

PYROPHYTE ACQUISITION CORP. II
AUDIT COMMITTEE CHARTER

Effective July 16, 2025

I. PURPOSES

The Audit Committee (the “**Committee**”) is appointed by the Board of Directors (the “**Board**”) of Pyrophyte Acquisition Corp. II (the “**Company**”) to assist the Board in its oversight of the accounting and financial reporting processes of the Company and the Company’s compliance with legal and regulatory requirements. To assist the Board in fulfilling its responsibilities, the Committee shall: (A) oversee: (i) audits of the financial statements of the Company; (ii) the integrity of the Company’s financial statements; (iii) the Company’s processes relating to risk management and the conduct and systems of internal control over financial reporting and disclosure controls and procedures; (iv) the qualifications, engagement, compensation, independence and performance of the Company’s independent auditor, and the auditor’s conduct of the annual audit of the Company’s financial statements and any other services provided to the Company; and (v) the performance of the Company’s internal audit function, if any; and (B) produce the annual report of the Committee required by the rules of the U.S. Securities and Exchange Commission (the “**SEC**”).

II. COMMITTEE MEMBERSHIP

A. Composition

The Committee shall consist of at least three members of the Board, subject to applicable phase-in rules of the New York Stock Exchange (the “**NYSE**”). Except as otherwise directed by the Board, a director selected as a Committee member shall continue to be a member for as long as he or she remains a director or until his or her earlier resignation or removal from the Committee. Any member may be removed from the Committee by the Board, with or without cause, at any time. Any vacancy on the Committee shall be filled by majority vote of the Board. No member of the Committee shall be removed except by majority vote of the Board.

B. Chair

The Chair of the Committee shall be appointed from among the Committee members by, and serve at the pleasure of, the Board, shall preside at meetings of the Committee and shall have authority to convene meetings, set agendas for meetings, and determine the Committee’s information needs, except as otherwise provided by the Board or the Committee, provided that if the Board does not so designate a chairperson, the members of the Committee, by a majority vote, may designate a chairperson. In the absence of the Chair at a duly convened meeting, the Committee shall select a temporary substitute from among its members to serve as chair of the meeting.

C. Independence

Each member of the Committee shall be an “independent” director in accordance with applicable listing standards of the NYSE and Rule 10A-3 under the United States Securities Exchange Act of 1934, as amended (the “*Exchange Act*”), as well as the Company’s Corporate Governance Guidelines, subject to any exceptions or cure periods that are applicable pursuant to the foregoing requirements and the phase-in periods permitted under the rules of the NYSE under which the Committee is required to have only one independent member at the time of listing, a majority of independent members within 90 days of listing and all independent members within one year of listing. Any action duly taken by the Committee shall be valid and effective, whether or not the members of the Committee at the time of such action are later determined not to have satisfied the requirements for membership provided herein.

D. Financial Literacy

Each member of the Committee shall in the judgment of the Board have the ability to read and understand fundamental financial statements and otherwise meet the financial literacy requirements of the NYSE. At least one member shall be an “audit committee financial expert” as such term is defined under applicable SEC rules.

E. Service on Multiple Audit Committees

No member of the Committee may serve on the audit committee of more than three public companies, including the Company, unless the Board has determined that such simultaneous service would not impair the ability of such member to effectively serve on the Committee.

III. AUTHORITY

In discharging its role, the Committee is empowered to inquire into any matter that it considers appropriate to carry out its responsibilities, with access to all books, records, facilities and personnel of the Company, and, subject to the direction of the Board, the Committee is authorized and delegated the authority to act on behalf of the Board with respect to any matter it determines to be necessary or appropriate to the accomplishment of its purposes.

The Committee shall have authority to retain, direct and oversee the activities of, and to terminate the engagement of, the Company’s independent auditor and any other accounting firm retained by the Committee to prepare or issue any other audit report or to perform any other audit, review or attest services and any legal counsel, accounting or other advisor or consultant hired to assist the Committee, all of whom shall be accountable to the Committee.

The Company shall provide the Committee with appropriate funding, as determined by the Committee, for the payment of (a) compensation to any registered public accounting firm engaged for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company; (b) compensation to any independent counsel or other advisers retained by the Committee in carrying out its duties; and (c) ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

IV. COMMITTEE MEETINGS

The Committee shall meet on a regularly scheduled basis at least four times per year and additionally as circumstances dictate.

The Committee shall establish its own schedule of meetings. The Committee may also act by unanimous written consent of its members.

Notice of meetings shall be given to all Committee members or may be waived, in the same manner as required for meetings of the Board. Meetings of the Committee may be held by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear and speak with each other. A majority of the members of the Committee shall constitute a quorum for a meeting and the affirmative vote of a majority of members present at a meeting at which a quorum is present shall constitute the action of the Committee. The Committee shall otherwise establish its own rules of procedure.

The Committee shall meet in executive session separately with each of the independent auditor, the internal auditor, if any, and with senior management, at least quarterly. At the end of each of the Committee's regularly scheduled meetings, and more frequently as deemed necessary, the Committee shall meet in private session with only the Committee members.

V. DELEGATION

The Committee, by resolution approved by a majority of the Committee, may form and delegate any of its responsibilities to a subcommittee so long as such subcommittee is solely comprised of one or more members of the Committee and such delegation is not otherwise inconsistent with law and applicable rules and regulations of the SEC and the NYSE.

VI. KEY RESPONSIBILITIES

The Committee relies on the expertise and knowledge of management, the internal auditors, if any, and the independent auditor in carrying out its oversight responsibilities. Management is responsible for the preparation, presentation, and integrity of the Company's financial statements, for the appropriateness of the accounting principles and reporting policies that are used by the Company, and for establishing and maintaining effective internal control over financial reporting. The independent auditor is responsible for auditing the Company's financial statements and, if applicable, the Company's internal control over financial reporting, and for reviewing the Company's unaudited interim financial statements.

The responsibilities set forth in this charter do not reflect or create any duty or obligation of the Committee to plan or conduct any audit; to determine or certify that the Company's financial statements are complete, accurate, fairly presented or in accordance with generally accepted accounting principles ("*GAAP*") or applicable law; to guarantee or otherwise certify as to the independent auditor's reports; to conduct investigations; or to assure compliance with laws and regulations or the Company's code of business conduct and ethics, internal policies, procedures and controls. The following responsibilities are set forth as a guide for fulfilling the Committee's purposes in such manner as the Committee determines is appropriate.

A. Oversight of the Independent Auditor

- (i) Independent Auditor Retention.** The Committee is solely and directly responsible for the appointment, evaluation, compensation, retention and, if appropriate, replacement of the independent auditor. The Committee may, in its discretion, seek stockholder ratification of the public accounting firm selected to be the Company's independent auditor.
- (ii) Independence.** The Committee shall assess at least annually the independent auditor's independence. In connection with this assessment, the Committee shall ensure the receipt of and review formal written statements from the independent auditor delineating all relationships between the auditor and the Company, consistent with applicable requirements of the Public Company Accounting Oversight Board ("**PCAOB**") regarding the independent auditor's communications with the Committee concerning independence. The Committee shall engage in an active dialogue with the independent auditor concerning any disclosed relationships or services that may impact the objectivity and independence of the auditor and take, or recommend that the Board take, appropriate action to oversee and ensure the independence of the auditor.
- (iii) Quality and Performance.** The Committee shall evaluate at least annually the qualifications and performance of the independent auditor, including the lead partner. The evaluation will include obtaining a written report from the independent auditor describing the firm's internal quality control procedures; any material issues raised by the most recent internal quality control review, PCAOB inspection, or other PCAOB review of the firm, by a peer review of the firm or by any inquiry or investigation by governmental or professional authorities within the past five years, concerning an independent audit or audits carried out by the firm, and any steps taken to address any such issues.
- (iv) General Oversight.** The independent auditor reports directly to the Committee. The Committee is responsible for oversight of the work of the independent auditor, including resolution of disagreements between management and the independent auditor regarding financial reporting. In connection with its oversight responsibility, the Committee shall consider the independent auditor's communications regarding, among other things, critical accounting policies and practices, all alternative accounting treatments within GAAP related to items material to the financial statements that have been discussed with management, including the ramifications of the alternative treatments and the treatment preferred by the independent auditor, and all material written communications between the independent auditor and management, and shall review the effect or potential effect of any regulatory regime, accounting initiatives or off-balance sheet structures on the Company's financial statements.
- (v) Audit Oversight.** The Committee shall establish with the independent auditor an understanding of the terms of the audit engagement, the role of the auditor with

respect to the Company's financial statements and coordination of audit efforts to ensure completeness of coverage, reduction of redundant efforts, the effective use of audit resources, and the use of accounting firms other than the appointed auditors of the Company. The Committee shall review the scope of the annual audit or interim review (including the level of involvement with unaudited quarterly or other interim-period information), and discuss the results, including, without limitation, the independent auditor's report and all matters required to be communicated to the Committee by the independent auditor in accordance with applicable auditing standards.

The Committee shall discuss with the independent auditor, before the issuance of the audit report, the overall audit strategy, including the timing of the audit, significant risks the auditor identified and significant changes to the planned audit strategy or identified risks. The Committee shall review with the independent auditor any audit problems or difficulties encountered during the course of the audit work and management's response, including any restrictions on the scope of the independent auditor's activities or access to required records, data and information, any difficult or contentious matters for which the auditor consulted outside the engagement team (for example, the audit firm's national office), any significant disagreements with management, and any other matters arising from the audit that are significant to the oversight of the Company's financial reporting process.

(v) **Auditor Rotation.** The Committee shall consider whether, in addition to assuring the regular rotation of the lead audit partner as required by law, in the interest of assuring continuing independence of an independent auditor, the Company should regularly rotate the firm appointed as the Company's independent auditor.

(vi) **Pre-Approval of Auditor Services.** The Committee is exclusively authorized and directed to consider and, in its discretion, approve in advance any services (including the fees and material terms thereof) proposed to be carried out for the Company by the independent auditor or by any other firm proposed to be engaged by the Company as its independent auditor. In connection with approval of any permissible tax services and services related to internal control over financial reporting, the Committee shall discuss with the independent auditor the potential effects of such services on the independence of the auditor.

B. Financial Statements and Other Financial Disclosures

(i) **Quality and Integrity of Financial Statements.** The Committee shall review and discuss with management and the independent auditor: the critical accounting policies and practices used by the Company, and any significant changes in the selection or application of the Company's accounting and auditing principles and

practices as suggested by the Company's independent auditor, internal auditors, if any, or management; the accounting treatment to be applied in respect of significant new transactions or other significant events not in the ordinary course of the Company's business; other policies and procedures adopted by the Company to fulfill its responsibilities regarding the presentation of financial statements in accordance with GAAP and applicable rules and regulations of the SEC, including the proper explanation and reconciliation of any non-GAAP measures presented; and any issues that arise with respect to the quality or integrity of the Company's financial statements.

- (ii) ***Audited Financial Statements.*** The Committee shall review and discuss with management and the independent auditor, before the issuance of the audit report, the financial statements and related notes and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" proposed to be included in the Company's Annual Report on Form 10-K. In this connection, the Committee shall review and discuss with management and the independent auditor the analyses prepared by management setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements (including analyses of the effects of alternative GAAP methods on the financial statements), and such other matters for which discussion shall be required by applicable auditing and related PCAOB standards. The Committee shall make a recommendation to the Board as to whether such financial statements should be included in the Company's Annual Report on Form 10-K.
- (iii) ***Audit Committee Report.*** The Committee shall annually prepare an audit committee report for inclusion where necessary in the proxy statement relating to the annual meeting of stockholders and/or annual report of the Company.
- (iv) ***Quarterly Financial Statements.*** The Committee shall review and discuss with management and the independent auditor the quarterly financial statements and related notes and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" proposed to be included in the Company's Quarterly Reports on Form 10-Q, together with the analyses prepared by management setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, and such other matters for which discussion shall be required by applicable auditing standards and related PCAOB standards.
- (v) ***Earnings Releases and Other Financial Information.*** The Committee shall discuss with management and the independent auditor and, prior to issuance, review and approve the Company's earnings releases, including the financial information, use of any "pro forma" or "adjusted" non-GAAP information, and earnings guidance (if such is provided) to be disclosed in such releases. The Committee shall also discuss with management other significant financial information to be provided to analysts or rating agencies.

- (vi) **Payments.** The Committee shall review on a quarterly basis all payments made to the Company's sponsor, officers or directors, or to the Company's or their affiliates.

C. Controls and Procedures

- (i) **Oversight.** The Committee shall provide oversight of management's design and maintenance of the Company's internal control over financial reporting and disclosure controls and procedures. Prior to the filing of the Company's Annual Report on Form 10-K, the Committee shall review with the independent auditor, management and the head of the internal audit function, if any: the Company's annual assessment and report and the independent auditor's report on the effectiveness of the Company's internal control over financial reporting, to the extent then applicable; any "material weakness" or "significant deficiency" in the design or operation of internal control over financial reporting, any steps taken to resolve any such control deficiencies and the adequacy of disclosures about changes in internal control over financial reporting; and any related significant findings and recommendations of the independent auditor or internal audit function, if any, together with management's responses (including, in the case of the independent auditor, any concerns regarding matters within the scope of, and compliance with, Section 10A of the Exchange Act).
- (ii) **Certifications.** The Committee shall review and discuss with management and the independent auditor the certifications and any related disclosures made by the Company's Chief Executive Officer and Chief Financial Officer in the Company's periodic reports about the results of their evaluation of the effectiveness of disclosure controls and procedures and any significant deficiencies or material weaknesses in the design or operation of internal control over financial reporting, and any fraud involving management or other employees who have a significant role in the Company's internal control over financial reporting, prior to the filing of the Company's Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q.
- (iii) **Internal Audit Function.** At least annually, the Committee shall review with the independent auditor the responsibilities, budget, staffing, effectiveness and performance of the internal audit function, if any, including the structure, qualification and activities of the internal audit function and the scope of internal audit responsibilities in relation to the independent auditor's duties. The Committee shall review and assess the annual internal audit plan, if any, the process used to develop the plan, and the status of activities, significant findings, recommendations and management's response. The Committee shall recommend for Board approval all matters related to responsibilities, budget and staffing of the internal audit function, if any. The Committee shall recommend for Board approval the appointment and, if appropriate, replacement of the senior internal audit executive.

- (iv) **Hiring Policies.** The Committee shall establish clear policies regarding the hiring of employees and former employees of the Company's independent auditor.

D. Risk Management, Compliance and Ethics

- (i) **Risk Management.** The Committee shall review and discuss with management, the head of the internal audit function, if any, and the independent auditor any significant risks or exposures and the Company's policies and processes with respect to risk assessment and risk management, and shall assess the steps management has taken to monitor and control such risks, except with respect to those risks for which oversight has been assigned to other committees of the Board or retained by the Board. The Committee shall review the Company's annual disclosures concerning the role of the Board in the risk oversight of the Company.
- (ii) **Legal and Regulatory Compliance.** The Committee shall review and assess with the Chairman, Co-Chairman or Co-Executive Chairman of the Board or outside counsel, as appropriate, legal and regulatory matters that may have a material impact on the Company's financial statements. The Committee shall also review and recommend for Board approval the code of business conduct and ethics and any other appropriate compliance policies, and will review requests for waivers under the code of business conduct and ethics sought with respect to any executive officer or director. The Committee shall review annually with the Chairman, Co-Chairman or Co-Executive Chairman of the Board or outside counsel, as appropriate, the scope, implementation and effectiveness of the ethics and compliance program, and any significant deviations by officers and employees from the code of business conduct and ethics or other compliance policies, and other matters pertaining to the integrity of management.
- (iii) **Procedures for Complaints.** The Committee shall establish "whistleblowing" procedures for (a) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and (b) the confidential, anonymous submission by the Company's employees of concerns regarding questionable accounting or auditing matters. The Committee shall review any such significant complaints or concerns.
- (iv) **Review and Approval of Swap Transactions.** The Committee shall at least annually review and approve the Company's decision to enter into swaps and other derivative transactions that are exempt from exchange-execution and clearance requirements under "end-user exception" regulations, and review and discuss with management applicable Company policies governing the Company's use of swaps subject to the end-user exception.
- (v) **Related Person Transactions.** The Committee shall review and, if appropriate, approve or ratify any related person transactions and other significant conflicts of

interest, in each case in accordance with the Company's Code of Business Conduct and Ethics and Related Party Transactions Policy.

E. Self-Evaluation and Reporting

(i) Self-Evaluation and Charter Review. The Committee shall conduct an annual self-evaluation of the performance of the Committee, including its effectiveness and compliance with this charter, and recommend to the Board such amendments of this charter as the Committee deems appropriate.

(ii) Reporting. The Committee shall report regularly to the Board on Committee findings and recommendations and any other matters the Committee deems appropriate or the Board requests, and maintain minutes or other records of Committee meetings and activities.

The Committee shall undertake such other responsibilities or tasks as the Board may delegate or assign to the Committee from time to time.