no opinion regarding the effectiveness of any waiver of stay, extension or usury laws or of unknown future rights, and we express no opinion regarding severability provisions.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to Vinson & Elkins L.L.P. in the Prospectuses forming a part of the Registration Statement under the caption "Legal Matters." In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act.

Sincerely,

Handwritten signature in blue ink that reads "VINSON & ELKINS LLP". The signature is written in a cursive, slightly stylized font.

Vinson & Elkins L.L.P.

**Consent of Independent Registered Public Accounting Firm**

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 10, 2025, relating to the consolidated financial statements of HighPeak Energy, Inc. appearing in the entity's Annual Report on Form 10-K for the year ended December 31, 2024.

We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/Weaver and Tidwell, L.L.P.  
WEAVER AND TIDWELL, L.L.P.

Austin, Texas  
November 4, 2025

**CAWLEY, GILLESPIE & ASSOCIATES, INC.**  
PETROLEUM CONSULTANTS

6500 RIVER PLCAE BLVD, SUITE 3-200  
AUSTIN, TEXAS 78730-1000  
512-249-7000

306 WEST SEVENTH STREET, SUITE 302 FORT WORTH, TEXAS 76102-4987  
817- 336-2461  
www.egaus.com

1000 LOUISIANA STREET, SUITE 1900  
HOUSTON, TEXAS 77002-5008  
713-651-9944

As independent petroleum engineers, we hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our reserves report and audit letter relating to HighPeak Energy, Inc.'s proved oil and natural gas reserves estimates and associated estimates of future net revenues and their present value as of December 31, 2024. We also consent to the references to our firm contained in the Registration Statement, including in the related prospectus under the caption "Experts."

**CAWLEY, GILLESPIE &  
ASSOCIATES, INC.**  
Texas Registered Engineering Firm

/s/ W. Todd Brooker  
\_\_\_\_\_  
W. Todd Brooker, P.E. President

Austin, Texas  
November 4, 2025

# Calculation of Filing Fee Tables

S-3

## HighPeak Energy, Inc.

Table 1: Newly Registered and Carry Forward Securities

Not Applicable

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective Date	Filing Fee Previously Paid in Connection with Unsold Securities to be Carried Forward
<b>Newly Registered Securities</b>												
Fees to be Paid	1 Equity	Common Stock, par value \$0.0001 per share	Other			300,000,000.00	\$ 0.0001381	\$ 41,430.00				
Fees to be Paid	2 Equity	Common stock, par value \$0.0001 per share	Other	108,764,359		691,741,323.24	\$ 0.0001381	\$ 95,529.48				
Fees Previously Paid												
<b>Carry Forward Securities</b>												
Carry Forward Securities												
Total Offering Amounts:						\$ 991,741,323.24		\$ 136,959.48				
Total Fees Previously Paid:								\$ 0.00				
Total Fee Offsets:								\$ 104,373.74				
Net Fee Due:								\$ 32,585.74				

### Offering Note

1

(1) An indeterminate number of shares of common stock, par value \$0.0001 per share ("common stock") of HighPeak Energy, Inc. (the "Registrant") is being registered as may from time to time be offered hereunder, on a primary basis, at indeterminate prices with an aggregate initial offering price not to exceed \$300,000,000.

(2) Includes such indeterminate amount of securities as may be issued upon exercise, conversion or exchange of, pursuant to anti-dilution adjustments, or pursuant to a stock dividend, stock split or similar transaction with respect to, securities that provide for such issuance, exercise, conversion, exchange, adjustment, stock split or similar transaction. Separate consideration may or may not be received for any of these securities.

2

(3) The proposed maximum aggregate offering price has been calculated pursuant to Rule 457(o) under the Securities Act of 1933, as amended (the "Securities Act"), and reflects the maximum aggregate offering price of securities that may be issued.

(4) Includes 79,706,576 shares of common stock acquired by the selling securityholders at the Closing of the business combination, and through related transactions and any subsequent transfers by selling securityholders.

(5) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) of the Securities Act on the basis of the average of the high and low sale prices of our common stock on October 30, 2025, as reported on the Nasdaq Global Market (the "Nasdaq"), which date is within five business days prior to filing this registration statement.

(6) The proposed maximum offering price per share of our common stock as may be offered on a secondary basis will be determined by the selling securityholders from time to time in connection with, and at the time of, the sale by the selling securityholders of such securities.

(7) On December 17, 2021, the Registrant filed a Registration Statement on Form S-3 (No. 333-261706), which became effective on January 3, 2022 (the "Prior Registration Statement") with the SEC and paid a primary offering (the "primary offering") registration fee of \$27,810.00. An amount of \$144,232,500 remained unsold under the Prior Registration Statement; such primary offering has been terminated and all of such securities remain unsold. Furthermore, the 108,764,359 shares of common stock registered hereunder for sale by the selling stockholder were included in the 117,064,602 shares of common stock (the "secondary unsold stock") registered pursuant to the Prior Registration Statement that were unsold. Pursuant to Rule 457(p) under the Securities Act of 1933, the filing fee of \$136,959.48 due with respect to the primary offering and secondary unsold stock registered hereunder is fully offset by filing fees of \$104,373.74 previously applied under the Prior Registration Statement. Pursuant to Rule 457(p) under the Securities Act, the Registrant hereby offsets the total registration fee due under this registration statement against the fees previously paid in connection with the unsold amount of securities on the Prior Registration Statement. Accordingly, a fee of \$32,585.74 is being paid in connection with the filing of this Registration Statement after an offset amount of \$104,373.74 is applied to this Registration Statement's registration fee.

