

SENESCO TECHNOLOGIES, INC.

NOMINATING AND CORPORATE GOVERNANCE COMMITTEE CHARTER

A. Purpose

The purpose of the Nominating and Corporate Governance Committee is to:

- identify individuals qualified to become directors of the Company;
- recommend to the Board the persons to be nominated for election as directors at any meeting of stockholders;
- advise the Board on corporate governance matters, including developing and recommending to the Board a set of corporate governance principles applicable to the Company; and
- oversee the evaluation of the Board.

B. Structure and Membership

1. Number. The Nominating and Corporate Governance Committee shall consist of such number of directors as the Board shall from time to time determine.
2. Independence. Except as otherwise permitted by the applicable rules of the NYSE Amex, each member of the Nominating and Corporate Governance Committee shall be an “independent director” as defined by such rules. Additionally, each member must meet the independence standards set forth in Rule 16b-3 of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (the “Exchange Act”) and Rule 162(m) of the Internal Revenue Code.
3. Chair. Unless the Board elects a Chair of the Nominating and Corporate Governance Committee, the Committee shall elect a Chair by majority vote.
4. Compensation. The compensation of the Nominating and Corporate Governance Committee members shall be as determined by the Board.
5. Selection and Removal. Members of the Nominating and Corporate Governance Committee shall be appointed by the Board. The Board may remove members of the Nominating and Corporate Governance Committee from such Committee, with or without cause.

C. Authority and Responsibilities

General

The Nominating and Corporate Governance Committee shall discharge its responsibilities, and shall assess the information provided by the Company’s management, in accordance with its business judgment.

Board and Committee Membership

1. Selection of Director Nominees. Except where the Company is legally required by contract, bylaw or otherwise to provide third parties with the right to nominate directors, the Nominating and Corporate Governance Committee shall be responsible for identifying and recommending to the Board the nominees for election as directors at any meeting of stockholders and the persons to be elected by the Board to fill any vacancies on the Board. In making such recommendations, the Committee shall consider candidates proposed by stockholders. The Committee shall review and evaluate information available to it regarding candidates proposed

by stockholders and shall apply the same criteria, and shall follow substantially the same process in considering them, as it does in considering other candidates.

2. Criteria for Selecting Directors. The Board's criteria for selecting directors are as set forth in the Company's Corporate Governance Guidelines. The Nominating and Corporate Governance Committee shall use such criteria and the principles set forth in such Guidelines to guide its director selection process. The Committee shall be responsible for reviewing with the Board, on an annual basis, the requisite skills and criteria for new Board members as well as the composition of the Board as a whole. The Committee may adopt, and periodically review and revise as it deems appropriate, procedures regarding director candidates proposed by stockholders.
3. Search Firms. The Nominating and Corporate Governance Committee shall have the authority to retain and terminate any search firm to be used to identify director nominees, upon prior consent of the Board.
4. Selection of Committee Members. The Nominating and Corporate Governance Committee shall be responsible for recommending to the Board the directors to be appointed to each committee of the Board.

Corporate Governance

5. Corporate Governance Guidelines. The Nominating and Corporate Governance Committee shall develop and recommend to the Board a set of Corporate Governance Guidelines applicable to the Company. The Committee shall, from time to time as it deems appropriate, but no less than annually, review and reassess the adequacy of such Corporate Governance Guidelines and recommend any proposed changes to the Board for approval.

Evaluation of the Board; Succession Planning

6. Evaluation of the Board. The Nominating and Corporate Governance Committee shall be responsible for overseeing an annual self-evaluation of the Board to determine whether it and its committees are functioning effectively. The Committee shall determine the nature of the evaluation, supervise the conduct of the evaluation and prepare an assessment of the Board's performance, to be discussed with the Board.
7. Succession of Senior Executives. The Nominating and Corporate Governance Committee shall oversee an annual review by the Board on succession planning, which shall include transitional leadership in the event of an unplanned vacancy.
8. Additional Powers. The Nominating and Corporate Governance Committee shall have such other duties as may be delegated from time to time by the Board of Directors.

D. Procedures and Administration

1. Meetings. The Nominating and Corporate Governance Committee shall meet as often as it deems necessary in order to perform its responsibilities. A quorum for the transaction of business by the Nominating and Corporate Governance Committee shall consist of a majority of the members of the Committee. The Committee shall keep such records of its meetings as it shall deem appropriate.
2. Subcommittees. The Nominating and Corporate Governance Committee may form and delegate authority to one or more subcommittees (including a subcommittee consisting of a single member), as it deems appropriate from time to time under the circumstances.

3. Reports to the Board. The Nominating and Corporate Governance Committee shall report regularly to the Board.
4. Charter. The Nominating and Corporate Governance Committee shall, from time to time as it deems appropriate, but no less than annually, review and reassess the adequacy of this Charter and recommend any proposed changes to the Board for approval.
5. Independent Advisors. The Nominating and Corporate Governance Committee shall have the authority to engage such independent legal and other advisors as it deems necessary or appropriate to carry out its responsibilities upon consent of the Board. Such independent advisors may be the regular advisors to the Company. The Nominating and Corporate Governance Committee is empowered, without further action by the Board of Directors, to cause the Company to pay the compensation of such advisors as established by the Nominating and Corporate Governance Committee.
6. Investigations. The Nominating and Corporate Governance Committee shall have the authority to conduct or authorize investigations into any matters within the scope of its responsibilities as it shall deem appropriate, including the authority to request any officer, employee or advisor of the Company to meet with the Committee or any advisors engaged by the Committee.
7. Annual Self-Evaluation. At least annually, the Nominating and Corporate Governance Committee shall evaluate its own performance.

SENESCO TECHNOLOGIES, INC.

CORPORATE GOVERNANCE GUIDELINES

The Board of Directors (the “Board”) of Senesco Technologies, Inc. (the “Company”) has adopted the following Corporate Governance Guidelines (the “Guidelines”) to assist the Board in the exercise of its duties and responsibilities and to serve the best interests of the Company and its stockholders. The Guidelines should be applied in a manner consistent with all applicable laws and stock exchange rules and the Company’s charter and bylaws, each as amended and in effect from time to time. The Guidelines provide a framework for the conduct of the Board’s business. The Board may modify or make exceptions to the Guidelines from time to time in its discretion and consistent with its duties and responsibilities to the Company and its stockholders.

A. Director Responsibilities

1. Oversee Management of the Company. The principal responsibility of the directors is to oversee the management of the Company and, in so doing, serve the best interests of the Company and its stockholders. This responsibility includes:
 - Reviewing and approving fundamental operating, financial and other corporate plans, strategies and objectives.
 - Evaluating the performance of the Company and its senior executives and taking appropriate action, including removal, when warranted.
 - Evaluating the Company’s compensation programs on a regular basis and determining the compensation of its senior executives.
 - Requiring, approving and implementing senior executive succession plans.
 - Evaluating whether corporate resources are used only for appropriate business purposes.
 - Establishing a corporate environment that promotes timely and effective disclosure (including robust and appropriate controls, procedures and incentives), fiscal accountability, high ethical standards and compliance with all applicable laws and regulations.
 - Reviewing and approving material transactions and commitments not entered into in the ordinary course of business.
 - Developing a corporate governance structure that allows and encourages the Board to fulfill its responsibilities.
 - Providing advice and assistance to the Company’s senior executives.
 - Evaluating the overall effectiveness of the Board and its committees.
 - Reviewing and evaluating the Company’s policies with respect to risk assessment and risk management.
2. Exercise Business Judgment. In discharging their fiduciary duties of care, loyalty and candor, directors are expected to exercise their business judgment to act in what they reasonably believe to be the best interests of the Company and its stockholders.
3. Understand the Company and its Business. Directors have an obligation to become and remain informed about the Company and its business, including the following:

- The principal operational and financial objectives, strategies and plans of the Company.
 - The results of operations and financial condition of the Company and of significant subsidiaries and business segments.
 - The relative standing of the business segments within the Company and vis-à-vis competitors.
 - The factors that determine the Company's success.
 - The risks and problems that affect the Company's business and prospects.
4. Establish Effective Systems. Directors are responsible for determining that effective systems are in place for the periodic and timely reporting to the Board on important matters concerning the Company, including the following:
- Current business and financial performance, the degree of achievement of approved objectives and the need to address forward-planning issues.
 - Future business prospects and forecasts, including actions, facilities, personnel and financial resources required to achieve forecasted results.
 - Financial statements, with appropriate segment or divisional breakdowns.
 - Compliance programs to assure the Company's compliance with law and corporate policies.
 - Material litigation and governmental and regulatory matters.
 - Monitoring and, where appropriate, responding to communications from stockholders.
- Directors should also periodically review the integrity of the Company's internal control and management information systems.
5. Board, Stockholder and Committee Meetings. Directors are responsible for attending Board meetings, meetings of committees on which they serve and the annual meeting of stockholders, and devoting the time needed, and meeting as frequently as necessary, to discharge their responsibilities properly.
6. Reliance on Management and Advisors; Indemnification. The directors are entitled to rely on the Company's senior executives, board committee reports and its outside advisors, auditors and legal counsel, except to the extent that any such person's integrity, honesty or competence is in doubt. The directors are also entitled to Company-provided indemnification, statutory exculpation and directors' and officers' liability insurance.

B. Director Qualification Standards

1. Independence. Except as may otherwise be permitted by NYSE rules, a majority of the members of the Board shall be independent directors. To be considered independent: (1) a director must be independent as determined under Section 303A.02 of the NYSE rules and (2) in the Board's judgment, the director must not have a material relationship with the Company (either directly or as a partner, shareholder or officer of an organization that has a relationship with the Company) that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

In addition, ownership of a significant amount of the Company's stock, by itself, does not constitute a material relationship.

For relationships not covered by the guidelines set forth above, the determination of whether a material relationship exists shall be made by the other members of the Board of Directors who are independent as defined above.

2. Size of the Board. The Board currently has ten members. The Board believes this is an appropriate size given the Company's present circumstances, but that a smaller or larger Board may be appropriate at any given time, depending on circumstances and changes in the Company's business.
3. Other Directorships. A director shall limit the number of other public company boards on which he or she serves so that he or she is able to devote adequate time to his or her duties to the Company, including preparing for and attending meetings. Directors should advise the Chairman of the Board and the Chairman of the Nominating and Corporate Governance Committee in advance of accepting an invitation to serve on another public company board. Service on boards and/or committees of other organizations shall comply with the Company's conflict of interest policies.
4. Tenure. The Board does not believe it should establish term limits. Term limits could result in the loss of directors who have been able to develop, over a period of time, increasing insight into the Company and its operations and an institutional memory that benefit the entire membership of the Board as well as management. As an alternative to term limits, the Nominating and Corporate Governance Committee shall review each director's continuation on the Board at least once every three years. This will allow each director the opportunity to conveniently confirm his or her desire to continue as a member of the Board and allow the Company to conveniently replace directors who are no longer interested or effective.
5. Lead Director. In the event that the Chairman of the Board is not an independent director, the Nominating and Corporate Governance Committee may nominate an independent director to serve as "Lead Director," who shall be approved by a majority of the independent directors. The Lead Director, if one is appointed, shall:
 - Chair any meeting of the non-management or independent directors in executive session;
 - Meet with any director who is not adequately performing his or her duties as a member of the Board or any committee;
 - Facilitate communications between other members of the Board and Chairman of the Board and/or the President and Chief Executive Officer; however, each director is free to communicate directly with the Chairman of the Board and with the President and Chief Executive Officer;
 - Work with the Chairman of the Board in the preparation of the agenda for each Board meeting and in determining the need for special meetings of the Board; and
 - Otherwise consult with the Chairman of the Board and/or President and Chief Executive Officer on matters relating to corporate governance and Board performance.
6. Separation of the Offices of Chairman and President and Chief Executive Officer. The offices of Chairman of the Board and President and Chief Executive Officer should be separate and the Chairman of the Board should be selected from among the independent directors to the extent the Board has not appointed a Lead Director.

7. Selection of New Director Candidates. Except where the Company is legally required by contract, bylaw or otherwise to provide third parties with the right to nominate directors, the Nominating and Corporate Governance Committee shall be responsible for, among other things, (i) identifying individuals qualified to become Board members, consistent with criteria approved by the Board, and (ii) recommending to the Board the persons to be nominated for election as directors at any meeting of stockholders and the persons to be elected by the Board to fill any vacancies on the Board. Director nominees shall be considered for recommendation by the Nominating and Corporate Governance Committee in accordance with these Guidelines, the policies and principles in its charter and the criteria set forth in Attachment A to these Guidelines. It is expected that the Nominating and Corporate Governance Committee will have direct input from the Chairman of the Board, the Lead Director, if any, and the President and Chief Executive Officer.
8. Extending the Invitation to a New Director Candidate to Join the Board. The invitation to join the Board should be extended by the Chairman of the Board, on behalf of the Board, and the Chairman of the Nominating and Corporate Governance Committee, on behalf of such Committee. Unauthorized approaches to prospective directors can be premature, embarrassing and harmful.
9. Change of Responsibility of Director. The Board believes that any director who retires from his or her principal current employment, or who materially changes his or her current position, should offer to tender his or her resignation to the Board, to the extent such change of responsibility results in a conflict under the Company's Code of Business Conduct and Ethics. The Nominating and Corporate Governance Committee shall then recommend to the Board whether the Board should accept the resignation based on a review of whether the individual continues to satisfy the Board's membership criteria in light of his or her new status.
10. Former President and Chief Executive Officer's Board Membership. The Board believes that the continuation of a former President and Chief Executive Officer of the Company on the Board is a matter to be decided in each individual instance by the Board, upon recommendation of the Nominating and Corporate Governance Committee. Accordingly, when the President and Chief Executive Officer ceases to serve in that position, he or she will be expected to resign from the Board if so requested by the Board, upon recommendation of the Nominating and Corporate Governance Committee.

C. Board Meetings

1. Selection of Agenda Items. The Chairman of the Board, in consultation with the Lead Director, if any, and the President and Chief Executive Officer, shall approve the agenda for each Board meeting. Each Board member is free to suggest the inclusion of agenda items and is free to raise at any Board meeting subjects that are not on the agenda for that meeting.
2. Frequency and Length of Meetings. The Chairman of the Board, in consultation with the members of the Board, shall determine the frequency and length of the Board meetings. Special meetings may be called from time to time as determined by the needs of the business.
3. Advance Distribution of Materials. Information and data that are important to the Board's understanding of the business to be conducted at a Board or committee meeting should generally be distributed in writing to the directors before the meeting, and directors should review these materials in advance of the meeting. The Board acknowledges that certain items to be discussed at a Board or committee meeting may be of an extremely confidential or time-sensitive nature and that the distribution of materials on these matters prior to meetings may not be appropriate or practicable. Presentations made at Board meetings should do more than summarize previously distributed Board meeting materials.

4. Executive Sessions. The independent directors shall meet in executive session at least quarterly to discuss, among other matters, the performance of the President and Chief Executive Officer. The non-management directors will meet in executive session at other times at the request of any non-management director. Absent unusual circumstances, these sessions shall be held in conjunction with regular Board meetings. The director who presides at these meetings shall be the Lead Director, if there is one, and if not, shall be chosen by the non-management directors, and his or her name shall be disclosed in the annual meeting proxy statement.
5. Attendance of Non-Directors at Board Meetings. The Board encourages the senior executives of the Company to, from time to time, bring Company personnel into Board meetings who (i) can provide additional insight into the items being discussed because of personal involvement in these areas or (ii) appear to be persons with future potential who should be given exposure to the Board.

D. Board Committees

1. Key Committees. The Board shall have at all times an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. Each such committee shall have a charter that has been approved by the Board. The Board may, from time to time, establish or maintain additional committees as necessary or appropriate.
2. Assignment and Rotation of Committee Members. The Nominating and Corporate Governance Committee shall be responsible for recommending to the Board the directors to be appointed to each committee of the Board. Except as otherwise permitted by the applicable NYSE rules, each member of the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee shall be an “independent director” as defined by such rules.
3. Committee Charters. In accordance with the applicable NYSE rules, the charters of the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee shall set forth the purposes, goals and responsibilities of the committees as well as qualifications for committee membership, procedures for committee member appointment and removal, committee structure and operations and committee reporting to the Board. The Board shall, from time to time as it deems appropriate, review and reassess the adequacy of each charter and make appropriate changes.
4. Selection of Agenda Items. The chairman of each committee, in consultation with the committee members, shall develop the committee’s agenda. At the beginning of the fiscal year each committee shall establish a schedule of subjects to be discussed during the year (to the extent practicable). The schedule for each committee meeting shall be furnished to all directors.
5. Frequency and Length of Committee Meetings. The chairman of each committee, in consultation with the committee members, shall determine the frequency and length of the committee meetings consistent with any requirements set forth in the committee’s charter. Special meetings may be called from time to time as determined by the needs of the business and the responsibilities of the committees.

E. Director Access to Management and Independent Advisors

1. Access to Officers and Employees. Directors have full and free access to officers and employees of the Company. Any meetings or contacts that a director wishes to initiate may be arranged through the President and Chief Executive Officer or the Secretary or directly by the director. The directors shall use their judgment to ensure that any such contact is not disruptive to the business operations of the Company and shall, to the extent appropriate, copy the President and Chief Executive Officer on any written communications between a director and an officer or employee of the Company.

2. Access to Independent Advisors. The Board and each committee have the power to hire and consult with independent legal, financial or other advisors for the benefit of the Board or such committee, as they may deem necessary, in accordance with the terms set forth in the applicable charter for each committee. Such independent advisors may be the regular advisors to the Company.

F. Director Compensation

1. Role of Board and Compensation Committee. The form and amount of director compensation shall be determined by the Board, or the Compensation Committee as designated, in accordance with the policies and principles set forth below. The Compensation Committee shall conduct an annual review of the compensation of the Company's directors. The Compensation Committee shall consider that questions as to directors' independence may be raised if director compensation and perquisites exceed customary levels, if the Company makes substantial charitable contributions to organizations with which a director is affiliated or if the Company enters into consulting contracts or business arrangements with (or provides other indirect forms of compensation to) a director or an organization with which the director is affiliated.
2. Form of Compensation. The Board believes that directors should be incentivized to focus on long-term stockholder value. Including equity as part of director compensation helps align the interest of directors with those of the Company's stockholders.
3. Amount of Consideration. The Company seeks to attract exceptional talent to its Board. Therefore, the Company's policy is to compensate directors at least competitively relative to comparable companies. The Company's management shall, from time to time, present a comparison report to the Board and the Compensation Committee, comparing the Company's director compensation with that of comparable companies. The Board believes that it is appropriate for the Chairman of the Board and the chairmen and members of the committees to receive additional compensation for their services in those positions.
4. Director Stock Ownership. The Board believes that each director should acquire and hold shares of Company stock in an amount that is meaningful and appropriate to such director. Therefore, the Board shall establish a meaningful target for stock ownership by each director and a time period during which this target is to be met.
5. Employee Directors. Directors who are also employees of the Company shall receive no additional compensation for Board or committee service.

G. Director Orientation and Continuing Education

1. Director Orientation. The Chairman of the Board, or his designee, and the Company's management shall conduct an orientation for new directors. The orientation shall include presentations by management to familiarize new directors with the Company's strategic plans, its significant financial, accounting and risk management issues, its compliance programs, its code of business conduct and ethics, its principal officers, its internal and independent auditors and its outside legal advisors. In addition, the orientation shall include a review of the Company's expectations of its directors in terms of time and effort, a review of the directors' fiduciary duties and visits to Company headquarters and, to the extent practical, certain of the Company's significant facilities. All other directors are also invited to attend the orientation program.
2. Continuing Education. 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. The Company shall pay all reasonable expenses related to continuing director education.

H. Management Evaluation and Succession

1. Selection of President and Chief Executive Officer. The Board selects the Company's President and Chief Executive Officer in the manner that it determines to be in the best interests of the Company's stockholders.
2. Evaluation of Senior Executives. The Compensation Committee shall be responsible for overseeing the evaluation of the Company's senior executives. In conjunction with the Audit Committee, in the case of the evaluation of the senior financial executives, the Compensation Committee shall determine the nature and frequency of the evaluation and the persons subject to the evaluation, supervise the conduct of the evaluation and prepare assessments of the performance of the Company's senior executives, to be discussed with the Board periodically. The Board shall review the assessments to ensure that the senior executives are providing the best leadership for the Company over both the long- and short-term.
3. Succession of Senior Executives. The Nominating and Corporate Governance Committee shall be responsible for overseeing an annual evaluation of succession planning.

I. Annual Performance Evaluation of the Board

The Nominating and Corporate Governance Committee shall oversee an annual self-evaluation of the Board to determine whether it and its committees are functioning effectively. The Nominating and Corporate Governance Committee shall determine the nature of the evaluation, supervise the conduct of the evaluation and prepare an assessment of the Board's performance, to be discussed with the Board. The purpose of this process is to improve the effectiveness of the Board and its committees and not to target individual Board members.

J. Board Interaction with Stockholders, Institutional Investors, the Press, Customers, Etc.

The Board believes that the President and Chief Executive Officer and his or her designees speak for the Company. Individual Board members may, from time to time, meet or otherwise communicate with various constituencies that are involved with the Company. It is, however, expected that Board members would do so with the knowledge of and, absent unusual circumstances or as contemplated by the committee charters, only at the request of the Company's senior executives.

The Board will give appropriate attention to written communications that are submitted by stockholders and other interested parties, and will respond if and as appropriate. Absent unusual circumstances or as contemplated by the committee charters, the Chairman of the Board (if an independent director), or the Lead Director (if one is appointed), or otherwise the Chairman of the Nominating and Corporate Governance Committee shall, subject to advice and assistance from the General Counsel, (1) be primarily responsible for monitoring communications from shareholders and other interested parties, and (2) provide copies or summaries of such communications to the other directors as he or she considers appropriate.

K. Periodic Review of the Corporate Governance Guidelines

The Nominating and Corporate Governance Committee shall, from time to time as it deems appropriate, review and reassess the adequacy of these Guidelines and recommend any proposed changes to the Board for approval.

Senesco Technologies, Inc.

Attachment A to Corporate Governance Guidelines

CRITERIA FOR NOMINATION AS A DIRECTOR

General Criteria

1. Nominees should have a reputation for integrity, honesty and adherence to high ethical standards.
2. Nominees should have demonstrated business acumen, experience and ability to exercise sound judgments in matters that relate to the current and long-term objectives of the Company and should be willing and able to contribute positively to the decision-making process of the Company.
3. Nominees should have a commitment to understand the Company and its industry and to regularly attend and participate in meetings of the Board and its committees.
4. Nominees should have the interest and ability to understand the sometimes conflicting interests of the various constituencies of the Company, which include stockholders, employees, customers, governmental units, creditors and the general public, and to act in the interests of all stockholders.
5. Nominees should not have, nor appear to have, a conflict of interest that would impair the nominee's ability to represent the interests of all the Company's stockholders and to fulfill the responsibilities of a director.
6. Nominees shall not be discriminated against on the basis of race, religion, national origin, sex, sexual orientation, disability or any other basis proscribed by law. The value of diversity on the Board should be considered.

Application of Criteria to Existing Directors

The renomination of existing directors should not be viewed as automatic, but should be based on continuing qualification under the criteria set forth above. In addition, the Nominating and Corporate Governance Committee shall consider the existing directors' performance on the Board and any committee, which shall include consideration of the extent to which the directors undertook continuing director education.

Criteria for Composition of the Board

The backgrounds and qualifications of the directors considered as a group should provide a significant breadth of experience, knowledge and abilities that shall assist the Board in fulfilling its responsibilities.