WESTERN NEW ENGLAND BANCORP, INC.

FINANCE AND RISK MANAGEMENT COMMITTEE CHARTER

As of October 28, 2025

Purpose

The Finance and Risk Management Committee (the "Committee") of Western New England Bancorp, Inc. (the "Company") is a standing committee of the Board of Directors (the "Board"). The purpose of the Committee is to assist the Board and the Executive Committee of the Board in fulfilling its responsibility with respect to (1) oversight of Company's enterprise risk management framework and the governance structure that supports it, and (2) oversight of Company's policies and practices relating to financial matters, including but not limited to, capital, liquidity and financing, as well as to merger, acquisition and divestiture activity ("M&A").

The Committee's role includes assisting the Board in the oversight of the guidelines, policies and processes for monitoring and mitigating overall enterprise risks. Generally, these risks can be categorized in the following risk classifications: credit, operational, liquidity, interest rate, price, compliance, technology, cybersecurity and strategic, including emerging risks. The Committee shall perform duties and responsibilities enumerated in, and consistent with, this Charter and shall consider risk in relation to the potential for growth and increase in shareholder value in compliance with safe and sound banking practices. The Committee also will, as directed by the Executive Committee or the Board, review financial strategic planning, corporate financial statements, projects or initiatives.

The Committee has responsibility for approval of the risk governance and financial strategy frameworks, oversight, and review. Executive and senior management of the Company ("Management") is responsible for risk assessment and risk management, financial initiatives and review, and M&A policies.

Membership

The Committee will consist of at least three members of the Board of Directors. The members of the Committee and the Committee Chair shall be appointed by, and may be removed by, the Board of Directors based upon recommendations from the Nominating and Corporate Governance Committee. Committee membership shall be rotated periodically. Newly appointed Committee members shall complete an orientation schedule with members of Management and the Committee Chair to fully understand their role and responsibilities associated with serving on this Committee.

Structure and Operations

The Committee shall meet as often as it determines necessary, but not less than three times per year at such times and places as it deems necessary to fulfill its responsibilities. The Committee shall maintain minutes of its meetings and report regularly to the Board regarding its actions and make recommendations to the Board as appropriate. The Committee is governed by the same rules regarding meetings (including meetings in person or by telephone or other similar communications equipment), action without meetings, notice, waiver of notice, and quorum and voting requirements as are applicable to the Board.

The Committee shall meet periodically with Management, including the Chief Risk Officer, the Chief Financial Officer and other members of Management.

The Committee shall review this Charter at least annually and recommend any proposed changes to the Board for approval.

Authority; Delegation of Authority

In furtherance of its duties, the Committee shall have direct access to, and receive regular reports from, Management, including but not limited to, the Chief Executive Officer, Chief Risk Officer, the Chief Financial Officer, the Chief Information Officer and General Counsel and shall be provided any information it requests relating to its responsibilities. The Committee is empowered to approve and amend policies and programs falling under its purview. The Committee shall have the power to conduct reviews into any matter within its scope of responsibilities.

The Committee may form and delegate authority to subcommittees, composed of one or more members of the Committee, as necessary or appropriate. Each subcommittee shall have the full power and authority of the Committee.

Duties and Responsibilities

The Committee shall have the following duties and responsibilities:

Oversight of Risk Management

- The Committee shall review and approve the level and nature of risks that the Company is willing to assume for its material activities and communicate in the form of a measurable Risk Appetite Statement. The Committee will monitor the Company's performance to ensure alignment with the tolerance levels articulated in the Risk Appetite Statement through the use of risk assessments, risk indicators, and stress testing results.

- The Committee shall receive information from the Chief Risk Officer and other Management, and approve recommendations for actions or other steps to be taken, as deemed appropriate, on items relating to the categories of risk, including credit, operational, liquidity, interest rate, price, compliance, technology, cybersecurity and strategic significant concentrations within those risk categories and the metrics used to monitor the level of risk.

- In accordance with the FFIEC advisory bulletin issued in 2015 and as since amended, the Committee shall annually review with the Chief Information Officer the Company's Business Continuity Plan (the "BCP"), the BCP Policy, BCP testing results and the Company's Pandemic Plan and Cyber Incident Response Plan and programs, including escalation protocols with respect to the prompt reporting of material cyber incidents to the Committee and the Board. The Committee shall further review with Management and report to the Board any cyber incident disclosure reports to or from regulators with respect thereto, and the root cause and remediation/enhancement efforts with respect thereto.

- The Committee shall review the independence and authority of the Enterprise Risk Management function.

- The Committee shall review the adequacy and frequency of risk reporting to the Board.

- The Committee shall perform other activities related to this Charter as requested by the Board and its Executive Committee.

Oversight of Financial, Capital Management and M&A Matters

- The Committee shall receive information from the Chief Financial Officer and other members of Management, and approve recommendations for actions or other steps to be taken, as deemed appropriate, on items relating to liquidity, repurchase plans and cash dividends.

- The Committee shall review the Company's balance sheet, capital, funding, interest rate and liquidity management framework, including significant policies, processes, and systems that Management uses to manage financial performance.

- The Committee shall review reports from Management concerning the Company's balance sheet structure.

- The Committee shall review reports from Management concerning the Company's liquidity, deposit gathering, and loan and funding activities.

- The Committee shall review reports from Management concerning the Company's regulatory capital levels and capital structure.

- The Committee shall review and make recommendations to the Board with respect to regular and special dividends on the Company's common stock.

- The Committee shall review and make recommendations to the Board with respect to open market repurchases of the Company's common stock.

- The Committee shall review major expenditures, as directed by the Executive Committee or the Board.

- The Committee shall receive reports on the Company's strategy with respect to merger, acquisition and divestiture activity and review and make recommendations to the Board as required under the bylaws of the Company.

Other Responsibilities

- The Committee shall participate in educational sessions to enhance the Committee's familiarity with risk and finance related issues.

- The Committee shall perform such other functions as may be mandated by regulatory requirements applicable to such committees or delegated by the Board.

- The Committee shall review significant pronouncements and changes to key regulatory requirements relating to the risk management area to the extent they apply to the Company.

- The Committee shall share information with the Audit Committee of the Board of Directors as necessary and appropriate to permit the Audit Committee to carry out its statutory, regulatory and other responsibilities.

- The Committee shall review summaries of regulatory examination reports pertaining to matters that are within the purview of the Committee and Management's responses thereto.

Outside Advisors

The Committee shall have the authority, in its sole discretion, to retain and obtain the advice and assistance of consultants, independent outside counsel and such other advisors as it deems necessary to fulfill its duties and responsibilities under this Charter. The Committee shall set the compensation, and oversee the work, of any consultants, outside counsel and other advisors. The Committee shall receive appropriate funding from the Company, as determined by the Committee in its capacity as a committee of the Board, for the payment of compensation to its consultants, outside counsel and any other advisors.

Performance Evaluation

The Committee shall conduct an annual evaluation of the performance of its duties under this Charter and shall present the results of the evaluation to the Board. The Committee shall conduct this evaluation in such manner as it deems appropriate.