

## **PYROPHYTE ACQUISITION CORP. II CORPORATE GOVERNANCE GUIDELINES**

**Effective July 16, 2025**

The Board of Directors (the “**Board**”) of Pyrophyte Acquisition Corp. II (the “**Company**”) has adopted these Corporate Governance Guidelines (the “**Guidelines**”) to assist the Board in its exercise of its responsibilities, to assist the Board in complying with the New York Stock Exchange (the “**NYSE**”) rules and other legal requirements. These Guidelines reflect the Board’s judgment as it relates to sound corporate governance practices by which the Board oversees the Company’s business affairs. These Guidelines are not intended to change or interpret any federal or state law or regulation or the Memorandum and Articles of Association of the Company (as it may be amended or restated from time to time, the “**Charter**”). These Guidelines are subject to change from time to time by the Board in its sole discretion.

### **I. BOARD COMPOSITION AND DIRECTOR QUALIFICATIONS**

#### ***A. Board Membership Criteria***

Subject to the terms of any stockholders’ agreement that sets forth procedures governing the nomination of directors to the Board or if the Company is otherwise required to provide third parties with the ability to nominate directors, the Nominating and Corporate Governance Committee (the “**Governance Committee**”) is responsible for reviewing the background and qualifications of individuals being considered as director candidates and recommending any proposed changes to the Board. Among the qualifications considered in the selection of candidates, the Governance Committee will look at the following attributes and criteria of candidates: experience, skills, expertise, diversity, personal and professional integrity, character, business judgment, time availability in light of other commitments, dedication and conflicts of interest. The Governance Committee may, if it deems appropriate, establish procedures to be followed by stockholders in submitting recommendations for Board candidates and the Governance Committee’s policies for consideration of Board candidates recommended by stockholders.

#### ***B. Independent Directors***

The Company defines an “independent” director in accordance with Section 303A.02 of the NYSE Listed Company Manual. Subject to the phase-in rules of the NYSE, the Board will be composed of a majority of independent directors. Whether directors are independent will be reviewed annually in connection with the preparation of the Company’s proxy statement. The Governance Committee, as well as the Board, will review commercial and other relationships between directors and the Company to make a determination regarding the independence of each of the directors, but the final independence determination will be made by the Board after due deliberation.

#### ***C. Directors Who Cease to be Independent***

An independent director who ceases to qualify as such after election to the Board will be required to tender a resignation as a director promptly to the Governance Committee. The Governance Committee will consider the tendered resignation and recommend to the Board whether to accept or reject the resignation, taking into consideration the effect of such change on the interests of the Company.

#### ***D. Directors Who Change Their Job Responsibility***

When a director’s principal occupation or business association changes substantially from that which he or she held when originally invited to join the Board (including retirement), he or she will be required to tender a resignation as a director promptly to the Governance Committee. The Governance Committee will consider the tendered resignation and recommend to the Board whether to accept or reject the resignation, taking into consideration the effect of such change on the interests of the Company.

#### ***E. Resignation, Retirement or Refusal to Stand for Reelection***

In the event that a director intends to resign or retire from, or refuse to stand for reelection to, the Board, he or she must tender written notice of such intent directly to the Chairman of the Board (the “**Chairman**”) and the Chief Executive Officer, who will share such notice with legal counsel. The Board, taking into account any recommendation of the Governance Committee, shall determine the action, if any, to be taken with respect to such notice. Except as may be provided in the Charter, there are no established limits for retirement from the Board.

#### ***F. Board Tenure***

Except as may be provided in the Charter, there are no established term limits for service on the Board. Directors shall be elected for the terms provided in the Charter. The Board may nominate a director for reelection based on the recommendation of the Governance Committee.

#### ***G. Notification of Additional Board Service***

Directors will advise the Chairman and the chairperson of the Governance Committee in advance of accepting an invitation to serve on another company board. Service on boards and committees of other organizations should be consistent with the Company’s Code of Business Conduct and Ethics. If a member of the Company’s Audit Committee serves on more than two audit committees, the Board will determine whether such simultaneous service impairs the director’s ability to serve effectively on the Company’s Audit Committee. The Board does not feel that it is appropriate to limit the number of company boards on which directors may serve.

### **II. BOARD OF DIRECTORS RESPONSIBILITIES**

The business affairs of the Company are managed under the direction of the Board. The Board believes that the primary responsibilities of directors are to exercise their business judgment in good faith and to act in what they reasonably believe is in the best interests of the Company and its stockholders. Directors must fulfill their responsibilities consistent with their fiduciary duty to stockholders, in compliance with all applicable rules and regulations and subject to the provisions of the Charter. In forming his or her judgment, each director is entitled to rely in good faith on the accuracy of the records of the Company and the information, opinions, reports or statements presented by the Company’s officers, employees, Board committees, outside advisors and auditors. In discharging that obligation, directors are entitled to rely on the honesty and integrity of the Company’s senior executives and its outside advisors and auditors.

### **III. BOARD MEETINGS AND PROCEDURES**

#### ***A. Meeting Frequency***

Following the Company’s initial business combination, the Board will hold at least one regularly scheduled meeting each quarter.

#### ***B. Chairman of the Board***

The Chairman will preside over all meetings of the directors, be responsible for the agenda at all meetings of the Board and will preside over meetings of stockholders. The Chairman will convey recommendations of the independent directors to the Board and will be the liaison between the Board and the management of the Company. The Chairman will preview information sent to the Board as necessary and approve meeting schedules to assure that there is sufficient time for discussion of all agenda items.

#### ***C. Agenda Items***

Each director is free to suggest agenda items to the Chairman and to raise at any meeting topics not on the agenda.

#### ***D. Attendance***

All directors are expected to make reasonable best efforts to attend all meetings of the Board, meetings of the committees of which they are members and the annual meeting of stockholders. Members are encouraged to attend Board meetings and meetings of committees of which they are members in person, but may also attend such meetings by telephone or video conference.

#### ***E. Meeting Materials and Preparation***

Information and materials important to the Board's understanding of topics expected to be discussed at meetings should, to the extent practical, be distributed sufficiently in advance to permit prior review. In the event of a meeting on short notice, or if materials would contain highly confidential or sensitive information, it is recognized that written materials might not be available in advance.

Each director should be sufficiently familiar with the business of the Company, including its financial statements and capital structure, and the risks and competition it faces, to facilitate active and effective participation in the deliberations of the Board and of each committee on which he or she serves. Management will make appropriate personnel available to answer any questions a director may have about any aspect of the Company's business. Directors should also review the materials provided by management and advisors in advance of the meetings of the Board and its committees and should arrive prepared to discuss the issues presented.

#### ***F. Separate Sessions of Non-Management Directors***

Non-management directors will meet regularly, in executive session, without management. If not a member of management, the Chairman will preside in executive session. If the Chairman is absent or disqualified, the chairperson of the Audit Committee, if independent, will preside. If the chairperson of the Audit Committee is absent, or not independent, an independent director designated by the other independent directors will preside.

In the event that the non-management directors include directors who are not independent, the Company will, at least once a year, schedule an executive session including only independent directors.

### **IV. DIRECTOR COMMUNICATIONS**

#### ***A. Director Communications with Management and Outside Advisors***

It is management's job to formulate, propose and implement strategic choices and the Board's role to approve and evaluate strategic direction and results. However, the Board and management are better able to perform their responsibilities if there is an ongoing dialogue among the Chief Executive Officer, other senior managers and Board members. To facilitate these discussions, directors will have access to the Company's senior management team. The Board and its committees shall have the right at any time to retain independent outside accounting, financial, legal or other advisors, and the Company shall provide appropriate funding, as determined by the Board or any committee, to compensate such independent outside advisors, as well as to cover the ordinary administrative expenses incurred by the Board and its committees in carrying out their duties. In the event that the Board proposes to incur any material expenses not expressly covered by these Guidelines, the Charter, the Company's Bylaws or the charters of the Board's various committees, the Board shall discuss such expenses with the Company's senior management team prior to incurring such expenses.

#### ***B. Board Interaction with Institutional Investors, Analysts, Press and Customers***

Generally, management should speak for the Company. Each director should refer all inquiries from institutional investors, analysts, the press or customers to the Chief Executive Officer or his or her designee.

### **V. DIRECTOR COMPENSATION**

The Board, upon the recommendation of the Compensation Committee, will establish the form and amount of compensation to be paid to directors following the Company's initial business combination, if any, and review this compensation each year.

## **VI. DIRECTOR ORIENTATION AND CONTINUING EDUCATION**

The Company will provide each new director with an orientation packet to familiarize him or her with, among other things, the Company's (i) initial business combination plan or, following its initial business combination, its business and strategic plans, (ii) significant financial, accounting and risk management issues, (iii) compliance programs, (iv) Code of Business Conduct and Ethics, (v) Policy Regarding Insider Trading and Dissemination of Inside Information, (vi) Guidelines, (vii) principal officers and (viii) independent auditors.

Each director is expected to be involved in continuing director education on an ongoing basis to enable him or her to better perform his or her duties and to recognize and deal appropriately with issues that arise, if prior to the Company's initial business combination, in light of the Company's goal of finding an initial business combination target and completing an initial business combination. The Company will pay all reasonable expenses related to the continuing director education.

## **VII. COMMITTEES OF THE BOARD**

### ***A. Number, Structure and Appointment of Committee Members***

The Board shall have at all times three (3) standing committees: (i) an Audit Committee; (ii) a Compensation Committee; and (iii) a Nominating and Corporate Governance Committee. All members of these committees shall be independent directors, subject to the phase-in rules of the NYSE, and shall be appointed by the Board upon recommendation of the Governance Committee. The Board may, from time to time, establish or maintain additional committees as necessary or appropriate.

### ***B. Committee Charters***

Each committee shall discharge its responsibilities in accordance with its own charter. Each committee charter shall set forth: the purposes, goals and responsibilities of the committee; qualifications for membership on the committee; and committee structure and operations. Each committee charter shall also specify procedures for committee member appointment and removal, as well as require that the committee annually evaluate its performance and report its assessment to the Governance Committee.

### ***C. Committee Meetings***

The chairperson of each committee, in consultation with committee members, shall determine the frequency and length of committee meetings unless otherwise provided in the charter for such committee. The chairperson of the committee, in consultation with committee members and appropriate members of management, shall establish the committee's meeting agenda. Each committee member may recommend items for inclusion on the committee's meeting agenda.

## **VIII. LEADERSHIP DEVELOPMENT**

### ***A. Evaluation of the Chief Executive Officer***

In accordance with the terms of its charter, the Compensation Committee will conduct an annual review of the Chief Executive Officer's performance and report its conclusions to the independent directors of the Board. The evaluation should be based on objective criteria including, but not limited to, the performance of the Company's business, accomplishment of the Company's goal of completing an initial business combination and, thereafter, its long-term and short-term strategic objectives and management development.

### ***B. Succession Planning***

From and after the completion of the Company's initial business combination, the Compensation Committee, in consultation with the Chief Executive Officer, shall annually report to the Board on succession planning, which shall include emergency Chief Executive Officer succession, Chief Executive Officer succession in the ordinary course and succession for other members of senior management. The entire Board will work with the Compensation Committee to evaluate potential successors to the Chief Executive Officer. The Chief Executive Officer should at all times make

available his or her recommendations and evaluations of potential successors, along with a review of any development plans recommended for such individuals.

#### **IX. ANNUAL PERFORMANCE EVALUATION OF THE BOARD**

The Board will conduct an annual self-evaluation to determine whether it and its committees are functioning effectively. The Governance Committee shall be responsible for conducting this evaluation by annually assessing the performance of the Board and its committees, and reporting its conclusions to the full Board. In performing its review, the committee shall solicit and consider the input of all of the directors through an evaluation process in which each director is asked to critically evaluate the performance of the Board and each committee on which he or she serves. At the discretion of the committee, this review may, from time to time, include input from each director on the performance of each other Board member. Candor shall be encouraged by ensuring that evaluations are and remain anonymous. This responsibility is in addition to, and shall be coordinated with, the committee's responsibility to annually assess whether the appropriate balance of skills and characteristics are represented on the Board.

#### **X. COMMUNICATING WITH THE BOARD**

Stockholders are invited to communicate to the Board, its committees, the Chairman or with non-management and independent directors as a group by writing to: Pyrophyte Acquisition Corp. II., 3262 Westheimer Road, Suite 706, Houston, Texas 77098

#### **XI. GUIDELINES**

The Governance Committee reviews these Guidelines periodically and recommends amendments to the Board as necessary. These Guidelines are posted on the Company's website.