Enterprise Financial Services Corp Human Capital and Compensation Committee Charter Approved August 20, 2025

I. Purpose

The Board of Directors (the "Board") of Enterprise Financial Services Corp ("EFSC") has established the Human Capital and Compensation Committee (the "Committee") to assist the Board in discharging the Board's responsibilities relating to compensation of the executive officers of EFSC and its subsidiaries, including Enterprise Bank & Trust (the "Bank", and together with EFSC and its subsidiaries, collectively, the "Company") and approving and monitoring compensation policies, practices and programs for the Company. The Committee is also responsible for strategic level oversight of the Company's human capital management function.

II. Membership

The Committee will be comprised of at least three (3) members of the Board, who shall also serve as members of the Board of Directors of the Bank (the "Bank Board"), and who also meet the qualifications set forth in this paragraph. No director may serve on the Committee unless the Board determines (on recommendation of the Nominating and Governance Committee) he or she is a non-employee director for purposes of Rule 16b-3 under the Securities Exchange Act of 1934, meets the applicable independence standards established by the listing rules of the NASDAQ Stock Market (the "Independence Rules"), and, for the purpose of approving qualified performance-based compensation that has been grandfathered under Section 162(m) of the Internal Revenue Code, satisfies the requirements of being an "outside director" for purposes of Section 162(m) of the Code.

The Committee members shall be recommended by the Nominating and Governance Committee and appointed by the Board. The Committee members shall serve until their successors shall be duly appointed or their earlier resignation or removal. Any vacancy on the Committee may be filled by the Board, upon recommendation of the Nominating and Governance Committee. The chairperson of the Committee shall be recommended by the Nominating and Governance Committee and appointed by the Board.

III. Meetings

The Committee shall meet as often as its members deem necessary to carry out its responsibilities, but in any case, shall meet at least twice per year. Meetings of the Committee may be held in person, telephonically, virtually or in any manner permitted by law or the EFSC Bylaws or Certificate of Incorporation. Except as otherwise required by the EFSC Bylaws or Certificate of Incorporation, a majority of the members of the Committee shall constitute a quorum for the transaction of business, and the act of a majority of the members present at any meeting at which there is a quorum shall be the act of the Committee.

The chairperson of the Committee shall be responsible for scheduling all meetings of the Committee and providing the Committee with a written agenda for each meeting, provided that a meeting of the Committee may be called by a majority of the members of the Committee. The agenda and information concerning the business to be conducted at each Committee meeting shall, to the extent practicable, be communicated to members sufficiently in advance of each meeting to permit meaningful review. The chairperson of the Committee shall preside at the meetings of the Committee. In the absence of the chairperson, the majority of the members of the Committee present at a meeting shall appoint a member to preside at the meeting.

The chairperson of the Committee will report regularly to both the EFSC Board and the Bank Board on the Committee's activities, findings and recommendations, as applicable. All actions of the Committee shall be reported, as applicable, to the EFSC Board and the Bank Board at the next regularly scheduled meeting. The Secretary or an Assistant Secretary of the Company, or such other person appointed by the Committee (which may include a member of the Committee) to act as secretary of the meeting, shall keep the minutes of the Committee.

The Committee may invite such members of Company's management and outside consultants and counsel to attend all or any part of a Committee meeting as it may deem desirable or appropriate. The Committee may also meet in executive session without the presence of Company's management as frequently as it believes necessary or appropriate. The Committee may adopt such other rules and regulations for calling and holding its meetings and for the transaction of business at such meetings as is necessary or desirable and not inconsistent with the provisions of the EFSC Bylaws or this Committee Charter.

IV. Responsibilities

The Committee shall:

- 1. In consultation with executive management, establish the Company's general compensation philosophy, and oversee the development and implementation of executive and executive management compensation programs.
- 2. Have the authority to enter, authorize and approve all employment contracts, change of control agreements and all other similar types of agreements with respect to each Named Executive Officer (as that term is defined in Item 402(a)(3) of Securities Exchange Commission Regulation S-K), other than the CEO, so long as such employment contract is consistent with existing compensation plans adopted by the Company. For all employment contracts, change of control agreements and all other similar types of agreements, with respect to the CEO, the Committee shall have the authority to review and recommend the same to the Board for entry, authorization and approval. Further, in conjunction with the Company's management, the Committee shall review policies regarding written employment agreements and other employees other than the Named Executive Officers.
- 3. Consider corporate goals and objectives relevant to the CEO's compensation. The Committee will receive the evaluation of the CEO based on such goals and objectives from the Executive Committee and utilize such evaluation in determining compensation for the CEO. The Committee shall, subject to the provisions of any applicable contract, approve, amend or terminate the following compensation elements regarding the CEO based on such evaluation: (a) annual base salary level, (b) annual incentive opportunity level, (c) long-term incentive opportunity level, (d) other employment agreement incentives or severance arrangements, and (e) any special or supplemental benefits. The CEO will not be present during any voting or deliberations by the Committee concerning his or her compensation.
- 4. At least annually, in consultation with the CEO, review and approve individual goals and objectives for the Named Executive Officers (other than the CEO) and evaluate such Named Executive Officers based on such goals and objectives. The Committee shall, subject to the provisions of any applicable contract, in consultation with the CEO, annually review and approve, amend or terminate for the executives of the Company, other than the CEO, (a) the annual base salary level, (b) the annual incentive opportunity level, (c) the long-term incentive opportunity level, (d) employment agreements or severance arrangements, and (e) any special or supplemental benefits.
- 5. Periodically review and make recommendations to the Board and the Bank Board with respect to the compensation and benefits of each Board's respective directors.
- 6. Recommend to the Board the approval, amendment or termination of incentive-compensation plans and any equity-based compensation plans. The Committee shall monitor the Company's incentive compensation programs, including the annual and long-term incentive plans, to evaluate whether they are being administered in a manner consistent with the Company's compensation philosophy as to participation, target annual incentive awards, corporate financial goals, actual awards paid to senior management, and total funds reserved for payment under the compensation plan.

- 7. Make all reviews and investigations required under applicable law with respect to whether any major financial risk exposures of the Company, including at least those identified by the Audit Committee of the Board, may have been possibly encouraged by compensation policies of the Company.
- 8. Recommend to the Board for approval by the Board any action, including, but not limited to, the adoption or amendment of any equity compensation plan that is required by law or regulation to be submitted to the stockholders of EFSC for approval.
- 9. Have the authority to appoint and remove various plan Trustees, appoint and remove members of any Administrative Committee; and to appoint and remove any Plan Administrator with respect to any compensation or plan maintained by the Company.
- 10. Review with management and approve the Compensation Discussion and Analysis ("CD&A") required by SEC Regulation S-K, Item 402 ("Item 402") in connection with the EFSC proxy statement and annual report on Form 10-K. Based on such review and discussion, the Committee shall (a) determine whether to recommend to the Board that the CD&A in the form prepared by management be included in the proxy statement and incorporated by reference in the annual report on Form 10-K; (b) make any certifications required under applicable law to be included within or in connection with the EFSC proxy statement and annual report on Form 10-K (c) prepare the Human Capital and Compensation Committee report required by Item 402 for inclusion in the proxy statement and incorporation by reference in the annual report; and (d) review and approve the CEO Pay Ratio and related discussion contained in the EFSC proxy statement. The Human Capital and Compensation Committee report in the EFSC proxy statement shall state whether the Committee reviewed and discussed with management the CD&A and, based on such review and discussion, whether the Committee recommended to the Board that the CD&A be included in the proxy statement and incorporated by reference in the annual report on Form 10-K.
- 11. Annually review and assess compliance with the stock ownership guidelines and make any changes to the stock ownership guidelines as necessary or appropriate.
- 12. Monitor and oversee the Company's efforts to implement compliance programs, policies and procedures that appropriately respond to the human capital related risks facing the Company, including:
 - (a) Understand the human capital related risks inherent in the Company's strategy, and encourage management to pursue prudent risk to generate sustainable performance and value.
 - (b) At least annually, review and approve all human capital related components of the Enterprise Financial Services Corp Enterprise Risk Management Risk Appetite Statement (the "RAS").
 - (c) Participate with management in developing related human capital related risk metrics and reports to be shared with the Board and the Bank Board.
 - (d) Monitor the Company's human capital risk profile against the human capital related components of the RAS as well as any exceptions to human capital related RAS metrics as reported by the Company's management, including appropriate actions taken by management to address such exceptions.
- 13. To the extent the Committee deems it necessary to do so, further the advancement of the Company's Environmental, Social and Governance goals (as they continue to evolve) through its compensation arrangements, policies and decisions.
- 14. Review and provide strategic level oversight of the Company's human capital related programs and strategies (to the extent that they are not governed by ERISA), including but not limited to those relating to:

- (a) the Company's workforce, such as skills and composition;
- (b) workforce recruitment, engagement and retention;
- (c) talent management and succession planning processes utilized by the Company;
- (d) development of employees and leaders; and
- (e) workforce inclusion efforts.
- 15. Perform any other activities consistent with this Charter, the EFSC and Bank By-laws and applicable law, as the Committee deems appropriate to carry out its assigned duties or as requested by the Company Board(s), as applicable.
- 16. Annually review the performance of the Committee.

V. Consultants, Legal Counsel and Other Advisers

- 1. The Committee may, in its sole discretion, retain or obtain the advice of a compensation consultant, legal counsel or other adviser (individually, an "Adviser" or collectively, "Advisers").
- 2. The Committee shall be directly responsible for the appointment, compensation and oversight of the work of any Adviser retained by the Committee.
- 3. The Company shall provide for appropriate funding, as determined by the Committee, for payment of reasonable compensation to any Adviser retained by the Committee.
- 4. The Committee may select, or receive advice from an Adviser, other than in-house legal counsel, only after taking into consideration the following factors:
 - (a) the provision of other services to the Company by the person that employs the Adviser;
 - (b) the amount of fees received from the Company by the person that employs the Adviser, as a percentage of the total revenue of the person that employs the Adviser;
 - (c) the policies and procedures of the person that employs the Adviser that are designed to prevent conflicts of interest;
 - (d) any business or personal relationship of the Adviser with a member of the Committee;
 - (e) any EFSC stock owned by the Adviser; and
 - (f) any business or personal relationship of the Adviser or the person employing the Adviser with an executive officer of the Company.
- 5. No provision of this Charter shall be construed: (i) to require the Committee to implement or act consistently with the advice or recommendations of any Adviser; or (ii) to affect the ability or obligation of the Committee to exercise its own judgment in fulfillment of its duties.
- 6. The Committee shall conduct the independence assessment outlined in paragraph 4 above with respect to any Adviser that provides advice to the Committee, other than in-house legal counsel. However, nothing in such paragraph shall require any Adviser to be independent, only that the Committee consider the independence factors enumerated in paragraph 4 before selecting, or receiving advice from, an Adviser. The Committee may select, or receive advice from, any Adviser of its choosing, including ones that are not independent, after considering the independence factors listed in paragraph 4.
- 7. Any provision of this Charter to the contrary notwithstanding, the Committee is not required to conduct an independence assessment for an Adviser that acts in a role limited to the following activities for which no disclosure is required under Item 407(e)(3)(iii) of Regulation S-K:

- (a) consulting on any broad-based plan that does not discriminate in scope, terms, or operation, in favor of executive officers or directors of the Company, and that is available generally to all salaried employees; and/or
- (b) providing information that either is not customized for the Company or that is customized based on parameters that are not developed by the Adviser, and about which the Adviser does not provide advice.

VI. Authority

The Committee has the authority and is empowered to:

- 1. Delegate, to the extent permitted by law, any of its responsibilities, along with the authority to take action in relation to such responsibilities, to one or more subcommittees or to management of the Company as the Committee may deem appropriate in its sole discretion.
- 2. In accordance with Section V above, select, retain, and obtain at the Company's expense, Advisers having special competence as necessary to assist the Committee in fulfilling its responsibilities, including, but not limited to, legal counsel and other professional consultants. The Committee shall set the compensation, and oversee the work, of its outside Advisers.
- 3. Seek information it requires from employees of the Company (all of whom are directed to cooperate with the Committee's requests) or any external parties.
- 4. Meet with the officers of the Company and any outside Advisers as the Committee may deem necessary.
- 5. Take such other actions as are authorized or contemplated by this Committee Charter.

VII. Review and Approval of Committee Charter

The Committee shall annually review and reassess the adequacy of this Committee Charter and recommend changes to the Board and the Bank Board as necessary or appropriate.