



**NXT ENERGY SOLUTIONS INC.
NOTICE OF ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS
AND MANAGEMENT INFORMATION CIRCULAR
DATED JUNE 13, 2024**

**WITH RESPECT TO THE
ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS
TO BE HELD ON
MONDAY, JULY 15, 2024**

NXT ENERGY SOLUTIONS INC.

NOTICE OF ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS

NOTICE IS HEREBY GIVEN THAT an annual and special meeting (the “**Meeting**”) of holders (“**Shareholders**”) of common shares (the “**Common Shares**”) of NXT Energy Solutions Inc. (the “**Company**” or “**NXT**”) will be held as follows:

When: 10:00 am (Calgary time) on Monday, July 15, 2024

Where: Norton Rose Fulbright Canada LLP
400 3rd Avenue SW, Suite 3700
Calgary, Alberta T2P 4H2
Telephone: 403.267.8222

The purpose of the Meeting will be to consider the following items of business:

1. to receive and consider the audited financial statements of the Company for the year ended December 31, 2023, the accompanying notes thereto, and the auditor’s report in respect thereof;
2. to elect six directors of the Company;
3. to appoint MNP LLP, Chartered Professional Accountants, as the auditors of the Company for the ensuing year at a remuneration to be determined by the Board of Directors of the Company (the “**Board**”);
4. to consider and approve the Control Person Resolution as outlined in Schedule “A”;
5. to consider and approve the Insider Participation Resolution as outlined in Schedule “B”;
6. to consider and approve the Security Based Compensation Arrangement as outlined in Schedule “C”; and
7. to transact such other business as may be properly brought before the Meeting.

The specific details of the matters to be brought before the Meeting are set forth in the accompanying management information circular which forms part of this Notice. Shareholders are reminded to review the information circular in detail prior to voting on the foregoing matters.

The Board has fixed June 10, 2024 as the record date for the determination of Shareholders entitled to receive notice of and to vote at the Meeting and at any postponement or adjournment thereof.

DATED at Calgary, Alberta, this 13th day of June, 2024.

BY ORDER OF THE BOARD OF DIRECTORS

“Charles Selby”

Chairman of the Board

Important

Shareholders who are unable to attend the Meeting or any postponement or adjournment thereof in person are requested to complete, date and sign the enclosed instrument of proxy and return it to Computershare Trust Company at 8th Floor, 100 University Avenue, Toronto, Ontario, M5J 2Y1, (facsimile: 1-866-249-7775) at least 48 hours (excluding Saturdays, Sundays and statutory holidays) before the Meeting or any postponement or adjournment thereof.

Shareholders are cautioned that the use of mail to transmit proxies is at each Shareholder’s risk.

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NXT ENERGY SOLUTIONS INC.

ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS

MANAGEMENT INFORMATION CIRCULAR

This management information circular (“**Information Circular**”) is furnished in connection with the solicitation of proxies by the management of NXT Energy Solutions Inc. (“**NXT**”, “**our**”, or the “**Company**”) for use at the annual and special meeting (the “**Meeting**”) of the holders (“**Shareholders**”) of common shares in the capital of NXT (“**Common Shares**”). Unless otherwise stated, information contained in this Information Circular is given as at June 13, 2024. Unless otherwise stated, all amounts set forth in this Information Circular are stated in Canadian dollars.

GENERAL INFORMATION

Solicitation of Proxies

Proxies are being solicited by and on behalf of the management of the Company to be used at the Meeting or any postponement or adjournment thereof. The proxyholders named in the form of proxy provided by the Company are directors and/or senior officers of the Company. A Shareholder has the right to appoint another person to be his or her proxyholder and one or more alternate proxyholder(s) (who need not be Shareholders) to represent him or her at the Meeting and may do so either by inserting the name of such proxyholder(s) in the blank space provided in the form of proxy provided by the Company or by completing another proper form of proxy.

The completed proxy must be deposited at:

- (i) the offices of the Company at Suite 302, 3320 – 17th Avenue S.W., Calgary, AB, T3E 0B4; or
- (ii) the offices of Computershare Trust Company of Canada (“**Computershare**”), at 8th Floor, 100 University Avenue, Toronto, ON, M5J 2Y1 (facsimile: 1-866-249-7775)

at least 48 hours (excluding Saturdays, Sundays and statutory holidays in the Province of Alberta) before the Meeting or any postponement or adjournment thereof. The Chairman of the Meeting may waive or extend the proxy cut-off without notice. Solicitation will be primarily by mail, but some proxies may be solicited personally or by telephone, facsimile transmission or other electronic means by officers, directors or employees of the Company. The cost of solicitation will be borne by the Company.

Exercise of Discretion by Proxyholders

The persons named in the proxy must vote for or against or withhold from voting the Common Shares in respect of which they are appointed, on any ballot that may be called for, in accordance with the direction of the Shareholder appointing them and if the Shareholder specifies a choice with respect to any matter to be acted upon, the Common Shares will be voted accordingly. **In the absence of such direction, the Common Shares represented will be voted in favour of all matters set out in the form of proxy provided by the Company.** The form of proxy provided by the Company confers discretionary authority upon the proxyholder with respect to any amendments or variations of the matters of business acted on at the Meeting or any adjournment or postponement thereof, in each instance, to the extent permitted by law, whether or not the amendment, variation or other matter that comes before the Meeting is routine and whether or not the amendment, variation or other matter that comes before the Meeting is contested. As of

the date hereof, management of the Company knows of no such amendments, variations or other matters to be brought before the Meeting.

Signing of Proxy

The proxy must be signed by the Shareholder or his or her duly appointed attorney authorized in writing or, if the Shareholder is a corporation, by a duly authorized officer. A proxy signed by a person acting as attorney or in some other representative capacity (including a representative of a corporate shareholder) should indicate that person's capacity (following his or her signature) and should be accompanied by the appropriate instrument evidencing qualification and authority to act (unless such instrument has been previously filed with the Company).

Voting by Internet

Registered Shareholders may also use the website at www.investorvote.com (the "**Voting Website**") to transmit their voting instructions. Shareholders should have the form of proxy in hand when they access the website. Shareholders will be prompted to enter their "Control Number" located on the proxy. If Shareholders vote by internet, their vote must be received no later than 48 hours (excluding Saturdays, Sundays and statutory holidays in the Province of Alberta) preceding the Meeting or any postponement or adjournment thereof. The Voting Website may be used to appoint a proxyholder to attend and vote on a Shareholder's behalf at the Meeting and to convey a Shareholder's voting instructions. Please note that if a Shareholder appoints a proxyholder and submits their voting instructions via the Voting Website and subsequently wishes to change their appointment, a Shareholder may resubmit their proxy and/or voting direction on the Voting Website prior to the deadline noted above. When resubmitting a proxy on the Voting Website, the most recently submitted proxy will be recognized as the only valid one, and all previous proxies submitted will be disregarded and considered as revoked, provided that the last proxy is submitted on the Voting Website by the deadline noted above.

Revocability of Proxies

A Shareholder who has submitted a proxy may revoke it as to any matter upon which a vote has not already been cast pursuant to the authority conferred by the proxy.

A Shareholder may revoke a proxy by depositing an instrument in writing, executed by the Shareholder or by an authorized attorney or, if the Shareholder is a corporation, in its corporate name by a duly authorized officer or attorney thereof, at:

- (i) the offices of the Company at Suite 302, 3320 – 17th Avenue S.W., Calgary, AB, T3E 0B4; or
- (ii) the offices of Computershare at 8th Floor, 100 University Avenue, Toronto, ON, M5J 2Y1

at any time up to and including the last business day preceding the day of the Meeting or any postponement or adjournment thereof.

In addition, a proxy may be revoked by the Shareholder executing another proxy bearing a later date and depositing the same at the office of the registrar and transfer agent of the Company within the time period set out above under the heading "*General Information – Solicitation of Proxies*", or by the Shareholder personally attending the Meeting and voting its Common Shares.

Advice to Beneficial Shareholders

The information set forth in this section is of significant importance to Beneficial Shareholders who do not hold their Common Shares in their own name. Beneficial Shareholders should note that only

proxies deposited by Registered Shareholders can be recognized and acted upon at the Meeting. If Common Shares are listed in an account statement provided to a person by a broker, then, in almost all cases, those Common Shares will not be registered in the person's name on the records of the Company. Such Common Shares will more likely be registered under the name of the person's broker or an agent of that broker.

In Canada, the vast majority of Common Shares are registered under the name of CDS & Co. (the registration name for The Canadian Depository for Securities, which acts as nominee for many Canadian brokerage firms). Common Shares held by brokers or their agents or nominees can only be voted (for or against resolutions) upon the instructions of the Beneficial Shareholder. Without specific instructions, a broker and its agents and nominees are prohibited from voting such shares for the broker's clients. **Therefore, Beneficial Shareholders should ensure that instructions respecting the voting of their Common Shares are communicated to the appropriate person or that the Common Shares are duly registered in their name.**

Canadian securities laws require intermediaries/brokers to seek voting instructions from Beneficial Shareholders in advance of shareholders' meetings. Every intermediary/broker has its own mailing procedures and provides its own return instructions to clients, which should be carefully followed by Beneficial Shareholders in order to ensure that their shares are voted at the Meeting. Often, the voting instruction form provided to a Beneficial Shareholder by its broker (or the agent of the broker) is identical to the form of proxy provided by the Company to Registered Shareholders. However, its purpose is limited to instructing the Registered Shareholder (the broker or agent of the broker) how to vote on behalf of the Beneficial Shareholder. In Canada, the majority of brokers now delegate responsibility for obtaining instructions from clients to Broadridge Financial Solutions, Inc. ("**Broadridge**"). Broadridge typically provides a scannable voting instruction form, in lieu of the form of proxy provided by the Company, and asks Beneficial Shareholders to return the voting instruction form to Broadridge. Alternatively, Beneficial Shareholders can call their toll-free telephone number to vote their Common Shares or access Broadridge's dedicated voting web site at www.proxyvotecanada.com to deliver their voting instructions. Broadridge then tabulates the results of all instructions received and provides appropriate instructions respecting the voting of shares to be represented at the Meeting. A Beneficial Shareholder receiving a voting instruction form from Broadridge cannot use that form to vote its Common Shares directly at the Meeting; the voting instruction form must be returned to Broadridge or, alternatively, instructions must be received by Broadridge well in advance of the Meeting in order to have such shares voted.

Although a Beneficial Shareholder may not be recognized directly at the Meeting for the purposes of voting Common Shares registered in the name of his or her broker (or an agent of the broker), a Beneficial Shareholder may attend the Meeting as proxyholder for the Registered Shareholder and vote their Common Shares in that capacity. A Beneficial Shareholder who wishes to attend the Meeting and indirectly vote his or her Common Shares as proxyholder for the Registered Shareholder should enter his or her own name in the blank space on the voting instruction form provided to him or her and return the same to his or her broker (or broker's agent) in accordance with the instructions provided by such broker (or agent), well in advance of the Meeting.

NXT, is sending the mailed materials directly to non-objecting Beneficial Shareholders. If you are a Beneficial Shareholder and NXT has sent the mailed materials directly to you, your name and address and information about your holdings of securities have been obtained in accordance with applicable securities laws from the intermediary holding on your behalf. NXT does not intend to pay for intermediaries to forward the Mailed Materials to objecting beneficial owners. By choosing to send these materials to you directly, the Company (and not the intermediary holding on your behalf) has assumed responsibility for: (i) delivering these materials to you; and (ii) executing your proper voting instructions. Please return your voting instructions as specified in the request for voting instructions.

VOTING SECURITIES AND PRINCIPAL HOLDERS OF VOTING SECURITIES

The Company is authorized to issue an unlimited number of Common Shares and as at the date hereof there are 78,259,326 Common Shares issued and outstanding, each of which carries the right to one vote at meetings of the Shareholders.

The Board of Directors of the Company (the “**Board**”) has fixed June 10, 2024 as the record date for the determination of Shareholders entitled to receive notice of and to vote at the Meeting and at any postponement or adjournment thereof. **Only Registered Shareholders as of the close of business on June 10, 2024 are entitled to receive notice of, and to vote at, the Meeting**, except that any person who acquires Common Shares from a Shareholder after that date may vote the shares so acquired if, not later than 10 days prior to the Meeting, that person makes a request to Computershare to have his, her or its name included on the list of Shareholders entitled to attend the Meeting and establishes that he, she or it owns the Common Shares.

As of the date hereof, to the knowledge of the directors and executive officers of the Company, no person owns, or controls or directs, directly or indirectly, voting securities carrying 10% or more of the voting rights attached to any class of the Company’s securities entitled to be voted at the Meeting, except Chee Pheng Cheng who beneficially owns, controls or directs, directly or indirectly, approximately 15.68% of the issued and outstanding Common Shares, and Mr. Michael P. Mork who, together with MCAPM, LP beneficially owns, controls or directs, directly or indirectly, approximately 19.07% of the issued and outstanding Common Shares.

<u>Name</u>	<u>Approximate Number of Common Shares Beneficially Owned, or Controlled or Directed, Directly or Indirectly</u>	<u>Percentage of Issued and Outstanding Common Shares</u>
MCAPM, LP	12,035,000	15.38%
Michael P. Mork	2,886,233	3.69%
Michael P. Mork Total Beneficial Ownership	14,921,233	19.07%
Chee Pheng Cheng	12,267,367	15.68%

PARTICULARS OF MATTERS TO BE ACTED UPON

To the knowledge of the Board, the only matters to be placed before the Meeting-are those matters set forth in the accompanying Notice of Meeting. A simple majority of votes (50% plus one vote) is required to approve each of the known matters to come before the Meeting.

Financial Statements

At the Meeting, Shareholders will receive and consider the financial statements, but no vote by the Shareholders with respect thereto is required or proposed to be taken. A copy of the Company’s financial statements and the auditor’s report thereon are also available on the Company’s SEDAR+ profile at www.sedarplus.ca.

Election of Directors

The articles of the Company provide that the Board be comprised of a minimum of one and a maximum of 15 directors. The by-laws of the Company provide that, in such an instance where the articles provide that the Board be comprised of a minimum and a maximum number of directors, the number of directors shall be fixed from time- to-time by resolution of the Board. The Board is currently composed of six directors and the Board has fixed the number of directors to be elected at the Meeting at eight. Biographies highlighting the experience, attributes and qualifications of each director nominee can be found under the heading

“Information on the Board and Director Nominees – Director Nominees” below. Each director elected will hold office until the next annual meeting of the Shareholders, unless his or her office is vacated earlier.

Management of the Company does not contemplate that any of the nominees will, for any reason, become unable or unwilling to serve as a director. However, if any change should occur prior to the Meeting, the persons named in the form of proxy reserve the right to vote for other nominees of their choice.

- **Unless otherwise directed, it is the intention of management of the Company to vote proxies FOR the election, as directors, the nominees whose names are set forth below under the heading “Information on the Board and Director Nominees – Director Nominees”.**

The Board believes that each director should have the confidence and support of the Shareholders of the Company. To this end, the Board has adopted a majority voting policy (the **“Policy”**) whereby a director who receives more “against” than “for” votes must immediately tender his or her resignation, and the remaining Board members must determine whether or not to accept such resignation within 90 days (and will be required to accept the resignation absent exceptional circumstances). The Policy does not apply where an election involves a proxy battle i.e., where proxy material is circulated in support of one or more nominees who are not part of the director nominees supported by the Board.

Appointment of Auditor

The Company proposes to nominate the Company’s existing auditors, MNP LLP, Chartered Professional Accountants, to act as the Company’s independent auditors, to hold office until the next annual meeting of the Shareholders with remuneration to be determined by the Board. MNP LLP Chartered Professional Accountants were first appointed as the Company’s auditor on May 29, 2023.

- **Unless otherwise directed, it is the intention of management of the Company to vote proxies FOR the appointment of MNP LLP, Chartered Professional Accountants, as auditors of the Company, to hold office until the next annual meeting of Shareholders, at a remuneration to be determined by the Board.**

The information regarding the Company’s Audit Committee as required by section 5.1 of National Instrument 52-110 – *Audit Committees* (“**NI 52-110**”) is set forth below under the heading *“Corporate Governance – Audit Committee”* and in the Company’s Annual Information Form for the year ended December 31, 2023 (the **“AIF”**) under the heading *“Directors and Officers – Board Committees”* and in Appendix A thereto.

Control Person Resolution

Background

On May 24, 2023, the Company announced the commencement of a private placement of a secured convertible debenture (the **“Ataraxia Debentures”**) with Ataraxia Capital. The Ataraxia Debentures bear interest at a rate of 10%, paid quarterly, have a fixed conversion price of US\$0.143 (CDN\$0.194) per Common Share, and grant the holder the right to appoint a director to the Board. The aggregate principal amount owing under the Ataraxia Debentures is US\$1,400,000, US\$1,200,000 of which was funded through an instalment of the private placement that closed on May 31, 2023, and the remaining US\$200,000 of which was funded through an instalment of the private placement that closed on July 10, 2023. The Ataraxia Debentures are due and payable two years after issuance of the Ataraxia Debentures. While any amount of the aggregate indebtedness under the Ataraxia Debentures remains outstanding, the holders of such Ataraxia Debentures have certain approval rights which require the Company to obtain the holder of such Ataraxia Debentures’ consent to, among other things, amend the Company’s articles, issue preferred shares or Common Shares, pay dividends on Common Shares, make loans or create or authorize the creation of any debt security if the Company’s aggregate indebtedness thereunder would exceed US\$1.00.

The amounts owing under the Ataraxia Debentures are secured against all of the present and future undertakings, assets and property of the Company pursuant to the terms and conditions of a General Security Agreement between the Company and Ataraxia Capital dated May 31, 2023. Events of default under the Ataraxia Debentures include the Company failing to pay principal or interest payments when due, and upon any such event of default the holder of the Ataraxia Debentures may declare the principal sum together with any accrued but unpaid interest thereon and any other amounts owing thereunder to be immediately due and payable.

On November 8, 2023 the Company commenced a private placement for an unsecured convertible debenture (the “**November Debentures**”). The November Debentures bear interest at 10.0% per annum, paid quarterly in arrears, and are due and payable two years after issuance of the November Debentures. The November Debentures are convertible into Common Shares at a fixed conversion price of US\$0.1808 (CDN\$0.25) at the election of the holders thereof. The Company issued a total of US\$1,872,000 (approximately CAD\$2,543,636) of the November Debentures, which will allow the subscribers to obtain an aggregate of up to 10,353,982 Common Shares. Events of default under the November Debentures include the Company failing to pay principal or interest payments when due, and upon any such event of default the holder of the November Debentures may declare the principal sum together with any accrued but unpaid interest thereon and any other amounts owing thereunder to be immediately due and payable.

MCAPM, LP and Michael P. Mork (collectively, “**Mork Capital**”) purchased US\$1,375,000 of the November Debentures, which allows them to acquire up to 7,605,088 Common Shares on conversion of their November Debentures. Along with its subscription of November Debentures, the Company made an unwritten agreement to grant Mork Capital the right to nominate a director for appointment to the Board. In connection with this right, Mork Capital is nominating Peter Mork for appointment to the Board at the Meeting. Further details on Mr. Peter Mork can be found under the heading “*Information on the Board and Director Nominees*”. Mork Capital’s subscription of November Debentures did not give rise to any other formal investor relations agreement.

The Company and MCAPM, LP entered into a subscription agreement on May 31, 2024 to complete another private placement whereby MCAPM, LP purchased US\$2,000,000 of convertible debentures (the “**2024 Convertible Debentures**”) and which such 2024 Convertible Debentures bear interest at a rate of 10% per annum, paid quarterly in arrears, are due and payable two years after the issuance thereof (the “**Maturity Date**”) and shall be convertible into up to 8,000,000 Common Shares at the election of MCAPM, LP, at a conversion price of US\$0.25 per Common Share. Events of default under the 2024 Convertible Debentures include the Company failing to pay principal or interest payments when due, and upon any such event of default the holder of the 2024 Convertible Debentures may declare the principal sum together with any accrued but unpaid interest thereon and any other amounts owing thereunder to be immediately due and payable. The Company relied on the exemptions from the formal valuation and the minority approval requirements of Multilateral Instrument 61-101 – *Protection of Minority Security Holders in Special Transactions* (“**MI 61-101**”) provided for in subsections 5.5(a) and 5.7(a) of MI 61-101, respectively, as the fair market value of the 2024 Convertible Debentures and the consideration paid for the 2024 Convertible Debentures, in relation to Mork Capital, did not represent more than 25% of the Company’s market capitalization, as determined in accordance with MI 61-101.

Mork Capital will have the right to own, after conversion of all of their November Debentures and 2024 Convertible Debentures, up to 30,526,321 Common Shares. This number is inclusive of the 14,921,233 Common Shares previously owned by Mork Capital, the 7,605,088 Common Shares available on conversion of Mork Capital’s November Debentures and the 8,000,000 Common Shares which would be available on conversion of MCAPM, LP’s 2024 Convertible Debentures. This represents approximately 32.5% of the issued and outstanding common shares as of May 7, 2024 (after giving effect to the conversion of the full amount of Mork Capital’s November Debentures and 2024 Convertible Debentures). The private placement of the 2024 Convertible Debentures closed on May 31, 2024.

Shareholder Approval

The TSX requires shareholder approval of a transaction if, in the opinion of the TSX, such transaction will “materially affect control” of the listed issuer. The TSX Company Manual provides that a transaction that results, or could result, in a new holding of more than 20% of the current issued and outstanding voting securities of a listed issuer by one security holder, or a combination of security holders acting together, is generally considered to materially affect control of such issuer and will constitute the creation of a new “Control Person”. Accordingly, Shareholder approval is required of the private placement of the 2024 Convertible Debentures in order for MCAPM, LP to be able to fully convert such 2024 Convertible Debentures into Common Shares.

At the Meeting, Shareholders will be asked to consider, and if deemed advisable, to approve the text of an ordinary resolution approving the conversion of the 2024 Convertible Debentures by MCAPM, LP into Common Shares such that Mork Capital may become a control person of the Company (the “**Control Person Resolution**”), substantially in the form attached as Schedule “A”. The Control Person Resolution must be approved by way of a resolution passed by a simple majority of 50% plus one of the votes properly cast by disinterested holders of Common Shares voting in person or by proxy at the Meeting – meaning that Mork Capital cannot vote on the Control Person Resolution. If such Shareholder approval is not obtained at the Meeting, Mork Capital may still convert its November Debentures and 2024 Convertible Debentures into Common Shares at any time, or from time to time, provided that it does not at any time hold 20% or more of the issued and outstanding Common Shares of the Company at any given time. Furthermore, if approval is not obtained, Mork Capital may still convert more than 50% of its November Debentures and remain below the 20% of the current issued and outstanding Common Shares of the Company – although Mork Capital could not, absent the approval of the Control Person Resolution, convert all of its November Debentures and remain below this threshold.

Recommendation of the Board

The Board has reviewed and considered the Control Person Resolution, and, after undertaking such a review, the Board unanimously resolved to approve and adopt the Control Person Resolution. Mork Capital, and its affiliates and associates (the “**Excluded Shareholders**” and Shareholders that are not Excluded Shareholders, collectively, the “**Disinterested Shareholders**”) shall not be permitted to vote on the Control Person Resolution. Only the votes of Disinterested Shareholders shall count towards the approval of the Control Person Resolution.

- **Unless otherwise directed, it is the intention of management of the Company to vote proxies FOR the Control Person Resolution, substantially in the form attached hereto as Schedule “A”.**

Insider Participation Resolution

Background

The Company has previously entered into two separate series of convertible debentures and entered into a third series of convertible debentures on May 31, 2024. See “*Control Person Resolution – Background*” for further information on the Ataraxia Debentures, the November Debentures and the 2024 Convertible Debentures.

Mork Capital has purchased US\$1,375,000 of the November Debentures between November 8, 2023 and January 11, 2024. Such November Debentures allow Mork Capital to acquire up to 7,605,088 Common Shares on conversion of such November Debentures.

The Company and MCAPM, LP entered into a further subscription agreement on May 31, 2024 to complete a private placement whereby MCAPM, LP purchased the 2024 Convertible Debentures, which may be

converted into up to 8,000,000 Common Shares. Mork Capital's subscription for the November Debentures and the 2024 Convertible Debentures are within six months of each other.

The TSX requires shareholder approval of a private placement that, during a given six-month period, involves the issuance of securities to an insider, or a group of insiders, of the issuer over multiple transactions in an amount greater than 10% of the number of the outstanding securities of the listed issuer at the beginning of the first such transaction, on a non-diluted basis, during such six-month period. Following the subscription for November Debentures, had nearly met this 10% insider participation limit given that the November Debentures subscribed for entitle Mork Capital to convert such November Debentures into 7,605,088 Common Shares, out of a total 78,001,066 Common Shares outstanding as of November 7, 2023. As a result, the 2024 Convertible Debentures subscribed for by MCAPM, LP cannot be fully converted into Common Shares unless the Insider Participation Resolution is approved. If the Insider Participation Resolution is not approved, Mork Capital will be permitted to convert a portion of the 2024 Convertible Debentures, for a maximum of 195,018 Common Shares.

Therefore, the 2024 Convertible Debentures would result in the issuance of securities convertible into Common Shares issued to MCAPM, LP in an amount greater than 10% of the number of outstanding Common Shares calculated on a non-diluted basis as of November 7, 2023 – which was the day immediately prior to the closing of the first tranche of the November Debentures. As a result, Shareholders must approve the conversion of any of the 2024 Convertible Debentures by any insiders.

Shareholder Approval

At the Meeting, Shareholders will be asked to consider and, if deemed advisable, to approve the text of an ordinary resolution approving the conversion of the 2024 Convertible Debentures by MCAPM, LP into Common Shares (the “**Insider Participation Resolution**”), substantially in the form attached as Schedule “B”. The Insider Participation Resolution must be must be approved by way of a resolution passed by a simple majority of 50% plus one of the votes properly cast by disinterested holders of Common Shares voting in person or by proxy at the Meeting. If such Shareholder approval is not obtained at the Meeting, MCAPM, LP would be able to convert a portion of the 2024 Convertible Debentures into a maximum of 195,018 Common Shares and the balance of the 2024 Convertible Debentures would be settled in cash by the Company on the Maturity Date. The Excluded Shareholders shall not be permitted to vote on the Control Person Resolution. Only the votes of Disinterested Shareholders shall count towards the approval of the Control Person Resolution.

In order for the 2024 Convertible Debentures to be fully convertible by Mork Capital, both the Insider Participation Resolution and the Control Person Resolution must be approved by Shareholders.

Recommendation of the Board

The Board has reviewed and considered the Insider Participation Resolution, and, after undertaking such a review, the Board unanimously resolved to approve and adopt the Insider Participation Resolution.

- **Unless otherwise directed, it is the intention of management of the Company to vote proxies FOR the Insider Participation Resolution, substantially in the form attached hereto as Schedule “B”.**

Security Based Compensation Arrangement Resolution

Background

As described under the heading “*Insider Participation Resolution – Background*”, on November 8, 2023, the Company commenced a private placement for the November Debentures, the final tranche of which closed on January 11, 2024, on which date the Company issued US\$1,872,000 of the November Debentures, US\$147,000 of which (the “**Director Debentures**”) were issued to certain current and former

directors of the Company (the “**Subscribing Directors**”) as satisfaction for partial payment of their respective director fees for acting in such capacity for the year ended December 31, 2023 (collectively, the “**Director Fees**”). The Director Debentures are subject to the same terms, including interest and conversion, as the November Debentures as further described under the heading “*Insider Participation Resolution – Background*” above.

The Board had determined that the value of the applicable portion of each Subscribing Directors’ Director Fees for past service as a director represented by the amounts owing to such Subscribing Directors under the November Debentures was not less than the fair market equivalent of the money that the Company would have received if the November Debentures had been issued for cash. In particular, the Company issued the following November Debentures in the aggregate amounts and to the following Subscribing Directors, such amounts representing the aggregated United States dollar equivalent of the partial payment of the applicable portion of the Director Fees owed to each Subscribing Director, as set forth across his name below, converted at the exchange rate posted by the Bank of Canada as of December 31, 2023:

<u>Director</u>	<u>Amount of November Debenture (USD)</u>
Charles Selby	\$12,000
Thomas E. Valentine	\$34,000
John S. Tilson	\$17,000
Bruce G. Wilcox	\$32,000
Gerald Sheehan	\$45,000
Theodore Patsellis	\$7,000
Total	\$147,000

In connection with the foregoing issuance, the Subscribing Directors will have the right to obtain, in the aggregate, up to a maximum of 813,053 Common Shares (the “**Director Fee Shares**”) upon conversion of the Director Debentures, representing 1.04% of the Common Shares issued and outstanding as of the date hereof. Other than the Director Fee Shares, no Common Shares are issuable in connection with the conversion of the Director Debentures. The Director Debentures are convertible into the Director Fee Shares at any time until January 11, 2026 (the “**Director Debenture Maturity Date**”).

There are no changes to the rights of the Subscribing Directors under the Director Debentures in the event that any of the Subscribing Directors cease to be directors of the Company prior to the Director Debenture Maturity Date. Such Subscribing Director will still be entitled to convert his Director Debentures into Director Fee Shares, and the Director Debentures will remain payable by the Company on the Director Debenture Maturity Date.

The rights and benefits of the Subscribing Directors under the Director Debentures may not be assigned to any person.

The issuance of the Director Fee Shares upon conversion of the Director Debentures constitutes a security based compensation arrangement for the purposes of Section 613 of the TSX Company Manual. The TSX requires shareholder approval of all security based compensation arrangements prior to giving effect to such arrangements.

The issuance of the Director Fee Shares is a one-time security based compensation arrangement and the Company will not be submitting this matter to the Shareholders at any subsequent meetings of the shareholders of the Company for amendments or approval of any other unallocated options, rights or other entitlements in connection with the Director Fee Shares. Should the Company wish to implement a similar security based compensation arrangement in the future, or any other security based compensation arrangement, the Company will be required to submit the arrangement to the Shareholders for approval in accordance with Section 613 of the TSX Company Manual.

Shareholder Approval

At the Meeting, Shareholders will be asked to consider and, if deemed advisable, to approve the text of an ordinary resolution ratifying the issuance of the Director Fee Shares upon conversion of the Director Debentures (the “**Security Based Compensation Arrangement Resolution**”), substantially in the form attached hereto as Schedule “C”. The Security Based Compensation Arrangement Resolution must be approved by way of a resolution passed by a simple majority of 50% plus one of the votes properly cast by disinterested holders of Common Shares voting in person or by proxy at the Meeting. Pursuant to Section 613 of the TSX Company Manual, insiders of the Company (including the Subscribing Directors) are not eligible to vote in respect of the Security Based Compensation Arrangement Resolution. If disinterested Shareholder approval is not obtained at the Meeting, the Subscribing Directors will not be able to convert any of the Director Debentures held into Common Shares, and the Director Debentures will be settled in cash by the Company on the Director Debenture Maturity Date.

Recommendation of the Board

The Board has reviewed and considered the Security Based Compensation Arrangement Resolution, and, after undertaking such a review, the Board unanimously resolved to approve and adopt the Security Based Compensation Arrangement Resolution.

- **Unless otherwise directed, it is the intention of management of the Company to vote proxies FOR the Security Based Compensation Arrangement Resolution, substantially in the form attached hereto as Schedule “C”.**

INTEREST OF CERTAIN PERSONS OR COMPANIES IN MATTERS TO BE ACTED ON

Management of the Company is not aware of any material interest, direct or indirect, by way of beneficial ownership of Common Shares or otherwise, of any director or executive officer of the Company who has held office as such since the beginning of the Company’s last financial year, any proposed nominee for election as director, or any associate or affiliate of any of the foregoing, in any matter to be acted on at the Meeting other than the election of directors and the approval of the Control Person Resolution, the Insider Participation Resolution and the Security Based Compensation Arrangement Resolution. Additional information can be found above under the heading “*Particulars of Matters to be Acted Upon*”.

INFORMATION ON THE BOARD AND DIRECTOR NOMINEES

Director Nominees

Name and Municipality of Residence	Office(s) Currently Held	Principal Occupation or Employment for the Last Five Years	# of Shares Beneficially Owned ⁽¹⁾	Year became a Director
Peter Mork Healdsburg, CA, USA Independent	None	Peter Mork, has served as a Portfolio Manager at Mork Capital Management, LLC in Healdsburg, California since 2021, and in similar roles over the last two decades, drawing on investment sector expertise. Previously, he led Institutional Sales & Research at La Jolla Economics in San Diego. He is a Chartered Financial Analyst (CFA) charter holder and earned a Bachelor’s degree in Business/Economics from the University of California, Santa Barbara. His leadership experience includes serving on the boards of private and non-profit organizations, and chairing the investment committee for a local endowment.	369,737 Common Shares	N/A
Theodore Patsellis	Director ^{2,6}	Mr. Patsellis is a Greek attorney who was admitted to the Athens Bar Association in 1996. He is a Greek Ministry of Justice certified Mediator and has been the owner of	Nil	2023

Name and Municipality of Residence	Office(s) Currently Held	Principal Occupation or Employment for the Last Five Years	# of Shares Beneficially Owned ⁽¹⁾	Year became a Director
Athens, Hellenic Republic Independent		a boutique Law firm since 2013. He holds a Bachelor Degree from the National and Kapodistrian University of Athens - Law Faculty and an LL.M. degree from the Ludwig-Maximilian University of Munich. Having worked for many years with Ernst & Young LLP, Hill International Inc. and several renowned law firms, Mr. Patsellis has acquired experience working in diversified environments and a variety of business cultures. With a strong German background and the experience of having lived and worked in Germany, Greece, Serbia and Romania as a lawyer and tax professional, he was able to lead various teams of professionals involved in large business transactions in the South-East European region. His expertise spans across mergers and acquisitions, corporate and transactional law, local and international taxation, corporate governance and compliance. His industry knowledge ranges from the telecommunications and energy sectors to the retail, hospitality and consumer products, pharmaceuticals, and real estate. In addition to NXT, as of the date hereof, he sits on the Board of Directors of PANA Holdings in Mauritius and Vivid Living Co. S.A. in Greece.		
Charles Selby Calgary, AB Canada Independent	Chairman of the Board ^{2,3,5}	Mr. Patsellis is a member of the Audit, and the Strategic Planning Committees. Mr. Selby obtained a Bachelor of Science (Hons.) degree in Chemical Engineering from Queen's University, a Juris Doctorate degree from the University of Calgary, and is a registered Professional Engineer and lawyer in the Province of Alberta. He previously practiced law for two large Canadian law firms, specializing in securities and international transactions primarily in the energy business. Mr. Selby served as Vice President of Pengrowth Corporation for almost 20 years participating in the growth of that entity to an enterprise value of more than \$4 billion. He also has served as a director and officer of a number of reporting issuers in the oil and natural gas industry including Arakis Energy Corp., with operations in the Sudan. Since 2017 he is President and Director of Caledonian Midstream Corporation, a company that has natural gas and oil production together with a sour natural gas plant and infrastructure in the Alberta foothills and is also the CEO and a director of Wildcat Royalty Corporation.	408,161 Common Shares	2006
Gerry Sheehan Dublin, Leinster Ireland Independent	Director ^{4,6}	Mr. Selby is the Chairman of NXT. He is also Chair of the Audit, Compensation, Disclosure Committees and a member of the Strategic Planning Committee. Mr. Sheehan has worked continuously in international oil and gas exploration, development, and production for over 40 years. He has broad technical and business development experience in Africa, South Asia and Europe. Mr. Sheehan began his career in 1982 as a geophysicist working with the British National Oil Corporation ("BNOC"), after privatization becoming Britoil plc. He evaluated acreage in the United Kingdom, Dutch, Danish, Irish and Norwegian sectors. In 1986 he transferred to the BNOC Houston office as a technical auditor. He was later seconded to the Global Basin Evaluation Team, focusing on Africa and Asia. In 1987 Mr. Sheehan joined the fledgling oil company Tullow Oil plc. as part of the founding technical team. The	77,000 Common Shares	2021

Name and Municipality of Residence	Office(s) Currently Held	Principal Occupation or Employment for the Last Five Years	# of Shares Beneficially Owned ⁽¹⁾	Year became a Director
		<p>company was operated in Senegal on a World Bank-sponsored gas to power project. New acreage was secured in the UK onshore, Pakistan, Syria and Yemen, with follow-on exploration and field development projects.</p> <p>From 1992 to 1998, Mr. Sheehan held the position of Chief Geophysicist. The company operated in South Asia culminating in the discovery and development of a one trillion cubic feet-sized Bangora gas field in Bangladesh, operated on behalf of Texaco and Chevron. His project team also deployed on the re-development of the offshore Espoir field in Cote d'Ivoire, West Africa, with partners Canadian Natural Resources Limited and Addax Petroleum.</p> <p>From 1998 to 2006 Mr. Sheehan held the post of International Exploration Manager, this role also encompassed a business development responsibility. This was a time of expansion in the company with new assets acquired in West Africa, North Africa, Central and Eastern Europe and South Asia. In 2004, Mr. Sheehan led the technical due-diligence team on the corporate acquisition of Energy Africa plc. The company expanded its footprint in Africa with oil exploration successes in Ghana and Uganda.</p> <p>In 2007 Mr. Sheehan founded a private company, Blackstairs Energy plc. The company acquired oil field rehabilitation projects in Romania, and exploration acreage in Armenia and Senegal. The company also undertook technical and commercial asset evaluations on behalf of third parties.</p> <p>In 2014 Mr. Sheehan was a founder of T5 Oil & Gas, a private London-based oil and gas company. T5 is a licence partner in a portfolio of assets in Gabon, comprising offshore oil production and a suite of undeveloped oil and gas fields, both offshore and onshore, now being advanced to development.</p> <p>Mr. Sheehan holds a Bachelor of Science degree in Geology and a Master of Science in Applied Geophysics, both obtained from the National University of Ireland. He is a Fellow of the Geological Society (FGS, elected 2009) and is an active member of the American Association of Petroleum Geologists (AAPG, 1986) and the Society of Exploration Geophysicists (SEG, 1996).</p> <p>Mr. Sheehan is the chair of the Strategic Planning Committee and a member of the Governance Committee.</p>		
<p>John Tilson Montecito, CA USA</p> <p>Independent</p>	<p>Director^{2,3,4}</p>	<p>Mr. Tilson obtained his Master of Business Administration degree from the University of Southern California and further obtained his Chartered Financial Analyst designation. Following this, Mr. Tilson worked as an analyst, portfolio manager, and advisor in the United States investment and financial industry with firms such as Sutro & Company and EF Hutton & Company. Mr. Tilson joined Roger Engemann & Associates, Inc. in 1983. During his tenure in such position, the Pasadena Group of Mutual Funds was started, with Pasadena Capital Corporation formed as the holding company for the mutual funds and investment management business. After working as an Analyst and Portfolio Manager, Mr. Tilson later became Executive Vice President & Managing Director of Pasadena Capital Corporation. Assets under management had grown to over US\$5</p>	<p>6,887,490 Common Shares</p>	<p>2015</p>

Name and Municipality of Residence	Office(s) Currently Held	Principal Occupation or Employment for the Last Five Years	# of Shares Beneficially Owned ⁽¹⁾	Year became a Director
Thomas E. Valentine Calgary, AB Canada	Director ^{3,4,7}	<p>billion by the time the firm was sold to Phoenix Companies in 1997. Mr. Tilson later retired in 2005.</p> <p>From 2006 to 2012, Mr. Tilson was a member of the Board of Trustees, including three years serving as Vice President and Chairman of the Long-Range Planning Committee for Lotusland, a Santa Barbara non-profit organization established by Madame Ganna Walska.</p> <p>Mr. Tilson is a member of the Audit Committee, the Compensation Committee and the Governance Committee.</p> <p>Mr. Valentine is a Partner with Norton Rose Fulbright Canada LLP, where he has practiced law, both as a barrister and a solicitor, since being admitted to the Law Society of Alberta in 1987. He is a member of the firm's Energy and Infrastructure Practice Group and is involved in energy-related matters throughout the Middle East, North Africa, the Commonwealth of Independent States, Asia and South America. His principal occupation is as a lawyer.</p>	Nil Common Shares	2007
Independent		<p>Mr. Valentine is Corporate Secretary of Touchstone Exploration Inc., and formerly was a director of two other Canadian public companies, Calvalley Petroleum Inc. (to May 2015) and Veraz Petroleum Ltd. (to December 2012).</p> <p>Mr. Valentine holds a Bachelor of Arts degree from the University of British Columbia, a Bachelor of Laws degree from Dalhousie University, and a Master of Laws degree from the London School of Economics.</p>		
Bruce G. Wilcox New York, NY USA	Chief Executive Officer and Director ⁵	<p>Mr. Valentine is the Chair of the Governance Committee and a member of the Compensation and Committee.</p> <p>Mr. Wilcox has had a long career as an investment company CEO, analyst and portfolio manager. He spent most of his career with Cumberland Associates, LLC, a New York equity fund, from 1986 through retirement in 2010, progressing from analyst / portfolio manager to partner (1989), and Chairman of the Management Committee (1997). Mr. Wilcox specialized in Cumberland's investments in the energy industry (exploration and production and service companies), with an emphasis on value and long-term holdings. During his tenure, the fund's assets under management ranged from US\$0.7 billion to \$1.5 billion.</p> <p>From 1984 to 1986, Mr. Wilcox was with Central National- Gottesman, Inc. as an analyst and portfolio manager on a team responsible for a \$500 million listed equity portfolio.</p> <p>Mr. Wilcox was CEO of E Street Management, LLC from 2016 through 2020 which managed a long/short equity fund of funds.</p> <p>From January 2011 to present he has also been one of three managing members of Xiling Fund III, LLC, part of a series of private equity funds (US\$100+ million) which invests in museum-quality Imperial Chinese porcelains, archaic bronzes and ink paintings.</p> <p>Mr. Wilcox obtained a Bachelor of Arts (Honors), in Modern Chinese from the University of California, Santa Barbara (1977); and a Master of International Management from the American Graduate School of</p>	685,000 Common Shares	2015

Name and Municipality of Residence	Office(s) Currently Held	Principal Occupation or Employment for the Last Five Years	# of Shares Beneficially Owned ⁽¹⁾	Year became a Director
		<p>International Management in Phoenix (1980, now a part of Arizona State University).</p> <p>Mr. Wilcox has served on several boards, including the Teachers College of Columbia University (2003 to date, serving as the Chair of the Investment Committee for that entire period), the University of California Santa Barbara Foundation (2003 to date, including as former Chair of the Board of Trustees, Investment and Finance Committees), and was a Trustee (2001 to May 2023) of the Manhattan Institute For Policy Research, a leading urban, state, and national policy institution, which works on matters such as energy policy.</p> <p>Mr. Wilcox is a member of the Disclosure Committee.</p>		
<p>Eugene Woychyshyn Calgary, AB Canada</p>	<p>VP of Finance & Chief Financial Officer⁵.</p>	<p>Mr. Woychyshyn brings to NXT over 25 years of leadership experience in multiple industries and worldwide regions including North America, Europe and Asia. Mr. Woychyshyn has extensive hands-on experience and accomplishments in mergers and acquisitions, organizational restructuring, purchasing, treasury, financial reporting and control, compliance, human resource management and tax planning. In almost ten years as an expatriate with assignments in Norway, China, the United States and South East Asia, Mr. Woychyshyn developed international business competencies.</p> <p>Mr. Woychyshyn originally served as a consultant to NXT from November 2017 to November 2018, providing controllership services. From 2015 to 2017 he was the Chief Financial Officer of Imaging Dynamics Company Limited.</p> <p>Mr. Woychyshyn is a Chartered Professional Accountant, CA, who holds a Bachelor of Commerce (Hons) degree from the University of Manitoba and a Masters of Business Administration degree from St. Joseph's University, Philadelphia PA, USA.</p> <p>Mr. Woychyshyn is a member of the Disclosure Committee.</p>	<p>853,062</p>	<p>N/A</p>

Notes:

- (1) The information as to shares beneficially owned as at the date of this Information Circular, not being within the knowledge of the Company, has been obtained from information provided by the directors to the Company. Includes any shares beneficially owned, controlled or directed, directly or indirectly, voting securities of the Company.
- (2) Member of the Audit Committee.
- (3) Member of the Compensation Committee.
- (4) Member of the Corporate Governance Committee.
- (5) Member of the Disclosure Committee.
- (6) Member of the Strategic Planning Committee.
- (7) Corporate Secretary.

Cease Trade Orders, Bankruptcies and Insolvencies

No proposed director has, within the 10 years prior to the date of this Information Circular, except as noted below:

- been a director, chief executive officer or chief financial officer of any company (including the Company) that was subject to a cease trade or similar order or an order that denied the relevant company access to any exemption under securities legislation for a period of more than 30 consecutive days that was issued: (i) while the proposed director was acting in the capacity as director chief executive officer or chief financial officer; or (ii) after the proposed director ceased

to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer;

- been a director, chief executive officer or chief financial officer of any company (including the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the proposed director.

Charles Selby was a board member of Montana Exploration Corp. (“MEC”) when it was issued a cease trade order by the Alberta Securities Commission on May 4, 2018 against MEC for failing to file its annual audited financial statements, annual management’s discussion and analysis and certification of annual filings within the required time period. MEC ceased operations in June 2021.

Penalties or Sanctions

No proposed director has been subject to any penalties or sanctions imposed by a court or a securities regulatory authority, nor has any proposed director entered into a settlement agreement with a securities regulatory authority, relating to trading in securities, promotion or management of a publicly traded issuer, or theft or fraud.

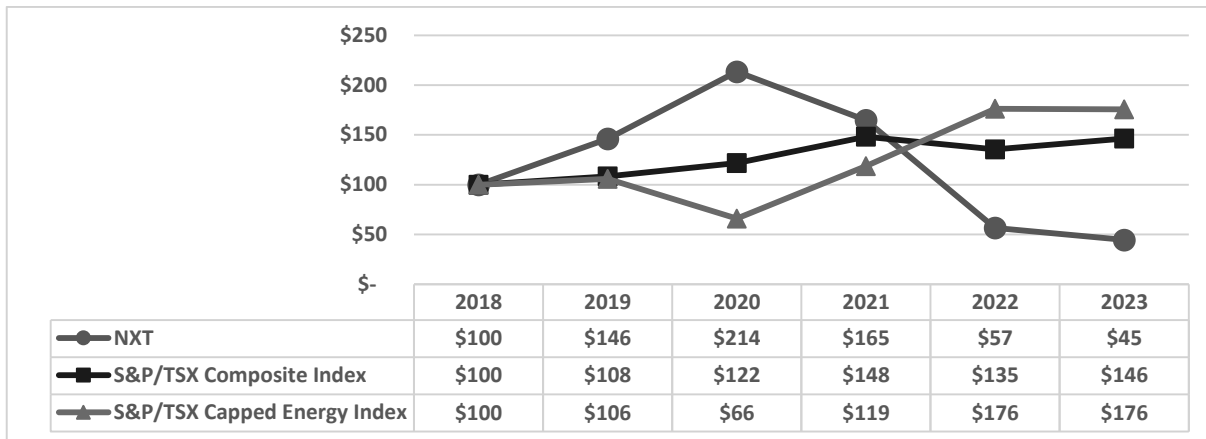
EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

This disclosure is intended to communicate the compensation provided to named executive officers of the Company, as defined under applicable securities laws (the “**Named Executive Officers**” or “**NEOs**”).

Total Return Performance Graph

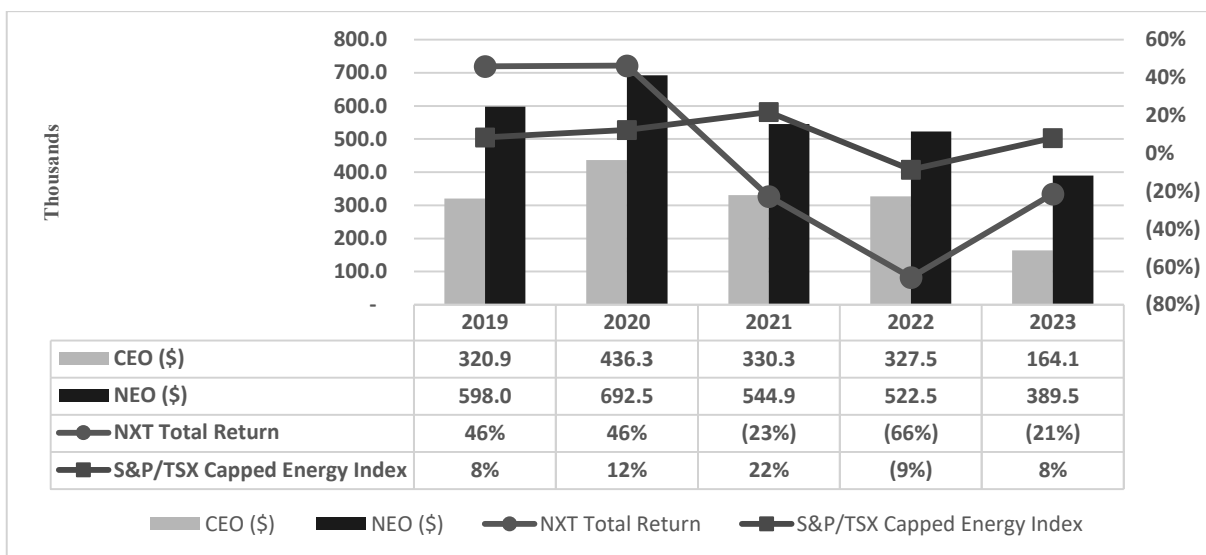
This following graph compares the Common Share price performance of the Company over the five-year period ending December 31, 2023, to the S&P/TSX Composite Index, and the S&P/TSX Capped Energy Index, each starting with an investment of \$100 at the end of 2018 excluding reinvestment of dividends.



Notes:

- (1) Does not include reinvested dividends.

Named Executive Officer Compensation Trends



Notes:

- (1) NEOs include the CEO.

In the five year period ending December 31, 2023, the Company did not pay any performance bonuses to its executive officers. Options granted pursuant to the Option Plan (“Options”) were granted to NEOs in 2023 based on specific revenue targets.

Compensation Committee

(i) Composition of the Compensation Committee

Messrs. Selby (Chair), Tison and Valentine are members of the Compensation Committee. All members are independent within the meaning of National Instrument 58-101 *Disclosure of Corporate Governance Practices* (“NI 58-101”).

(ii) Responsibilities of the Compensation Committee

The Compensation Committee's duties, as outlined in its charter, are to deal with the assessment of management and succession to key positions and compensation within the Company. The Compensation Committee shall assist the Board in discharging the Board's oversight responsibilities relating to the compensation and retention of key senior management employees, and in particular the CEO, with the skills and expertise needed to enable the Company to achieve its goals and strategies at fair and competitive compensation and appropriate performance incentives. In discharging its responsibilities, the Compensation Committee will report and where appropriate, make recommendations to the Board in respect of the matters identified in the charter. Compensation of executive officers of the Company, including the NEOs, is recommended to the Board by the Compensation Committee. The Board, as a whole, reviews the recommendations of the Compensation Committee.

All members of the Compensation Committee have expertise and extensive experience in compensation, governance and other human resource areas through their roles with other publicly listed companies, as discussed in further detail under the heading "*Corporate Governance – Compensation Committee*".

The Board has adopted a formal mandate for the Compensation Committee, which provides that the Compensation Committee is responsible for reviewing and approving the compensation of the directors and officers of the Company. The Compensation Committee also reviews and approves changes to the Company's compensation policies and approves the hiring of executive management recruited from outside the Company.

The Company did not retain an independent compensation advisor for the year ended December 31, 2023 or to date in 2024.

Compensation Philosophy and Objectives

The Company's executive compensation program is intended to attract, motivate and retain high performing senior executives, encourage and reward superior performance and align management's interest with those of the Shareholders. This is accomplished by providing an opportunity to receive total compensation that is competitive with the compensation received by those executives at comparable companies, by ensuring that a significant proportion of executive compensation is linked to performance, and by providing executives with equity-based incentive plans, including the RSU Plan, the Option Plan, and the ESP Plan as well as the DSU Plan pursuant to which executives who are also directors of the Company are eligible to receive DSU grants.

The pay philosophy of the Company incorporates a strong pay-for-performance approach by providing competitive cash compensation and benefits with upside potential that is linked directly to shareholder value creation. In general, the Company attempts to provide competitive pay (market averages) for achieving target or expected performance, with additional bonus amounts payable when the Company has achieved superior performance results when compared to its business plan as approved by the Board.

The Company does not believe that its compensation programs encourage excessive or inappropriate risk taking as the Company's executives receive both fixed and variable compensation which allows employees to focus on the Company's business both in the immediate future and in the long-term.

Compensation Elements

The executive compensation program is comprised of fixed and variable components and covers four elements:

- (i) a base salary;
- (ii) non-equity incentives, consisting of a cash bonus linked to corporate and individual performance;
- (iii) equity incentives, comprised of Restricted Share Units granted pursuant to the RSU Plan (“**RSUs**”), Options, and Common Shares issued or acquired pursuant to the ESP Plan (“**ESP Shares**”), as well as Deferred Share Units granted pursuant to the DSU Plan (“**DSUs**”) to executives that are also directors of the Company; and
- (iv) other elements of compensation, including benefits and other perquisites.

Each compensation component has a different function, but all elements work in concert to maximize individual and overall performance by establishing specific, competitive operational and financial goals and by providing financial incentives to employees based on their level of achievement of these goals. The ESP Shares contributed by the Company further enhance the Company’s executive compensation program. Executives who are also directors of the Company are also eligible to receive DSUs.

(i) Base Salary

The objective of base salary is to provide a fixed level of cash compensation for performing day-to-day responsibilities. In setting base salaries, the Company strives to be competitive with the oil and gas service industry but the size of the Company prohibits base salary compensation from matching larger industry competitors. Consideration is also given to objective factors, including level of responsibility, experience and expertise and to subjective factors, such as leadership, commitment and attitude.

(ii) Cash Bonus Plan

Cash bonuses are intended to reflect actual performance in a particular fiscal year based on the achievement of objective corporate financial performance measures. The Compensation Committee and the Board have determined that cash bonuses will only be paid on a discretionary basis subject to the Company’s ability to pay such bonuses, individual performance and contributions, and other competitive considerations.

No cash bonuses were paid to executives in 2023.

(iii) Equity Incentives

The equity component of the Company’s executive compensation program, namely the RSU Plan, the Option Plan and the ESP Plan, as well as the DSU Plan in so far as executives that are also directors of the Company are eligible to receive DSUs thereunder, are designed to:

- recognize and reward the impact of longer-term strategic actions undertaken by management;
- align the interests of the Company’s executive and employees with the interests of the Shareholders;
- focus management on developing and successfully implementing the continuing growth strategy of the Company;

- foster the retention of key management personnel; and
- attract talented individuals to the Company.

DSU, RSU and Option awards are approved by the Board, based on the recommendations of the Compensation Committee after considering the recommendations of the CEO, with the exception that any awards to the CEO are determined and approved independently of any input from the CEO. In granting DSUs, RSUs and Options, consideration is given to:

- the number of DSUs, RSUs and Options already outstanding on an individual and aggregate basis, as well as the terms thereof and the number of ESP Shares reserved for issuance under the ESP Plan;
- the limits imposed by the TSX on the total number of DSUs, RSUs, Options and ESP Shares that may be issued and outstanding;
- the expected impact of the role of the executive on the Company's performance and strategic development; and
- market benchmarking.

Summaries of the material terms of each of the ESP Plan, the RSU Plan, the Option Plan and the DSU Plan are attached to this Information Circular as Schedule "D", Schedule "E", Schedule "F" and Schedule "G".

(iv) Benefits and Other Perquisites

The Company's executive employee benefit program includes such items as life insurance, disability, medical, dental, health and accident plans, and four weeks of annual paid vacation. These benefits and perquisites are designed to be competitive overall with equivalent positions in the Company's industry.

Summary Compensation Table

The following table sets forth information concerning the total compensation to the NEOs paid during the Company's three most recently completed financial years.

Name and principal position	Year	Salary (\$) ⁽²⁾⁽³⁾	Share-based awards (\$) ⁽⁵⁾	Option-based awards (\$) ⁽⁶⁾	All other compensation (\$) ⁽⁷⁾	Total compensation (\$)
Bruce G. Wilcox ⁽¹⁾⁽⁴⁾	2023	133,237	-	10,408	-	143,645
Chief Executive Officer	2022	-	-	-	-	-
	2021	-	-	-	-	-
George Liszicasz ⁽¹⁾⁽⁴⁾	2023	18,866	744	-	841	20,451
Former President & Chief Executive Officer	2022	309,800	2,272	-	15,400	327,472
Chairman of the Board	2021	309,800	8,388	-	12,156	330,344
Eugene Woychyshyn	2023	180,000	17,513	26,020	1,822	225,355
Vice-President of Finance & Chief Financial Officer	2022	180,000	13,200	-	1,785	194,985
	2021	180,000	33,000	-	1,585	214,585

Notes:

- (1) Mr. Liszicasz passed away on January 21, 2023. Mr. Wilcox was appointed Interim CEO on June 21, 2023.
- (2) Amounts disclosed in the column for "Salary" in 2022 and 2023 include salary accrued, but not paid to the NEOs.
- (3) Amounts disclosed in the column for "Salary" include amounts contributed by the NEOs to the ESP Plan during the applicable year.
- (4) Amounts disclosed in the column for "Salary" for Mr. Wilcox and Mr. Liszicasz include compensation received for director services.

- (5) Amounts disclosed in the column for "Share-based awards" are calculated as the aggregate grant date fair values of the vested and unvested RSUs and ESP Shares granted or issued to, or acquired for, the NEOs under the RSU Plan and ESP Plan during the applicable year.
- (6) Amounts disclosed in the column for "Option-based awards" are calculated as the grant date fair value determined using a Black-Scholes model. This methodology is consistent with the method used to estimate the fair value of Options in NXT's financial statements. The amount excludes options granted in exchange for prior director fees, as these are reported as part of director compensation when earned.
- (7) Amounts disclosed in the column for "All other compensation" pertain to benefits related to standard health and life insurance premiums, car allowances, and other miscellaneous compensation paid by the Company on behalf of the eligible NEO of the Company. It also includes amounts related to severance pay, consulting fees and any cash payout in the year of unused vacation pay entitlements.

Incentive Plan Awards

Outstanding Share-based Awards and Option-based Awards

The following table lists: (i) the number of securities underlying unexercised Options that have been granted to each of the NEOs and the net benefit of their "in-the-money" Options as at December 31, 2023; and (ii) the number of securities underlying unvested RSUs that have been granted to each of the NEOs and their net benefit at December 31, 2023. The number of securities underlying outstanding unexercised Options and the number of RSUs listed in the table below includes unvested Options and RSUs, the value of which could not be realized by the NEO as at December 31, 2023. There were no DSUs issued to NEOs and outstanding as at December 31, 2023.

Name	Option-based Awards				Share-based Awards		
	Number of securities underlying unexercised options (#)	Option exercise price (\$)	Option expiration date	Value of unexercised in-the-money options (\$) ⁽¹⁾	Number of shares or units of shares that have not vested (#)	Market or payout value of share-based awards that have not vested (\$) ⁽¹⁾	Market or payout value of vested share based awards not paid out or distributed (\$) ⁽²⁾
Bruce G. Wilcox ⁽³⁾	52,650	0.260	Jan. 9, 2028	-	-	-	-
Eugene Woychyshyn	100,000	0.216	Jan. 6, 2028	-	-	-	-
	250,000	0.216	Jan. 6, 2028	-	-	-	-

Note:

- (1) Amounts disclosed in the columns for "Value of unexercised in-the-money options" and "Market or payout value of share-based awards that have not vested" are in respect of all vested and unvested option-based awards, including Options, and all unvested share-based awards, including RSUs, respectively, held by the NEOs as at December 31, 2023. These amounts were calculated using \$0.165, which was the closing trading price of the Common Shares on the TSX on December 31, 2023, the last day of trading of the year.
- (2) Amounts disclosed in the column for "Market or payout value of vested share-based awards not paid out or distributed" are in respect of all vested share-based awards, including DSUs, which the NEOs are entitled to receive but which were not yet paid out or distributed as at December 31, 2023. These amounts were calculated using \$0.165, which was the closing trading price of the Common Shares on the TSX on December 29, 2023, the last day of trading of the year.
- (3) Mr. Liszicasz passed away on January 21, 2023. Mr. Wilcox was appointed Interim CEO on June 21, 2023.

Value Vested During the Year

The following table sets forth, for each NEO, the intrinsic (or "in-the-money") value as at the vesting date on all security-based awards that vested during the financial year ended December 31, 2023:

Name	Option-based awards – Value vested during the year (\$) ⁽¹⁾	Share-based awards – Value vested during the year (\$) ⁽²⁾	Non-equity incentive plan compensation – Value earned during the year (\$) ⁽³⁾
Bruce G. Wilcox ⁽⁴⁾	-	-	-
George Liszicasz ⁽⁴⁾	-	12,007	-
Eugene Woychyshyn	-	28,180	-

Notes:

- (1) Amounts disclosed in the column for “*Option-based awards – Value vested during the year*” represent the aggregate dollar value that would have been realized if any option-based awards, including Options, were in-the-money as at the vesting date, and if they had been exercised on the vesting date, based on the difference between the closing price of the Common Shares on the vesting date and the exercise price of those awards.
- (2) Amounts disclosed in the column for “*Share-based awards – Value vested during the year*” represent the aggregate dollar value of vested share-based awards, including ESPs, RSUs and DSUs, as at the vesting date.
- (3) The Company’s non-equity plan compensation reflects annual bonus amounts earned in the year, and payable in cash.
- (4) Mr. Liszicasz passed away on January 21, 2023. Mr. Wilcox was appointed Interim CEO on June 21, 2023.

Narrative Discussion of Incentive Plans

Other than the RSU Plan, the Option Plan, the ESP Plan and the Cash Bonus Plan, the details of which are provided under the headings “*Executive Compensation – Compensation Discussion and Analysis*” and “*Securities Authorized for Issuance Under Equity Compensation Plans*”, the Company does not have any plans that provide compensation to non-director executives intended to serve as an incentive for performance over a period longer than one year.

The Company prohibits its executive officers or directors from purchasing financial instruments which are designed to hedge financial risk related to any equity securities which are granted as part of their compensation program.

Employment Agreements

The Company occasionally enters into employment agreements with the Company’s executive officers, with such agreements setting out the principal terms of the employment relationship as between the executive officer and the Company, including the individual’s overall role, the expectations of the Company around business practices including confidentiality, ethical behavior and conflict of interest and financial terms. In addition, the contracts detail any severance payments that may be provided on termination of employment.

Mr. Bruce G. Wilcox serves as the Chief Executive Officer of the Company pursuant to an executive employment agreement effective as of May 1, 2024 (the “**Wilcox EEA**”).

Mr. Eugene Woychyshyn serves as the VP of Finance and Chief Financial Officer of the Company pursuant to an executive employment agreement effective as of May 1, 2024 (the “**Woychyshyn EEA**”).

Pursuant to the terms of the Wilcox EEA and the Woychyshyn EEA, the employment of Mr. Wilcox and Mr. Woychyshyn (each, an “**Executive**” and together, the “**Executives**”) may be terminated by the Company. Upon termination of employment without cause, and for any other reason excluding termination with cause, disability, death, or voluntary resignation, the Executives are entitled to immediately receive:

- (i) an amount equal to the greater of 8 months of such Executive’s base salary, or 2 months of the base salary plus 1.5 months of the base salary for each year of service completed or commenced;
- (ii) an amount equal to 50% of any bonuses paid to the Executive for the prior calendar year;
- (iii) any declared but unpaid bonuses and any accrued benefits and vacation;
- (iv) accrued or vested rights under the Company’s equity-based incentive plans, subject to compliance and conditions of such plans; and
- (v) an amount equal to 15% of the amount calculated pursuant to item (i) above.

In addition to the above benefits, if the termination is pursuant to a change of control, all outstanding unvested rights under the Company’s equity-based incentive plans shall immediately accelerate and vest upon the occurrence of the change of control, and the Executives will have 90 days to exercise such rights. A change of control is defined in the Wilcox EEA and the Woychyshyn EEA as:

- (i) the acceptance by the 50 percent of the holders of voting securities of the Company, of any offer, whether by way of a takeover bid or otherwise, for more than 50 percent of the outstanding voting securities of the Company;
- (ii) the acquisition of the beneficial ownership of more than 50 percent of the combined voting rights of the Company's then outstanding voting securities by a person or two or more persons acting jointly;
- (iii) the entering into of any agreement by the Company to merge, consolidate, amalgamate, initiate an arrangement or be absorbed by or into another company, except where such agreement relates to a bona fide reorganization of the Company in circumstances where the business of the Company is continued, and where the shareholdings or ownership interests remain substantially the same following the reorganization;
- (iv) the passing of a resolution by the Board, or shareholders of the Company, to substantially liquidate assets or wind-up its business or significantly rearrange its affairs, except where such resolution or commencement relates to a bona fide reorganization of the Company in circumstances where the business of the Company is continued, and where the ownership interests remain substantially the same following the reorganization as existed prior to the reorganization;
- (v) the sale by the Company of all or substantially all of the assets; or
- (vi) individuals who were proposed as nominees by the management of the Company to become members of the Board immediately prior to a meeting of the shareholders of the Company involving a contest for or, an item of business relating to the election of directors shall not constitute a majority of the Board following such election.

The following table sets out the estimated amounts payable by the Company to the Executives under the Wilcox EEA and Woychyshyn EEA if the Executives had been terminated by the Company without cause on December 31, 2023, assuming the executive employment agreements were entered into by December 31, 2023:

Name	Cash Portion (\$)	Option Payout Amount (\$) ⁽¹⁾	RSU Payout Amount (\$) ⁽²⁾	DSU Payout Amount (\$) ⁽³⁾
Bruce G. Wilcox	146,667	-	-	-
Eugene Woychyshyn	207,781	-	-	-

Notes:

- (1) No options held by executives were "in the money" as of December 31, 2023.
- (2) No RSUs were granted to the Executives as of December 31, 2023.
- (3) No DSUs were granted to the Executives as of December 31, 2023.

There are no benefits payable to the Executives upon termination with cause, disability, death, or voluntary resignation.

DIRECTOR COMPENSATION

The annual compensation for directors is currently approved by the Board at least once per year, and for 2022 included an election by each director, to receive 100% of the annual retainer fee in cash or a combination of cash, Options and/or DSUs. The retainer fee is currently \$30,000 per annum, with the Chairman of the Board and the Chair of the Audit Committee receiving an additional \$5,000 per annum for their Chair responsibilities. In addition, each director is eligible to receive Options and RSUs. For 2023 no cash payments were remitted to directors, but all current directors converted most of their outstanding fees at December 31, 2023 to convertible debentures.

Summary Compensation Table

The following table sets forth all compensation provided to the directors of the Company in the most recently completed financial year.

Name ⁽¹⁾	Fees earned (\$)	Share-based awards (\$)	Option-based awards (\$) ⁽⁴⁾	Total compensation (\$)
Frank Ingriselli ⁽²⁾	1,731	-	-	1,731
Theodore Patsellis ⁽²⁾	17,308 ⁽³⁾	-	16,485	33,793
Charles Selby	32,692 ⁽³⁾	-	10,408	43,100
Gerry Sheehan	30,000	-	10,408	40,408
John Tilson	30,000 ⁽³⁾	-	10,408	40,408
Thomas E. Valentine	30,000 ⁽³⁾	-	10,408	40,408

Notes:

- (1) Information for Mr. Wilcox is documented under the heading "Executive Compensation".
(2) Mr. Ingriselli resigned as a director on January 20, 2023. Mr. Patsellis joined the board on June 5, 2023.
(3) The following directors elected to receive some or all or part of their 2023 director fees in the form of options: Mr. Patsellis \$7,500; Mr. Selby \$16,249; and Mr. Tilson \$7,500.
(4) The amount excludes options granted in exchange for prior director fees, as these are reported as part of director compensation when earned.

Incentive Plan Awards

Outstanding Share-based Awards and Option-based Awards

The following table lists the number of securities underlying unexercised option-based and share-based awards that have been granted to each of the directors and the net benefit of their "in-the-money" awards as at December 31, 2023. The number of securities underlying outstanding unexercised option-based awards listed in the table below includes unvested option-based awards, the value of which could not be realized by the directors as at December 31, 2023.

Name ⁽¹⁾	Option-based Awards				Share-based Awards		
	Number of securities underlying unexercised options (#)	Option exercise price (\$)	Option expiration date	Value of unexercised in-the-money options (\$) ⁽²⁾	Number of shares or units of shares that have not vested (#)	Market or payout value of share-based awards that have not vested (\$) ⁽¹⁾	Market or payout value of vested-share based awards not paid out or distributed (\$) ⁽²⁾
Theodore Patsellis	100,000	0.259	Sept. 14, 2028	-	-	-	-
	36,400	0.252	Sept. 28, 2028	-	-	-	-
Charles Selby	100,000	0.216	Jan. 6, 2028	-	-	-	-
	177,200	0.264	Jan. 11, 2028	-	-	-	-
	55,400	0.20	Jun. 5, 2028	-	-	-	-
	42,450	0.252	Sept. 28, 2028	-	-	-	-
	-	-	-	-	-	-	6,163
Gerry Sheehan	100,000	0.216	Jan. 6, 2028	-	-	-	-
John Tilson	16,000	0.51	Sept. 30, 2025	-	-	-	-
	21,360	0.44	June 30, 2026	-	-	-	-
	14,750	0.68	Sept. 30, 2026	-	-	-	-
	18,050	0.62	Dec. 31, 2026	-	-	-	-
	24,460	0.72	May 31, 2027	-	-	-	-
	17,500	0.68	June 30, 2027	-	-	-	-

	69,200	0.174	Nov. 21, 2027	-	-	-	-
	155,200	0.216	Jan. 6, 2028	-	-	-	-
	36,400	0.252	Sept 28, 2028	-	-	-	-
Thomas Valentine	100,000	0.216	Jan. 6, 2028	-	-	-	-
	110,800	0.20	Jun. 5, 2028	-	-	-	-

Notes:

- (1) Information for Mr. Wilcox is documented under the heading "Executive Compensation".
- (2) Amounts disclosed in the columns for "Value of unexercised in-the-money options" and "Market or payout value of share-based awards that have not vested" are in respect of all vested and unvested option-based awards, including Options, and all unvested share-based awards, including RSUs, respectively, held by the directors as at December 31, 2023. These amounts were calculated using \$0.165, which was the closing trading price of the Common Shares on the TSX on December 29, 2023, the last day of trading of the year.
- (3) Amounts disclosed in the column for "Market or payout value of vested share-based awards not paid out or distributed" are in respect of all vested share-based awards, including DSUs, which the directors are entitled to receive but which were not yet paid out or distributed as at December 31, 2023. These amounts were calculated using \$0.165, which was the closing trading price of the Common Shares on the TSX on December 29, 2023, the last day of trading of the year.

Value Vested During the Year

The following table sets forth, for each director, the intrinsic (or "in-the-money") value as at the vesting date on all security-based awards that vested during the financial year ended December 31, 2023:

Name ⁽¹⁾	Option-based awards – Value vested during the year (\$) ⁽²⁾	Share-based awards – Value vested during the year (\$) ⁽³⁾
Theodore Patsellis	-	-
Charles Selby	-	-
John Tilson	-	-
Thomas E. Valentine	-	-
Bruce G. Wilcox	-	-

Notes:

- (1) Information for Mr. Wilcox is documented under the heading "Executive Compensation".
- (2) Amounts disclosed in the column for "Option-based awards – Value vested during the year" represent the aggregate dollar value that would have been realized if any option-based awards, including Options, were in-the-money as at the vesting date, and if they had been exercised on the vesting date, based on the difference between the closing price of the Common Shares on the vesting date and the exercise price of those awards.
- (3) Amounts disclosed in the column for "Share-based awards – Value vested during the year" represent the aggregate dollar value of vested share-based awards, including RSUs and DSUs, as at the vesting date.

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

As discussed above, the Company has adopted four equity compensation plans: (i) the DSU Plan, which was last approved by the Shareholders on June 6, 2022; (ii) the RSU Plan, which was last approved by the Shareholders on August 2, 2023; (iii) the Option Plan, which was last approved by the Shareholders on June 6, 2022; and (iv) the ESP Plan, which was last approved by the Shareholders on August 2, 2023. The aggregate number of securities reserved for issuance under the DSU Plan, the RSU Plan, the Option Plan, and the ESP Plan shall not exceed 10% of the total number of issued and outstanding Common Shares (calculated on a non-diluted basis) from time to time.

As at December 31, 2023, there were 78,025,237 Common Shares issued and outstanding and an aggregate of 7,802,524 securities available for issuance under the Company's existing equity compensation plans. Of those 7,802,524 securities available for issuance, 2,927,820 Options had been issued under the Option Plan and were outstanding, 37,354 DSUs had been issued under the DSU Plan and were outstanding, and 0 RSUs had been issued under the RSU Plan and were outstanding (in total representing approximately 3.8% of the total number of issued and outstanding Common Shares) and 4,874,704 securities remained available for issuance (representing approximately 6.2% of the total number of issued and outstanding Common Shares).

Plan Category	Number of securities to be issued upon exercise of outstanding options, and rights ⁽¹⁾	Weighted-average exercise price of outstanding options, and rights	Number of securities remaining available for future issuance under equity compensation plans ⁽²⁾
Equity compensation plans approved by security holders			
Option Plan	2,927,820	\$0.25 ⁽³⁾	3,185,588
RSU Plan ⁽¹⁾	-	-	822,707
DSU Plan ⁽¹⁾	37,354	\$0.40 ⁽³⁾	162,646
ESP Plan ⁽¹⁾	-	-	666,409
Total	2,962,174	\$0.25	4,837,350

Notes:

- (1) RSUs, DSUs and ESP Shares are issued automatically once vested and do not require the holder thereof to exercise.
- (2) Number of securities remaining available for future issuance under security-based compensation plans calculated at December 31, 2023 as 10% of 78,025,237 Common Shares issued and outstanding, less: (i) 2,927,820 Options outstanding; and (ii) 37,354 DSUs outstanding.
- (3) Average price of the Common Shares on the TSX on the date the Options, RSUs, and DSUs were granted or issued, as applicable.

The burn rate shows how rapidly a company is utilizing shares reserved for equity compensation plans. It is calculated by dividing the number of share awards granted in a given year by the weighted average of the issued and outstanding shares of the Company for the same year. The following table summarizes the Company's three year annual and three year average burn rate as at December 31, 2023.

Fiscal Year	Options Granted (#)	RSUs Granted (#)	DSUs Granted (#)	ESPs Issued (#)	Basic Weighted Average of Issued and Outstanding Common Shares as at December 31 (#)	Burn Rate				
						Options	RSUs	DSUs	ESPs	Total
2023	2,716,500	-	-	309,509	77,646,094	3.50%	0.00%	0.00%	0.40%	3.90%
2022	134,060	-	-	188,633	65,602,875	0.20%	0.00%	0.00%	0.29%	0.49%
2021	62,660	-	-	304,550	64,658,380	0.09%	0.00%	0.00%	0.47%	0.56%
Average Three-year Burn Rate						1.26%	0.00%	0.00%	0.39%	1.65%

INDEBTEDNESS OF DIRECTORS AND EXECUTIVE OFFICERS

As of the date hereof, no director or officer of the Company, or any associate of any director or officer is or has been indebted, on a net basis, to the Company at any time during the last completed financial year.

INTEREST OF INFORMED PERSONS IN MATERIAL TRANSACTIONS

To the knowledge of the Board and executive officers of the Company, no "informed person" (as defined in NI 51-102), proposed director, or associate or affiliate of any informed person or proposed director had a material interest, direct or indirect, in any transaction since the commencement of the Company's most recently completed financial year or in any proposed transaction which has materially affected or would materially affect the Company.

CORPORATE GOVERNANCE

The Company and the Board recognize the importance of corporate governance to the effective management of the Company and to its Shareholders. The Company's approach to significant issues of

corporate governance is designed with a view to ensuring that the business and affairs of the Company are effectively managed so as to enhance shareholder value.

The Board and management endorse the need to establish forward-looking governance policies and to continuously evaluate and modify them to ensure their effectiveness.

In accordance with NI 58-101, the Company annually discloses information related to its system of corporate governance, which is detailed in Schedule “H” to this Information Circular.

The Board held a total of nine formal meetings in 2023, which were attended as follows:

Plan Category	Meetings (#)	Attended (#)	Attended (%)
Theodore Patsellis ⁽¹⁾	5	5	100
Charles Selby	9	9	100
Gerry Sheehan	9	9	100
John Tilson	5	9	56
Thomas E. Valentine	9	9	100
Bruce G. Wilcox	9	9	100

(1) Mr. Patsellis joined the board on June 5, 2023.

Corporate Governance Committee

Composition

Mr. Valentine (Chair), Mr. Sheehan, and Mr. Tilson are members of the Corporate Governance Committee. All members of the Corporate Governance Committee are independent.

Responsibilities

The Corporate Governance Committee’s duties, as outlined in its charter, are to deal with the Company’s approach to corporate governance and the promotion of compliance with industry and regulatory standards. The Committee is responsible for overseeing and assessing the functioning of the Board and the committees of the Board and for the development, recommendation to the Board, implementation and assessment of effective corporate governance principles and guidelines. The Committee’s responsibilities also include identifying candidates for director and recommending that the Board select qualified director candidates for election at the next annual meeting of Shareholders.

Disclosure Committee

Composition

Messrs. Selby (Chairman of the Board and Committee Chair), Wilcox (Chief Executive Officer of the Company), and Woychyshyn (Vice President, Finance & Chief Financial Officer of the Company) are the current members of the Disclosure Committee. Mr. Selby is independent within the meaning of NI 58-101.

Responsibilities

The Disclosure Committee’s duties are to ensure that the Company provides timely, accurate and balanced disclosure of all material information about the Company and to provide fair and equal access to such information. All news releases, including but not limited to releases of material information, are managed by the Disclosure Committee. If the information has been determined by the Disclosure Committee to be material, news releases will be prepared, reviewed and then disseminated through a news-wire service that provides simultaneous service to widespread news services and financial media. Additionally, the

Disclosure Committee is responsible for ensuring public disclosure through filing these news releases on SEDAR+ and EDGAR as well as the Company's website.

Strategic Planning Committee

Composition

Messrs. Sheehan (Chair), Selby, and Patsellis are the current members of the Strategic Planning Committee. All members of the Strategic Planning Committee are independent within the meaning of NI 58-101.

Responsibilities

The Strategic Planning Committee's duties are to set out the long-term goals of the Company and to take an active role in the development and execution of plans to achieve those goals. The Committee participates in establishing priority areas of Company business, assessment of strategic initiatives from Company senior executives with regard to development and implementation control of the Company strategy and business area specific strategies of the Company. The Committee also makes recommendations regarding the overall organization and management structure including areas where management needs to be strengthened, reviewing the organizational job descriptions and requirements and procedures for coordination of organizational management and board resources. The Committee is actively involved in the Company's strategic planning process and reviews all materials relating to the strategic plan with management. The Board is responsible for reviewing and approving the strategic plan. At least one board meeting each year is centered on discussing and considering the strategic plan, which takes into account the risks and opportunities of the business. Management must seek the Board's approval for any transaction that would have a significant impact on the strategic plan.

Audit Committee

Composition

Messrs. Selby (Chair), Tilson and Patsellis are the current members of the Audit Committee. All members of the Audit Committee are independent within the meaning of NI 52-110, and each member is financially literate. The Audit Committee Charter is attached as Schedule "I" to this Information Circular.

All members of the Audit Committee have an educational background and experience that provides them with the knowledge and ability to understand accounting policies and related financial reporting and disclosure issues, in order to fulfill their duties and responsibilities as a member of the Audit Committee.

(i) Charles Selby

Mr. Selby is both a lawyer and professional engineer, with past legal experience specializing in securities and corporate finance matters. He has served on the board or in senior management roles with a number of private firms as well as reporting issuers in the oil and natural gas industry. Mr. Selby has previously served on the audit committees of Alta Canada Energy Corp. and served as the audit committee chairman for Idaho Natural Resources Corp. (formerly Bridge Resources Corp.).

(ii) John Tilson

Mr. Tilson, obtained a Master of Business Administration degree from the University of Southern California and his Chartered Financial Analyst designation and, before his retirement, had a distinguished career as an analyst, portfolio manager, and advisor in the US investment and financial industry with such firms as Sutro & Company and EF Hutton & Company. Mr. Tilson is now retired.

(iii) Theodore Patsellis

Mr. Patsellis, obtained Bachelor Degree from the National and Kapodistrian University of Athens - Law Faculty and an LL.M. degree from the Ludwig-Maximilian University of Munich. His expertise comprises M&A, Corporate, Transaction Law, Local and International taxation, Corporate Governance and Compliance. He has acquired extensive experience working in diversified environments and a variety of business cultures as a lawyer and tax professional. He led a team of professionals involved in large business transactions in the South-East European region.

Oversight

The Board adopted all recommendations by the Audit Committee with respect to the nomination and compensation of the external auditor.

Pre-Approval Policies and Procedures

The Audit Committee has adopted a formal policy requiring the pre-approval of all audit and non-audit related services to be provided by the Company's principal auditor prior to the commencement of the engagement, subject to the following:

- the Audit Committee will review annually a list of audit, audit related, recurring tax and other non-audit services and recommend pre-approval of those services for the upcoming year. Any additional requests will be addressed on a case-by-case specific engagement basis;
- for engagements not on the pre-approved list, the Audit Committee has delegated to the Chair of the Audit Committee the authority to pre-approve individual non-audit service engagements with expected annual aggregate costs of up to \$50,000 subject to reporting to the Audit Committee, at its next scheduled meeting; and
- for engagements not on the pre-approved list and with expected costs greater than an annual aggregate of \$50,000, the entire Audit Committee must approve this service, generally at its next scheduled meeting.

Nature and Amount of Auditor's Fees

The following table sets forth the aggregate audit fees, audit-related fees, tax fees, and all other fees of our principal accountants (MNP LLP and KPMG LLP for 2023 and KPMG LLP for 2022) and all other fees billed for products and services provided by our principal accountants for the fiscal years ended December 31, 2023 and 2022.

	2023	2022
Audit fees ⁽¹⁾	\$ 261,803	\$ 407,670
Tax fees	\$ -	\$ 12,273
Other audit related fees	\$ -	\$ -
Total fees	\$ 261,803	\$ 419,943

Notes:

(1) Includes fees related to reviews of each of the Company's unaudited interim, 3-month quarterly filing period.

The Audit Committee held a total of four meetings during 2023.

Compensation Committee

Composition

Messrs. Selby (Chair), Messrs. Selby (Chair), Tilson and Valentine are the current members of the Compensation Committee. All members are independent within the meaning of National Instrument 58-101 – Disclosure of Corporate Governance Practices and have extensive direct financial and legal experience which is relevant to fulfilling their responsibilities related to executive compensation. Mr. Selby has approximately 20 years of experience in advising a Canadian company on compensation issues and has served on the compensation committees of the board of directors of other reporting issuers. Mr. Valentine currently serves on the compensation committee of two public companies, and has dealt with compensation and employment law issues for 25 years. Mr. Tilson's career as an executive and managing director at various firms dealing with human resource matters has also given him experience in dealing with compensation related issues. The charter of the Compensation Committee is posted on the Company's website and may viewed at www.nxtenergy.com. Investors may also request a copy be mailed to them by writing to our offices at Suite 302, 3320 – 17th Avenue SW, Calgary, Alberta, Canada, T3E 0B4.

Responsibilities

The primary responsibilities of the Compensation Committee are to recommend to the Board an executive compensation philosophy, a senior management organization and reporting structure, corporate objectives for which the CEO is to be responsible, review the performance of senior officers with the CEO, review and recommend compensation to be paid to senior officers, review and recommend remuneration and benefits to be paid to the directors and review general policies relating to compensation and benefits of our employees. See "*Compensation Discussion and Analysis*" within this Information Circular for further information regarding the role of the Compensation Committee. The Compensation Committee held no meeting during 2023.

ADDITIONAL INFORMATION

Additional information relating to the Company is available on both the Company's website (www.nxtenergy.com) as well on SEDAR+ (www.sedarplus.ca).

Shareholders may contact Mr. Eugene Woychyshyn, Vice President, Finance & Chief Financial Officer (tel: 1-403-206-0805 or fax: 1-403-264-6442) to request copies of the AIF and/or the Financial Statements and the related management's discussion and analysis. Financial information is provided in the Company's comparative annual financial statements and related management's discussion and analysis for the Company's most recently completed financial year.

DATED at Calgary, this 13th day of June, 2024.

**SCHEDULE “A”
CONTROL PERSON RESOLUTION**

WHEREAS NXT Energy Solutions Inc. (the “**Company**”) entered into a subscription agreement on May 31, 2024 to complete a private placement whereby MCAPM, LP (the “**Subscriber**”) purchased US\$2,000,000 aggregate principal amount of convertible debentures (the “**2024 Convertible Debentures**”) and which such 2024 Convertible Debentures bear interest at a rate of 10% per annum and are convertible into common shares in the capital of the Company (“**Common Shares**”) at the election of the Subscriber and at a conversion price of US\$0.25 per Common Share for 8,000,000 Common Shares;

AND WHEREAS the Company previously issued convertible debentures totaling US\$1,375,000 to the Subscriber at a conversion price US\$0.1808 per Common Share (the “**November Debentures**”) and such November Debentures may be convertible into 7,605,088 Common Shares at the election of the Subscriber;

AND WHEREAS the Subscriber and Michael Mork, (collectively, “**Mork Capital**”), currently own Common Shares, together with securities convertible into Common Shares, equal to 19.1% of the current issued and outstanding Common Shares;

AND WHEREAS according to Section 604(a)(i) of the Toronto Stock Exchange (the “**TSX**”) Company Manual (the “**TSX Company Manual**”), the TSX will generally require shareholder approval of a transaction if, in the opinion of the TSX, such transaction will “materially affect control” of the listed issuer;

AND WHEREAS the completion of the 2024 Convertible Debentures and conversion of the November Debentures would result in Mork Capital holding Common Shares, and securities convertible into Common Shares, equal to 32.5% of the current issued and outstanding Common Shares of the Company;

AND WHEREAS the TSX Company Manual provides that a transaction that results, or could result, in a new holding of more than 20% of the current issued and outstanding voting securities of a listed issuer by one security holder, or a combination of security holders acting together, is generally considered to materially affect control of such issuer and will constitute the creation of a new “Control Person” (a “**Control Person**”);

AND WHEREAS the TSX has confirmed that the creation of a Control Person must be approved by an ordinary resolution passed by a majority of the holders of Common Shares represented in person or by proxy at a meeting of the shareholders (the “**Vote**”), excluding the Common Shares held by shareholders who have participated in the 2024 Convertible Debenture and their affiliates and associates (such shareholders, their affiliates and associates, collectively, the “**Excluded Shareholders**” and shareholders that are not Excluded Shareholders, collectively, the “**Disinterested Shareholders**”);

AND WHEREAS pursuant to the rules of the TSX, only the votes cast by the Disinterested Shareholders of the Company will be counted towards the Vote, such that Mork Capital’s votes cannot count towards the Vote;

AND WHEREAS the board of directors of the Company has reviewed and considered the 2024 Convertible Debentures, the November Debentures as well as the creation of a new Control Person of the Company and, after undertaking such review, unanimously resolved to approve the new “Control Person”;

AND WHEREAS further information regarding the November Debentures and the 2024 Convertible Debentures can be found in the Management Information Circular dated June 13, 2024 under the heading “*Particulars of Matters to be Acted Upon – Creation of a New Control Person*”;

NOW THEREFORE BE IT RESOLVED THAT given the possible conversion of the 2024 Convertible Debentures and November Debentures by Mork Capital, at their discretion, the resulting creation of a new “Control Person” is hereby approved.

**SCHEDULE “B”
INSIDER PARTICIPATION RESOLUTION**

WHEREAS NXT Energy Solutions Inc. (the “**Company**”) entered into a subscription agreement on May 31, 2024 to complete a private placement whereby MCAPM, LP (the “**Subscriber**”) purchased US\$2,000,000 aggregate principal amount of convertible debentures (the “**2024 Convertible Debentures**”) and which such 2024 Convertible Debentures bear interest at a rate of 10% per annum and are convertible into common shares in the capital of the Company (“**Common Shares**”) at the election of the Subscriber and at a conversion price of US\$0.25 per Common Share;

AND WHEREAS the Subscriber qualifies as an “insider” of the Company according to the definition ascribed to such term in the Toronto Stock Exchange (the “**TSX**”) Company Manual (the “**TSX Company Manual**”);

AND WHEREAS according to Section 607(g)(ii) of the TSX Company Manual, the TSX will generally require shareholder approval of a private placement that, during a given six-month period, involves the issuance of securities to an insider of the listed issuer in an amount greater than 10% of the number of the outstanding securities of the listed issuer, on a non-diluted basis, prior to the date of the closing of the first private placement to such insider during such six-month period;

AND WHEREAS the completion of the 2024 Convertible Debentures has resulted in the issuance of securities convertible into Common Shares to the Subscriber and Michael Mork, (collectively, “**Mork Capital**”) in an amount greater than 10% of the number of outstanding Common Shares calculated on a non-diluted basis;

AND WHEREAS in order for the 2024 Convertible Debentures to proceed under the rules set out in section 607(g)(ii) of the TSX Company Manual, the 2024 Convertible Debentures must be approved by an ordinary resolution passed by a majority of the holders of Common Shares represented in person or by proxy at a meeting of the shareholders (the “**Vote**”), excluding the Common Shares held by shareholders who have participated in the 2024 Convertible Debenture and their affiliates and associates (such shareholders, their affiliates and associates, collectively, the “**Excluded Shareholders**”) and shareholders that are not Excluded Shareholders, collectively, the “**Disinterested Shareholders**”);

AND WHEREAS pursuant to the rules of the TSX, only the votes cast by the Disinterested Shareholders of the Company will be counted towards the Vote, such that Mork Capital’s vote cannot count towards the Vote;

AND WHEREAS the board of directors of the Company has reviewed and considered the 2024 Convertible Debentures and, after undertaking such review, have unanimously resolved to approve the 2024 Convertible Debentures;

AND WHEREAS further information regarding the 2024 Convertible Debentures can be found in the Company’s Management Information Circular dated June 13, 2024 under the heading “*Particulars of Matters to be Acted Upon – Insider Participation Resolution*”;

NOW THEREFORE BE IT RESOLVED THAT conversion of the 2024 Convertible Debentures by the Subscriber, at their discretion is hereby authorized and approved.

SCHEDULE “C”
SECURITY BASED COMPENSATION ARRANGEMENT RESOLUTION

WHEREAS, on November 8, 2023, NXT Energy Solutions Inc. (the “**Company**”) commenced a private placement (the “**Private Placement**”) for unsecured convertible debentures (the “**November Debentures**”) which bear interest at a rate of 10% per annum and are convertible into common shares in the capital of the Company (“**Common Shares**”) at the election of the holders thereof and at a conversion price of US\$0.1808 per Common Share;

AND WHEREAS, on January 11, 2024, under the Private Placement, the Company issued US\$147,000 of the November Debentures (the “**Director Debentures**”) to certain current and former directors of the Company (the “**Subscribing Directors**”) as satisfaction for partial payment of their respective director fees for acting in such capacity for the year ended December 31, 2023;

AND WHEREAS in connection with the issuance of the Director Debentures, the Subscribing Directors will have the right to obtain, in the aggregate, up to a maximum of 813,053 Common Shares (the “**Director Fee Shares**”);

AND WHEREAS pursuant to Section 613(b)(v) of the Toronto Stock Exchange Company Manual (the “**TSX Manual**”), the issuance of the Director Fee Shares upon conversion of the Director Debentures constitutes a security based compensation arrangement;

AND WHEREAS pursuant to Section 613 of the TSX Manual, all security based compensation arrangements must be approved by way of a resolution passed by a simply majority of 50% plus one of the votes properly cast by disinterested holders of Common Shares represented in person or by proxy at a meeting of the shareholders (the “**Vote**”);

AND WHEREAS pursuant to the TSX Manual, only the votes cast by the disinterested shareholders of the Company will be counted towards the Vote, such that the Subscribing Directors’ votes will not count towards the Vote;

AND WHEREAS the board of directors of the Company previously reviewed and considered the issuance of the Director Debentures and, upon conversion thereof, the Director Fee Shares, and after undertaking such review, unanimously resolved to approve same;

AND WHEREAS further information regarding the November Debentures and the Director Issuance can be found in the Company’s Management Information Circular dated June 13, 2024 under the headings “*Particulars of Matters to be Acted Upon – Control Person Resolution*” and “*Particulars of Matters to be Acted Upon – Security Based Compensation Arrangement Resolution*”;

NOW THEREFORE BE IT RESOLVED THAT:

1. The issuance of the Director Debentures is hereby ratified, confirmed and approved.
2. Upon conversion of the Director Debentures by the Subscribing Directors in accordance with their terms, the issuance of the Director Fee Shares be and is hereby authorized and approved.

SCHEDULE “D” EMPLOYEE SHARE PURCHASE PLAN SUMMARY

The following is a summary of the material provisions of the Employee Share Purchase Plan (the “**ESP Plan**”) of NXT Energy Solutions Inc. (the “**Company**”). This summary does not purport to be complete and is subject to, and qualified in its entirety by reference to, the provisions of the ESP Plan, the full text of which is set out in Schedule “K” to the Company’s Prior Year Information Circular dated June 30, 2023 which is available on SEDAR+ (www.sedarplus.ca). Capitalized terms which are used herein shall have the meanings ascribed thereto in the ESP Plan.

Participation and Purpose

The ESP Plan allows employees (including officers) and other individuals determined by the board of directors of the Company (the **Board**) to be eligible to contribute a portion of their earnings to the ESP Plan for the purchase of Common Shares. The amount that a participant may contribute ranges from a minimum of 1% to a maximum of 10% of a participant’s Earnings. The Company will equally match that participant’s contribution and, as an incentive to participate in the ESP Plan, the Company will double its contributions for the first year up to a maximum of \$15,000. Common Shares contributed by the Company may be issued from treasury or acquired through the facilities of the Exchange. A participant may make excess contributions under the ESP Plan up to a maximum of such participant’s net earnings; however, excess contributions do not receive a corresponding employer contribution by NXT.

NXT considers the ESP Plan an integral element of its compensation program, as it strengthens the Company’s ability to attract and retain qualified personnel and promotes investment in the Company, thereby aligning the interests of participating employees and officers with Shareholders.

Employer Contributions

Common Shares issued from treasury under the ESP Plan will be priced in one of two ways: (i) if the Administrative Agent acquires Common Shares through market purchases for a contribution period, treasury shares will be issued at a price equal to the weighted average purchase price of Common Shares purchased by the Administrative Agent for such contribution period; or (ii) where all Common Shares are issued from treasury for a contribution period, such shares will be issued at the weighted average trading price of the common shares on the Exchange on the five trading days preceding the treasury issuance date.

The number of Common Shares reserved for issuance from time to time pursuant to the ESP Plan and all other equity compensation plans (including the RSU Plan, the DSU Plan and the Option Plan) shall be equal to 10% of the issued and outstanding Common Shares, calculated on an undiluted basis, and further provided that the number of Common Shares: (a) reserved for issuance to Insiders does not exceed 10% of the issued and outstanding Common Shares; (b) issued to Insiders within a one-year period does not exceed 10% of the issued and outstanding Shares; or (c) issued to any one Insider (and such Insider’s associates) within a one-year period does not exceed 5% of the issued and outstanding Common Shares.

Withdrawal and Termination of Participation

A participant’s entitlement to make further Employee Contributions and Excess Contributions, and to receive Employer Contributions and Employer Bonus Contributions in respect thereof shall terminate immediately if any of the following occur: (a) the participant becomes totally and permanently disabled; (b) the participant ceases to be an employee of NXT, including by way of resignation, retirement or termination (with or without cause); or (c) the participant dies. Upon the occurrence of any such event, Common Shares held on behalf of a participant may be transferred and registered as directed by the participant; sold with the net proceeds distributed to the participant; or, if the Common Shares are held in an RRSP or TFSA account, transferred to another RRSP or TFSA account (to the extent permitted by law).

If a participant sells or withdraws Common Shares that were acquired by or issued to the Administrative Agent in respect of employer contributions within six months of the acquisition or issuance, the participant is not entitled to receive employer contributions under the ESP Plan for a period of six months thereafter.

Vesting

Common Shares held by the Administrative Agent on behalf of participants are at all times vested in such participants. A participant is not entitled to transfer any interest in Common Shares held by the Administrative Agent on behalf of such participant, subject to a participant's right to terminate his or her participation in the ESP Plan.

Amendments and Termination of the ESP Plan

The Board has the power and authority to approve without Shareholder approval (but with the consent of the Exchange, as required) amendments to cure any ambiguity, error or omission in the ESP Plan or to correct or supplement any provision of the ESP Plan that is inconsistent with any other provision of the ESP Plan, to comply with applicable law or the requirements of the Exchange respecting administration and eligibility under the ESP Plan, or that of a "housekeeping nature". The Board may amend, suspend or discontinue the ESP Plan at any time, provided that, without Shareholder approval, no amendment may be made to change the number of Common Shares issuable under the ESP Plan, increase participation limits solely to the benefit of insiders of NXT, or to amend the amendment provision of the ESP Plan.

SCHEDULE “E” RESTRICTED SHARE UNIT PLAN SUMMARY

The following is a summary of the material provisions of the Restricted Share Unit Plan (the “**RSU Plan**”) of NXT Energy Solutions Inc. (the “**Company**”). This summary does not purport to be complete and is subject to, and qualified in its entirety by reference to, the provisions of the RSU Plan, the full text of which is set out in Schedule “L” to the Company’s Information Circular dated June 30, 2023 which is available on SEDAR+ (www.sedarplus.ca). Capitalized terms which are used herein shall have the meanings ascribed thereto in the RSU Plan.

Purpose

The RSU Plan is designed to strengthen the ability of NXT to attract and retain qualified Service Providers, to align the interests of Service Providers with the interests of NXT’s shareholders, and to focus management of NXT on operating and financial performance and total long-term Shareholder return by providing an increased incentive to contribute to NXT’s growth and profitability.

Eligible Participants

Officers, directors, employees and consultants or contractors, or principals of consultants or contractors of the Company are eligible to receive grants under the RSU Plan, which is administered by the Board.

Awards

The aggregate number of Common Shares reserved for issuance from treasury under the RSU Plan together with the Company’s other equity compensation plans (including the DSU Plan, the Option Plan and, the ESP Plan) is 10% of the Common Shares issued and outstanding.

RSUs shall not be granted pursuant to the RSU Plan without the requisite approval of the Shareholders and the Exchange, if such grant together with grants pursuant to all other equity compensation plans of the Company could result, at any time, in the number of Common Shares: (a) reserved for issuance to Insiders exceeding 10% of the issued and outstanding Shares; (b) issued to Insiders within a one-year period exceeding 10% of the issued and outstanding Shares; (c) issued to any one Insider (and such Insider’s associates) within a one-year period exceeding 5% of the issued and outstanding Shares; or (d) issued to each Non-Management Director exceeding a value of \$150,000, calculated at the time of grant.

The RSUs shall vest over a period of time no longer than 3 years from the first anniversary of the Grant Date.

Amendments and Termination of the RSU Plan

The RSU Plan and any Unit Award granted pursuant to thereto may be amended, modified or terminated by the Board without approval of Shareholders, subject to any required approval of the Exchange in the event that the Shares are listed on the Exchange, provided that all material amendments to the Plan shall require the prior approval of the Shareholders and no amendment may cause the RSU Plan to cease to meet the exception in paragraph (k) of the definition of “salary deferral arrangement” in the Tax Act. Examples of the types of amendments that are not material that the Board is entitled to make without Shareholder approval include, without limitation, amendments: (a) to ensure continuing compliance with applicable laws, regulations, requirements, rules or policies of any governmental authority or any stock exchange; (b) of a “housekeeping” nature, which include amendments to eliminate any ambiguity or correct or supplement any provision contained herein; (c) respecting the administration of the RSU Plan; (d) changing the vesting provisions of the RSU Plan or any Unit Award; and (e) changing the termination provisions of any Unit Award that does not entail an extension beyond the original expiration date thereof.

If the Common Shares are listed on the Exchange, no amendment to the RSU Plan requiring Shareholder approval under any applicable securities laws or requirements shall become effective until such Shareholder approval is obtained. In addition to the foregoing, Shareholder approval shall be required to: (a) make any amendment to the RSU Plan to increase the percentage of Common Shares that are available

to be issued under outstanding Unit Awards at any time pursuant to Section 6(a) of the RSU Plan; (b) extend the Expiry Date of any outstanding Unit Awards held by Insiders; (c) make any amendment to increase the number of Shares that may be issued to Insiders above the restrictions contained in Sections 5(a)(i) and 5(a)(ii) of the RSU Plan; (d) amend the limits on Non- Management Directors contained in Section 5(a)(iv) of the RSU Plan; or (e) amend Section 10 of the RSU Plan (the Amendment and Termination Provision).

In addition, no amendment to the RSU Plan or Unit Awards granted pursuant to the RSU Plan may be made without the consent of the Grantee, if it adversely alters or impairs the rights of any Grantee in respect of any Unit Award previously granted to such Grantee under the RSU Plan.

Cessation of Entitlement to Participate

Except as otherwise determined by the Board, in the event a Grantee who is a director, officer, employee of, or service provider to, the Company ceases to hold such position, then the following will apply: (a) if a Grantee is terminated for Just Cause or any other material breach, all unvested RSUs shall be terminated and rights to receive any payment thereunder shall be forfeited immediately; (b) if a Grantee voluntarily resigns or is Terminated Without Cause (and such Termination is not an Accelerated Vesting Event), then all unvested RSUs shall be terminated and rights to receive payment thereunder shall be forfeited immediately; (c) in the event of the death of the Grantee, the Vesting Date for all RSUs held by such Grantee shall be the date of the death of the Grantee; or (d) if termination of the Grantee is due to their becoming permanently disabled, the Vesting date of all RSUs shall be unaffected and shall continue to vest in accordance with the applicable Unit Award Agreement.

Transferability

Shares or cash deliverable upon vesting of an RSU shall only be delivered to or to the order of, a Grantee, by NXT or the Plan Trustee, as applicable, except that if a Grantee dies, Common Shares or cash may be delivered to the Grantee's legal representative or designated beneficiary to whom the RSUs transfer by will or by the laws of descent and distribution. Except for the foregoing and as otherwise provided in the RSU Plan, no assignment, sale, transfer, pledge or charge of an RSU, whether voluntary, involuntary, by operation of law or otherwise, vests any interest or right in such RSU whatsoever in any assignee or transferee and, immediately upon any assignment, sale, transfer, pledge or charge or attempt to assign, sell, transfer, pledge or charge, such RSU shall terminate and be of no further force or effect.

Effect of Certain Changes

In the event: (a) of any change in the Common Shares through subdivision, consolidation, reclassification, amalgamation, merger or otherwise; (b) that any rights are granted to Shareholders to purchase Common Shares at prices substantially below fair market value; or (c) that, as a result of any reorganization, recapitalization, merger, consolidation or other transaction that is not a Liquidity Event, the Common Shares are converted into or exchangeable for any other securities; then, in any such case, the Board may make such adjustments to the RSU Plan and to any Unit Awards outstanding under the RSU Plan as the Board may, in its sole discretion, consider appropriate in the circumstances to prevent substantial dilution or enlargement of the rights granted to Grantees hereunder.

Funding of RSU Awards

NXT may from time to time, on its own behalf and on behalf of such of the NXT Entities that employ Service Providers, make contributions to a Trust Fund in such amounts and at such times as may be specified by the Committee for the purpose of funding, in whole or in part, awards of RSUs which become payable to Service Providers pursuant to the RSU Plan. Any purchases of Shares by the Plan Trustee or otherwise pursuant to the RSU Plan shall be made on the open market by a broker designated by the Plan Trustee who is independent of NXT in accordance with the by-laws, regulations and policies of the Exchange. For greater certainty, any Trust Funds shall not result in the Plan being viewed as a "retirement compensation arrangement" for the purpose of the Tax Act.

If approval is not obtained at the Meeting, RSUs which were not allocated as of August 2, 2023 will not be available again for grant. RSUs which were allocated and outstanding as of August 2, 2023 and

subsequently cancelled or terminated will not be available again for grant. Previously granted RSUs which are not cancelled or terminated will continue unaffected by the approval or disapproval of the Unallocated Entitlements Resolution.

**SCHEDULE “F”
AMENDED AND RESTATED STOCK OPTION PLAN SUMMARY**

The following is a summary of the material provisions of the Amended and Restated Stock Option Plan (the “**Option Plan**”) of NXT Energy Solutions Inc. (the “**Company**”). This summary does not purport to be complete and is subject to, and qualified in its entirety by reference to, the provisions of the Option Plan. Capitalized terms which are used herein shall have the meanings ascribed thereto in the Option Plan.

Purpose

The purpose of the Option Plan is to advance the interests of the Company by encouraging its directors, officers and employees or service providers to acquire Common Shares, thereby: (i) increasing the proprietary interests of such persons in the Company; (ii) aligning the interests of such persons with the interests of the Shareholders generally; (iii) encouraging such persons to remain associated with the Company; and (iv) furnishing such persons with an additional incentive and remuneration in their efforts on behalf of the Company.

Eligible Participants

Officers, directors, employees and service providers to the Company are eligible to receive grants of Options under the Option Plan, which is administered by the Board.

Common Shares Subject to the Option Plan

The aggregate number of Common Shares reserved for issuance under the Option Plan, or any other security-based compensation plan of the Company, shall not exceed 10% of the total number of issued and outstanding Common Shares (calculated on a non-diluted basis) from time to time. The number of Common Shares that may be acquired under an Option granted to a participant shall be determined by the Board as at the time the Option is granted, provided that the aggregate number of Common Shares reserved for issuance to any one participant under the Option Plan or any other plan of the Company, shall not exceed five percent of the total number of issued and outstanding Common Shares (calculated on a non-diluted basis) in any 12 month period (and, in the case of consultants and persons retained to perform investor relation activities, shall not exceed two percent in any 12 month period) unless the Company receives the permission of the stock exchange or exchanges on which the Common Shares are listed to exceed such threshold.

Insider Participation

The maximum number of Common Shares which may be reserved for issuance to “Insiders” (as defined in the TSX Company Manual) under the Option Plan and under all other security-based compensation arrangements of the Company shall be 10% of the total number of Common Shares issued and outstanding. The number of Common Shares issued to Insiders within any one-year period under the Option Plan and under all other security-based compensation arrangements of the Company shall not exceed 10% of the total number of Common Shares issued and outstanding. The issuance to any one Insider (and such Insider’s associates) within a one-year period of a number of Common Shares under the Option Plan and under all other security-based compensation arrangements of the Company shall not exceed 5% of the number of Common Shares issued and outstanding.

Exercise Price

The exercise price of Options granted under the Option Plan shall be fixed by the Board at the time the Option is granted but shall not be less than the five-day volume weighted average of the closing price of the Common Shares prior to the date of grant, or the market value of the Common Shares at the date of the grant as otherwise calculated in accordance with the rules of the applicable exchange.

Vesting and Term of Options

The Option Period during which Options may be exercised shall be determined by the Board at the time the Options are granted, subject to any vesting limitations which may be imposed by the Board in its sole, unfettered discretion at the time such Options are granted, provided that:

no Option shall be exercisable for a period exceeding five years from the date the Option is granted unless the Company receives the permission of the stock exchange or exchanges on which the Shares are then listed and as specifically provided by the Board, and in any event, no Option shall be exercisable for a period exceeding 10 years from the date the Option is granted;

no Option in respect of which shareholder approval is required under the rules of any stock exchange or exchanges on which the Common Shares are then listed shall be exercisable until such time as the Option has been approved by the Shareholders; and

the Board may, subject to the receipt of any necessary regulatory approvals, in its sole discretion, accelerate the time at which any Option may be exercised, in whole or in part; and

any Options granted to any Participant must expire within 30 days after the Participant ceases to be a Participant, and within 30 days for any Participant engaged in investor relation activities after such Participant ceases to be employed to provide investor relation activities.

Blackout Periods

A "Blackout Period" designated by the Company shall mean a period of time during which the Option holder cannot exercise an Option, or sell the Shares that are issuable pursuant to the exercise of Options, due to applicable policies of the Company in respect of insider trading. If an Option expires during a Blackout Period, or within 10 business days after the expiry of a Blackout Period applicable to the relevant Option holder, then the revised expiration date for that Option shall be extended to become the tenth business day after the expiry date of the Blackout Period.

Cessation of Entitlement to Options

In the event that a holder of Options who is a director, officer, employee of, or service provider to, the Company ceases to hold such position for any reason other than death or permanent disability, such Options will terminate immediately as to the then unvested portion thereof and at 4:00 p.m. (Calgary time) on the earlier of the date of the expiration of the Option Period and the 30th day after the date such individual ceases to be a director, officer, employee of, or service provider to, the Company as to the then vested portion of the Option.

In the event of the death or permanent disability of an option holder, any Options previously granted to such holder shall be exercisable until the end of the Option Period or until the expiration of 12 months after the date of death or permanent disability of such holder, whichever is earlier, and in the event of death or permanent disability, only: (i) by the person or persons to whom the option holder's rights under the Options shall pass by under the terms of the option holder's will or by applicable law; and (ii) to the extent that the holder was entitled to exercise the Options as at the date of the holder's death or permanent disability.

Transferability

All benefits and rights in Options accruing to any option holder in accordance with the terms and conditions of the Option Plan shall not be transferable or assignable unless specifically provided in the Option Plan. The Company shall not recognize any attempted exercise of any purported assignee of an option holder. During the lifetime of an option holder, any Options granted under the Option Plan may only be exercised by the holder thereof and in the event of the death or permanent disability of an option holder, by the person or persons to whom the option holder's rights under the Options pass by the option holder's will or applicable law.

Amendments

The Board may, at any time, amend, suspend or terminate the Option Plan, or any portion thereof, or any Option granted thereunder, without Shareholder approval, subject to those provisions of applicable law (including, without limitation, the rules, regulations and policies of the TSX), if any, that require the approval of Shareholders or any governmental or regulatory body.

Notwithstanding the foregoing, Shareholder approval will be required for the following types of amendments:

- (a) amendments to the number of Common Shares issuable under the Option Plan, including an increase to a fixed maximum number of Common Shares or a change from a fixed maximum number of Common Shares to a fixed maximum percentage;
- (b) amendments which would result in the exercise price for any Option granted under the Option Plan being lower than the market price of the Common Shares at the time the Option is granted;
- (c) amendments which reduce the exercise price of an Option;
- (d) amendments extending the term of an Option held by an insider beyond its original expiry date except as otherwise permitted by the Option Plan;
- (e) the adoption of any option exchange scheme involving Options; and
- (f) amendments required to be approved by Shareholders under applicable law (including, without limitation, the rules, regulations and policies of the TSX).

Financial Assistance

Financial assistance may only be provided in connection with the exercise of an Option if the Shareholders approve such assistance.

Change of Control

In the event of a sale by the Company of all or substantially all of its assets or in the event of a change of control of the Company, the option holder shall be entitled to exercise in full or in part any unexercised Options previously granted under the Option Plan, whether vested or not, either: (i) during the remaining term of the Options; or (ii) within ninety (90) days after the date of termination of the employment of the option holder with the Company or the cessation or termination of the option holder as a director of, officer of, or service provider to, the Company, whichever first occurs.

**SCHEDULE “G”
DEFERRED SHARE UNIT PLAN SUMMARY**

The following is a summary of the material provisions of the Deferred Share Unit Plan (the “**DSU Plan**”) of NXT Energy Solutions Inc. (the “**Company**”). This summary does not purport to be complete and is subject to, and qualified in its entirety by reference to, the provisions of the DSU Plan. Capitalized terms which are used herein shall have the meanings ascribed thereto in the DSU Plan.

Purpose

The principal purposes of the DSU Plan are to: (i) strengthen the ability of the Company and its affiliates to retain qualified directors which the Company and its affiliates require; (ii) provide a competitive long term incentive program to attract qualified directors which the Company and its affiliates require; and (iii) promote a proprietary interest in the Company through share ownership thereby aligning the interests of directors with the Company’s shareholders.

Eligibility

The DSU Plan provides for grants of DSUs to directors of the Company and Company’s affiliates. The Grant Date with respect to a DSU is the last day of each calendar quarter in a particular calendar year (except in the case of the last calendar quarter where the Grant Date with respect to a DSU will be December 15).

Awards

The Company will maintain or cause to be maintained a DSU Account for each Designated Participant and DSUs will be credited to that DSU Account as of the applicable Grant Date, with the number of DSUs to be so credited determined by dividing the portion of the Designated Participant’s annual remuneration (and meeting fees, as applicable) for the applicable calendar year elected to be received in the form of DSUs by the Fair Market Value (as defined in the DSU Plan) per Common Share on the particular quarterly Grant Date (subject to pro-ration in respect of a particular Designated Participant that ceased to be a Designated Participant in that particular calendar quarter). In all cases, DSUs automatically vest on the Grant Date and have the same value on that Grant Date as the cash amount of the Designated Participant’s annual remuneration (and meeting fees, as applicable) for which DSUs are being granted.

DSUs granted under the DSU Plan may be settled, at the election of the Board, with Common Shares, cash, or a combination of Common Shares and cash. Any Common Shares to be delivered to a Designated Participant in settlement of a DSU may be acquired through the facilities of the applicable exchange or, subject to shareholder approval of unallocated entitlements thereunder every three years, issued by the Company from treasury.

A Designated Participant may, by delivering a Redemption Notice to the Company, elect up to two separate Redemption Dates on which all or a portion of the DSUs credited to his or her DSU Account will be redeemed. A Redemption Date cannot: (a) be prior to that Designated Participant’s Date of Termination (being the actual date a Designated Participant ceases to be a director or non-employee service provider to the Company or any affiliate, as applicable); (b) fall within a Black-Out Period (as defined in the DSU Plan); (c) be later than the Redemption Deadline of December 15 of the next calendar year after that Designated Participant’s Date of Termination; or (d) be before the date on which the Redemption Notice is filed with the Company.

Any amounts payable to a Designated Participant, including delivery of Common Shares or a cash payment (in either case less applicable tax withholdings), will be made as soon as practicable after a Redemption Date and no later than the applicable Redemption Deadline. All DSUs are automatically cancelled following payment or satisfaction of such DSUs.

Among other limitations, the DSU Plan limits the number of Common Shares that may be issuable pursuant to outstanding DSUs granted under the DSU Plan:

- the maximum number of Common Shares reserved for issuance under the DSU Plan and all other security-based compensation arrangements of the Company is 10% of the aggregate number of issued and
- outstanding Common Shares, calculated on an undiluted basis. The number of Common Shares reserved for future awards does not include the dividend equivalent that will accumulate on the underlying grants.
- in addition: (i) no one Designated Participant may be granted any DSUs which, together with all DSUs then held by such Designated Participant, would entitle such Designated Participant to receive a number of Common Shares which is greater than 5% of the outstanding Common Shares, calculated on an undiluted basis; and (ii) the number of Common Shares (A) issued to a Designated Participant and any other insiders of the Company, within any one year period, and (B) issuable to a Designated Participant and any other insiders of the Company, at any time, in each case under the DSU Plan or when combined with all other security-based compensation arrangements of the Company, shall not exceed 10% of the Company's total issued and outstanding Common Shares.

Amendments and Termination

Under the DSU Plan, amendments: to cure any ambiguity, error or omission or correct any inconsistencies; that are necessary to comply with applicable law or the requirements of any stock exchange on which the Common Shares are listed; respecting the administration and eligibility for participating under the DSU Plan; respecting the U.S. terms and conditions and/or any DSU issued to a Designated Participant who is a citizen or resident of the United States to the extent necessary to comply with U.S. law; or that are of a "housekeeping nature", may be approved by the Board without shareholder approval (but with consent of the TSX). Shareholder approval is required to make amendments:

- to increase the maximum number of Common Shares issuable under the DSU Plan;
- to limit Designated Participant participation;
- that result in a material or unreasonable dilution in the number of outstanding Common Shares or any material benefit to a Designated Participant;
- that change the class of eligible participants to the DSU Plan which would have the potential of broadening or increasing participation by insiders of the Company;
- to the amendment provision of the DSU Plan; or
- to the DSU Plan that permits a Designated Participant to transfer DSUs to any person, other than in the case of the death of the Designated Participant.

Amendments will take effect only with respect to DSUs granted after the effective date of such amendment (unless the Company and the Designated Participants to whom DSUs have been granted mutually consent to any such amendment applying to any outstanding DSUs). The Board may amend, suspend, terminate or discontinue the DSU Plan and DSUs at any time.

In August 2019, NXT made certain amendments to the DSU Plan as follows: (i) to reflect the intention of the Board that existing directors of the Company be entitled to participate in the Plan and to make elections with respect to remuneration received in the year the DSU Plan was adopted and approved; (ii) to remedy minor clerical mistakes; and (iii) to confirm the amended nature of the DSU Plan. Such amendments were approved by the TSX in September 2019 and no shareholder approval was required.

Ownership

Until Common Shares are delivered to a Designated Participant pursuant to any DSU or any election to receive Market-Purchased Shares (as defined in the DSU Plan), as applicable, in accordance with the DSU Plan that Designated Participant will not possess any incidents of ownership of such Common Shares.

Effect of Certain Changes

If Common Shares are changed through subdivision, consolidation, reclassification, amalgamation, merger or otherwise; rights are granted to shareholders to purchase Common Shares at prices substantially below fair market value; or as a result of any recapitalization, merger or consolidation, Common Shares are converted into or

exchangeable for any other securities, the Board may (subject to any necessary TSX approval) make adjustments to the DSU Plan and any outstanding DSUs to prevent substantial dilution or enlargement of the rights granted to the Designated Participant thereunder.

Transferability

DSUs may not be assigned, sold, transferred, pledged or charged, and Common Shares or cash payable pursuant to the DSU Plan shall only be paid to a Designated Participant personally except upon the death of a Designated Participant where such payment may be made to the estate or a beneficiary of the Designated Participant.

Financial Assistance

The DSU Plan does not contain any provisions for financial assistance by the Company in respect of DSUs granted under the arrangement.

**SCHEDULE “H”
STATEMENT OF CORPORATE GOVERNANCE PRACTICES**

The table below describes the corporate governance practices of NXT Energy Solutions Inc. (the “Company”) as set out in Form 58-101F1 – *Corporate Governance Disclosure*. Defined terms used herein have the same meaning as in the Company’s Information Circular dated May 7, 2024.

Content of Provision	Governance Practices of the Company
Board of Directors	
Disclose the identity of directors who are independent.	The Board has determined that five of the six current directors are “independent” within the meaning of NI 52-110. The five independent directors at the date of the Information Circular were Charles Selby, John Tilson, Theodore Patsellis, Gerry Sheehan, and Thomas E. Valentine. Director nominee, Mr. Peter Mork will also be independent. Mr. Wilcox, and Mr. Woychyshyn are not independent.
Disclose the identity of directors who are not independent and describe the basis for that determination.	
Disclose whether or not a majority of directors are independent. If a majority of directors are not independent, describe what the board of directors (the board) does to facilitate its exercise of independent judgement in carrying out its responsibilities.	
If a director is presently a director of any other issuer that is a reporting issuer (or the equivalent) in a jurisdiction or a foreign jurisdiction, identify both the director and the other issuer.	Such other directorships have been disclosed in the Information Circular.
Disclose whether or not the independent directors hold regularly scheduled meetings at which non-independent directors and members of management are not in attendance. If the independent directors hold such meetings, disclose the number of meetings held since the beginning of the issuers most recently completed financial year. If the independent directors do not hold such meetings, describe what the board does to facilitate open and candid discussion among its independent directors.	The current Corporate Governance Committee membership is independent. The Corporate Governance Committee meets in person or by conference call at least monthly, or more frequently as required. Members of management are not in attendance at these meetings. The Corporate Governance Committee also meets on an ad hoc basis where circumstances warrant.
Disclose whether or not the chair of the board is an independent director. If the board has a chair or lead director who is an independent director, disclose the identity of the independent chair or lead director, and describe his or her role and responsibilities. If the board has neither a chair that is independent nor a lead director that is independent, describe what the board does to provide leadership for its independent directors.	Charles Selby is the chair of the board and is independent. He is currently responsible for: <ul style="list-style-type: none"> • facilitating the functioning of the Board independent of management and ensuring that directors have an independent leadership contact; • ensuring that the Board has adequate resources, especially by way of full, timely and relevant information to support its decision-making requirements; • assisting and providing input on preparation of agendas for Board meetings as required; • consulting with the chairs of the Board committees on the effectiveness of Board committees; • ensuring that independent directors have adequate opportunities to meet to discuss issues without management of the Company present; • chairing Board meetings of the Company are not in attendance; • ensuring delegated committee functions are carried out and reported to the Board, for example, the Chief Executive Officer of the Company performance assessment, Chief Executive Officer of the Company and Board succession planning, and strategic planning; and • acting as a liaison between the Board and management.
Disclose the attendance record of each director for all board meetings held since the beginning of the issuers most recently completed financial year.	The attendance records for all Board meetings has been disclosed in the Information Circular. Please see the section under the heading “Corporate Governance” in the Information Circular for more details.

Content of Provision	Governance Practices of the Company
Board Mandate	
Disclose the text of the board's written mandate. If the board does not have a written mandate, describe how the board delineates its role and responsibilities.	The mandate of the Board is appended to the Information Circular as Schedule "J".
Position Descriptions	
Disclose whether or not the board has developed written position descriptions for the chair and the chair of each board committee. If the board has not developed written position descriptions for the chair and/or the chair of each board committee, briefly describe how the board delineates the role and responsibilities of each such position.	Written position descriptions have been developed for the Chief Executive Officer of the Company and the Chief Financial Officer of the Company. Current and newly elected members of the Board are provided a briefing note, prepared by the Corporate Governance Committee, which describes the roles and responsibilities of Board members, sub-committee chairs, and executives.
Disclose whether or not the board and CEO have developed a written position description for the CEO. If the board and CEO have not developed such a position description, briefly describe how the board delineates the role and responsibilities of the CEO.	A written position description has been developed for the Chief Executive Officer of the Company by the Corporate Governance Committee of the Board.
Orientation and Continuing Education	
Briefly describe what measures the board takes to orient new directors regarding <ul style="list-style-type: none"> (i) the role of the board, its committees and its directors, and (ii) the nature and operation of the issuer's business. Briefly describe what measures, if any, the board takes to provide continuing education for its directors. If the board does not provide continuing education, describe how the board ensures that its directors maintain the skill and knowledge necessary to meet their obligations as directors.	New directors meet with the Board and senior management to discuss the business activities of the Company and are given the opportunity to familiarize themselves with the Company and gain insight into the Company's business, business plans and operations by visiting the Company's offices and reviewing SFD [®] survey documentation and processes. In addition, both current and newly elected members of the Board are provided a briefing note, prepared by the Corporate Governance Committee, which, among other things, serves as a both an orientation for new Board members and an update for existing Board members with respect to relevant topics in corporate governance.
Ethical Business Conduct	
Disclose whether or not the board has adopted a written code for the directors, officers and employees. If the board has adopted a written code: <ul style="list-style-type: none"> (i) disclose how a person or company may obtain a copy of the code; (ii) describe how the board monitors compliance with its code, or if the board does not monitor compliance, explain whether and how the board satisfies itself regarding compliance with its code; and (iii) provide a cross-reference to any material change report filed since the beginning of the issuers most recently completed financial year that pertains to any conduct of a director or executive officer that constitutes a departure from the code. 	The Company has adopted a Code of Conduct and Business Ethics (the "Code") for all directors, officers, employees and consultants. The Code is available on the Company's intranet site. Additionally, the Code is available on the Company's website at www.nxtenergy.com . The Code is also filed on SEDAR+. Lastly, should anyone wish a hard copy of any of the Code, it may be obtained on request from the Corporate Secretary at 302, 3320 17th Avenue SW, Calgary, AB T3E 0B4. Compliance is monitored by the Audit Committee receiving, annually, certificates from NXT's officers and senior management confirming their compliance with the Code. The Audit Committee reviews the certifications and reports to the Board. In addition to the annual certification of the officers, each employee and consultant receives annually a communication from management reiterating the need to comply with the Code.
Describe any steps the board takes to ensure directors exercise independent judgement in considering transactions and agreements in respect of which a director or executive officer has a material interest.	Directors must disclose all interests and relationships of which the director is aware which may give rise to a conflict of interest. Directors are also required to disclose any actual or potential personal interest in a matter on which the Board is deciding and withdraw from deliberations and voting on the matter.
Describe any other steps the board takes to encourage and promote a culture of ethical business conduct.	All Board members as well as all employees have received a copy of the Code and have signed a Certification of Compliance Form acknowledging their understanding and compliance therewith. The Code provides guidance in a number of areas to ensure fair, ethical, lawful and consistent conduct by the Company and its employees. The Code specifically deals with business ethics, employment practices, insider trading and conflicts of interest.

Content of Provision	Governance Practices of the Company
<i>Nomination of Directors</i>	
Describe the process by which the board identifies new candidates for board nomination.	The Chairman of the Board, in consultation with the Board, is responsible for proposing new nominees to the Board. The Corporate Governance Committee, in its discussions with the Board, will determine what competencies and skills the Board considers necessary to discharge its duties and will identify potential candidates based on the skills required to fulfill its needs. Other factors considered by the Board are an individual's experience, expertise, and reputation. NXT does not have a nominating committee; however, the Corporate Governance Committee is composed entirely of independent directors and is charged with recommending new candidates for nomination to the Board.
Disclose whether or not the board has a nominating committee composed entirely of independent directors. If the board does not have a nominating committee composed entirely of independent directors, describe what steps the board takes to encourage an objective nomination process.	
If the board has a nominating committee, describe the responsibilities, powers and operation of the nominating committee.	
<i>Compensation</i>	
Describe the process by which the board determines the compensation for the issuer's directors and officers.	The Compensation Committee has the primary responsibility for determining compensation for the directors and senior officers with the objective of ensuring the compensation package is fair and consistent with industry practices. Where appropriate the Compensation Committee will engage outside compensation consultants to obtain industry comparisons and receive independent recommendations. The Compensation Committee is composed entirely of independent members. The Board has adopted a formal mandate for the Compensation Committee, which provides that the Compensation Committee is responsible for reviewing and approving the compensation of the directors and officers of the Company. The Compensation Committee also reviews and approves changes to the Company's compensation policies and approves the hiring of executive management recruited from outside the Company.
Disclose whether or not the board has a compensation committee composed entirely of independent directors. If the board does not have a compensation committee composed entirely of independent directors, describe what steps the board takes to ensure an objective process for determining such compensation.	
If the board has a compensation committee, describe the responsibilities, powers and operation of the compensation committee.	
<i>Other Board Committees</i>	
If the board has standing committees other than the audit, compensation and nominating committees, identify the committees and describe their function.	The Company has two other standing committees; Corporate Governance Committee, Strategic Planning Committee, and Disclosure Committee. The description of committee functions has been disclosed in the "Corporate Governance", "Strategic Planning Committee", and "Disclosure Committee" sections of the Information Circular.
<i>Assessments</i>	
Disclose whether or not the board, its committees and individual directors are regularly assessed with respect to their effectiveness and contribution. If assessments are regularly conducted, describe the process used for the assessments. If assessments are not regularly conducted, describe how the board satisfies itself that the board, its committees, and its individual directors are performing effectively.	In 2014, the Corporate Governance Committee initiated an annual Board member "self-assessment" and feedback review process, the results of which are summarized and discussed amongst the Board. In mid-2017, the Corporate Governance Committee supplemented this process with a monthly Corporate Governance Committee conference call wherein these assessments, among other matters, are assessed and thereafter reported to the Board. This process continues.
<i>Director Term Limits and Other Mechanisms of Board Renewal</i>	
Disclose whether or not the issuer has adopted term limits for the directors on its board or other mechanisms of board renewal and, if so, include a description of those director term limits or other mechanisms of board renewal. If the issuer has not adopted director term limits or other mechanisms of board renewal, disclose why it has not done so.	There is currently no formal term limit in place for members of the Board, however the Board is elected annually by the Shareholders. The Corporate Governance Committee is tasked with ensuring members of the Board are fit to serve as members of the Board, and to ensure members of the Board stay current on corporate governance trends.

Content of Provision	Governance Practices of the Company
<i>Policies Regarding the Representation of Women on the Board</i>	
<p>Disclose whether the issuer has adopted a written policy relating to the identification and nomination of women directors. If the issuer has not adopted such a policy, disclose why it has not done so.</p> <p>If an issuer has adopted a policy referred to in (i), disclose the following in respect of the policy: (A) a short summary of its objectives and key provisions,</p> <p>(B) the measures taken to ensure that the policy has been effectively implemented, (C) annual and cumulative progress by the issuer in achieving the objectives of the policy, and (D) whether and, if so, how the board or its nominating committee measures the effectiveness of the policy.</p>	<p>While the Board has not adopted a written policy relating to the identification and nomination of women directors, it embraces a broad concept of diversity that encompasses additional factors including age, race, personal attributes, skills, training, educational background and life experience. This allows the Board to identify and select new directors from the widest possible group of potential candidates in order to best serve the interests of NXT and its Shareholders. NXT believes identifying capable and diverse nominees for the Board is best achieved with this broad approach, instead of being constrained by quotas or specific targets. This approach is part of NXT's commitment to ensure that the Board has the required range of skills, knowledge, experience and perspectives to provide the strategic direction and leadership necessary for NXT to achieve its business objectives.</p>
<i>Consideration of the Representation of Women in the Director Identification and Selection Process</i>	
<p>Disclose whether and, if so, how the board or nominating committee considers the level of representation of women on the board in identifying and nominating candidates for election or re-election to the board. If the issuer does not consider the level of representation of women on the board in identifying and nominating candidates for election or re-election to the board, disclose the issuer's reasons for not doing so.</p>	<p>Although NXT does not specifically evaluate candidates based on the level of representation of women on the Board, it does consider candidates against an objective merit-based criteria which gives due regard to the value of varying perspectives. This allows NXT to ensure that the Board is inclusive of the different perspectives necessary to best serve the interests of NXT and its Shareholders, while avoiding an inflexible approach based on percentage of representation.</p>
<i>Consideration Given to the Representation of Women in Executive Officer Appointments</i>	
<p>Disclose whether and, if so, how the issuer considers the level of representation of women in executive officer positions when making executive officer appointments. If the issuer does not consider the level of representation of women in executive officer positions when making executive officer appointments, disclose the issuer's reasons for not doing so.</p>	<p>NXT's position with respect to the representation of women in executive officer positions is the same as its position with respect to the representation of women on the Board. NXT does not consider quotas or specific targets of representation in the hiring process, but instead promotes on a merit-based system that values diversity of skills, knowledge, experience and perspectives. This allows for the most capable candidates to be hired, while ensuring a wide variety of perspectives can be utilized to best serve the interests of NXT.</p>
<i>Issuer's Targets Regarding the Representation of Women on the Board and in Executive Officer Positions</i>	
<p>(i) For purposes of this Item, a "target" means a number or percentage, or a range of numbers or percentages, adopted by the issuer of women on the issuer's board or in executive officer positions of the issuer by a specific date.</p> <p>(ii) Disclose whether the issuer has adopted a target regarding women on the issuer's board. If the issuer has not adopted a target, disclose why it has not done so.</p> <p>(iii) Disclose whether the issuer has adopted a target regarding women in executive officer positions of the issuer. If the issuer has not adopted a target, disclose why it has not done so.</p> <p>(iv) If the issuer has adopted a target referred to in either (ii) or (iii), disclose: (A) the target, and (B) the annual and cumulative progress of the issuer in achieving the target.</p>	<p>The Board has not adopted a target regarding women on the Board or in executive officer positions for the reasons set out above. The Board feels that adopting such a target could unduly restrict NXT's ability to identify and select the most qualified people.</p>
<i>Number of Women on the Board and in Executive Officer Positions</i>	
<p>(i) Disclose the number and proportion (in percentage terms) of directors on the issuer's board who are women.</p>	<p>Currently 0 (0%) of NXT's Board members are women.</p>
<p>(ii) Disclose the number and proportion (in percentage terms) of executive officers of the issuer, including all major subsidiaries of the issuer, who are women.</p>	<p>Currently 0 (0%) of NXT's executive officers are women.</p>

SCHEDULE "I" **AUDIT COMMITTEE CHARTER**

INTRODUCTION

This charter (the "**Charter**") has been adopted to govern the composition, mandate, responsibilities and authority of the Audit Committee (the "**Committee**") of the Board of Directors (the "**Board**") of NXT Energy Solutions Inc. (the "**Company**").

COMPOSITION AND PROCEDURES

The Committee shall be appointed by the Board and shall be composed of three directors, with at least two of whom being "independent" as required by the *Business Corporations Act* (Alberta) (the "**Act**").

The Board will appoint the chair of the Committee.

The quorum for meetings shall be a majority of the members of the Committee, present in person or by telephone or other telecommunication device that permits all persons participating in the meeting to speak and to hear each other.

Meetings of the Committee shall be conducted as follows:

- (a) the Committee shall meet, in person or by teleconference, at least four times annually at such times and locations as may be requested by the chair of the Committee. Notice of meetings to the members shall be the same as set out in the by-laws of the Company for meetings of the Board. The Auditors or any member of the Committee may request a meeting of the Committee; and
- (b) management representatives may be invited to attend meetings (except private sessions with the Auditors as defined below).

PRIMARY RESPONSIBILITIES OF THE COMMITTEE

The primary responsibilities of the Committee are:

1. To recommend to the Board:
 - (a) the external auditor (the "**Auditors**") to be nominated for appointment by the Shareholders of the Company for the purpose of preparing or issuing the Auditor's report or performing other audit, review or attest services for the Company; and
 - (b) the compensation of the Auditors.

To oversee the work of the Auditors in preparing or issuing the Auditor's report on the Company's annual consolidated financial statements or performing other audit, review or attest services for the Company including the resolution of disagreements between management of the Company and the Auditors regarding financial reporting.

To pre-approve, as required by the Act and subject to the exemptions in the Act, all non-audit services to be provided to the Company by the Auditors. The Committee may, in accordance with the requirements of the Act, delegate to one or more members of the Committee the authority to pre-approve non-audit services to be provided by the Auditors, provided that all such pre-approvals of non-audit services shall be presented to the Committee at its first scheduled meeting following such pre-approval.

To review:

- (c) the Company's unaudited quarterly consolidated financial statements for the first, second and third quarters of the Company's fiscal year ("**quarterly statements**") and the Company's audited annual consolidated financial statements ("**annual statements**");
- (d) the management's discussion & analysis ("**MD&A**") prepared in conjunction with the quarterly and annual statements; and
- (e) all press releases to be issued by the Company with respect to its annual and quarterly earnings and press releases on other material financial reporting matters.

To satisfy itself that adequate procedures are adopted by the Company for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements other than the public disclosure referred to in section 4 above, and to regularly assess the adequacy of such procedures.

To satisfy itself that adequate procedures are adopted and oversee the maintenance of procedures for:

- (f) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters; and
- (g) the confidential anonymous submission by employees of the Company and its subsidiaries of concerns regarding questionable accounting or auditing matters.

To review and approve the Company's and its subsidiaries' hiring policies regarding partners, employees and former partners and employees of the current and former Auditors of the Company and its subsidiaries.

AUTHORITY OF THE COMMITTEE

Subject to prior consultation with the Chief Executive Officer or the Chief Financial Officer (except in unusual circumstances), the Committee is authorized to:

1. engage independent counsel and other advisors it determines necessary to carry out the Committee's duties and responsibilities;

set and require the Company to pay the compensation and charged expenses for any advisors engaged by the Committee; and

communicate directly with any internal audit staff of the Company and its subsidiaries (if any) and the Auditors.

ADDITIONAL RESPONSIBILITIES AND DUTIES OF THE COMMITTEE

Auditors

1. The Committee shall ensure that the Company requires and instructs the Auditors to report directly to the Committee; and

The Committee is responsible for ensuring the independence of the Auditors. On an annual basis, the Committee shall obtain a formal written statement from the Auditors delineating all relationships between the Auditors and the Company and confirming the independence of the Auditors. This written statement shall be obtained in conjunction with the audit of the annual financial statements after each fiscal year end.

Review of Annual Financial Statements

The Committee shall review the annual financial statements and related MD&A of the Company prior to their public release and shall report the results of its review to the Board and make recommendations to the Board

with respect to Board approval of the financial statements and related MD&A. At the Committee meeting at which the Company's annual financial statements are to be reviewed, the Committee shall meet, in person or by teleconference, with representatives of the Auditors and with the Company's management to assess and understand the annual financial statements and the results of the audit including, but not limited to:

1. that the Company's system of internal controls and financial reporting systems are adequate to produce fair and complete disclosure of its financial results;

that the Company's reporting is complete and fairly presents its financial condition in accordance with generally accepted accounting principles;

that accounting judgments and estimates used by management are reasonable and do not constitute earnings management;

that risk management policies are in place to identify and reduce significant financial and business risks; and

that the Company has in place a system to ensure compliance with applicable laws, regulations and policies.

Review of Quarterly Financial Statements

The Committee shall review the interim quarterly financial statements and related MD&A of the Company prior to their public release and shall report the results of its review to the Board and make recommendations to the Board with respect to Board approval of the quarterly statements and related MD&A unless the Board has delegated to the Committee the authority to approve the quarterly statements and related MD&A, in which case the Committee shall also approve the quarterly statements and related MD&A. The review by the Company shall be substantially completed prior to the issuance of a press release respecting the quarterly financial results. The Committee shall meet with the Company's management to assess and understand the interim quarterly financial statements and to discuss the results of their preparation and review.

Other Responsibilities and Duties

1. As part of the quarterly and annual reviews described above, the Committee will:
 - (a) meet with management in the absence of the Auditors for the annual review;
 - (b) meet with the Auditors in the absence of management for the annual review;
 - (c) review with management and the Auditors any proposed changes in major accounting policies, the presentation and impact of significant risks and uncertainties, and key estimates and judgments of management that may be material to financial reporting;
 - (d) review with management and the Auditors any significant financial reporting issues discussed during the fiscal period and the method of resolution;
 - (e) review any problems experienced by the Auditors in performing the annual audit, including any restrictions imposed by management or significant accounting issues on which there was a disagreement with management;
 - (f) obtain an explanation from management of all significant variances between comparative reporting periods;
 - (g) review the post-audit or management letter, containing the recommendations of the Auditors, and management's response and subsequent follow up to matters raised by the Auditors;

- (h) review any evaluation of internal controls by the Auditors, together with management's response; and
- (i) review and reassess the Charter for adequacy at least annually and make changes as it deems necessary.

In addition to the quarterly and annual reviews, the Committee will:

- (j) prior to the commencement of each annual audit, meet with the Auditors to review the Auditors' audit plan for the ensuing audit;
- (k) review with management and the Auditors all material accounting and financial issues affecting the Company not dealt with in annual and quarterly reviews; and
- (l) review annually and recommend changes to the Company's Code of Conduct & Business Ethics.

The Committee shall perform such other duties as may be required by the Board or as may be delegated to the Committee by the Board.

SCHEDULE “J” BOARD MANDATE

PURPOSE

The principal role of the board of directors (the “**Board**”) of NXT Energy Solutions Inc. (the “**Company**”) is stewardship of the Company through the creation of shareholder value, including the protection and enhancement of the value of its assets, as the fundamental objective. The stewardship responsibility means that the Board oversees the conduct of the business and management, which is responsible for the day-to-day conduct of the business. The Board must assess and ensure systems are in place to manage the risks of the Company’s business with the objective of preserving the Company’s assets. The Board, through the Chief Executive Officer (“**CEO**”), sets the attitude and disposition of the Company towards compliance with applicable laws, environmental, safety and health policies, financial practices and reporting. In addition to its primary accountability to shareholders, the Board is also accountable to employees, government authorities, other stakeholders and the public.

PRIMARY RESPONSIBILITIES

The principal responsibilities of the Board, which are required to ensure the overall stewardship of the Company are as follows:

the Board must ensure that there are long-term goals in place and must adopt a strategic planning process. The CEO, with the approval of the Board, must establish long-term goals for the Company. The CEO formulates the Company’s strategy, policies and proposed actions and presents them to the Board for approval. The Board brings objectivity and judgment to this process. The Board ultimately approves, on an annual basis, the strategic plan which takes into account, among other things, the opportunities and risks of the Company’s business;

the Board must identify and have an understanding of the principal risks associated with the Company’s businesses and must ensure that appropriate systems are in place which effectively monitor and manage those risks;

the Board must ensure that processes are in place to enable it to monitor and measure management’s, and in particular the CEO’s, performance in achieving the Company’s stated objectives. These processes should include appropriate training, development and succession planning of management;

to the extent feasible, the Board shall satisfy itself as to the integrity of the CEO and other executive officers and that the CEO and other executive officers create a culture of integrity throughout the Company;

the Board must ensure that the necessary internal controls and management systems are in place that effectively monitor the Company’s operations and ensure compliance with applicable laws, regulations and policies;

the Board must monitor compliance with the Company’s Code of Business Conduct and Ethics; and

the Board must ensure the Company has adopted a communication policy which effectively communicates with and receives feedback from shareholders. The Board must also ensure that the Company has appropriate processes in place to effectively communicate with employees, government authorities, other stakeholders and the public.

NON-DELEGABLE RESPONSIBILITIES

Pursuant to the *Business Corporations Act* (Alberta) (the “**Act**”), certain matters are considered to be of such importance, so as to warrant the attention of all Directors and, accordingly, the Act prescribes that the following matters either cannot be delegated or may only be delegated in a qualified or partial manner:

- the submission of items to shareholders for their approval;

- the filling of a vacancy among the directors or in the office of auditor;
- the appointment of additional directors; the issue of securities;
- the declaration of dividend;
- the purchase, redemption or other acquisition of the Company's own shares;
- the payment of certain commissions prescribed by the Act;
- the approval of a management proxy circular;
- the approval of annual financial statements; and
- the adoption, amendment or repeal of by-laws.

CUSTOMARY BOARD MATTERS

The following typifies matters customarily considered by the Board in fulfilling its responsibility for stewardship of the Company. The Board may determine it appropriate to delegate certain of these matters to committees of the Board:

- the appointment of officers, other than executive officers;
- adopting a process to consider the competencies and skills the Board, as a whole, should possess and assess the competencies and skills of each Board member and consider the appropriate size of the Board, with a view to facilitating effective decision-making;
- determining the remuneration of directors and auditors;
- reviewing and recommending to shareholders, changes to capital structure;
- approving the Company's long-term strategy and the annual capital expenditure plan of the Company and its subsidiaries and where appropriate any supplementary capital plan;
- approving banking, borrowing and investment policies;
- determining dividend policy;
- developing the Company's approach to corporate governance including, without limitation, developing a set of corporate governance principles and guidelines;
- approving the holding, location and date of meetings of shareholders;
- appointment of members to committees of the Board and approving terms of reference for and the matters to be delegated to such committees;
- granting any waivers from the Company's Code of Business Conduct and Ethics for the benefit of the Company's directors or executive officers;
- granting and delegating authority to designated officers and employees including the authority to commit capital, open bank accounts, sign bank requisitions and sign contracts, documents and instruments in writing;
- determining the number of directors and recommending nominees for election by the shareholders;

- approving amendments to the Company's existing plans: Stock Option Plan, employee benefits plans, or such other plans as the Company approves from time to time;
- approving the acquisition or disposition of certain corporate assets; and
- appointing the Company's transfer agents and registrars.

BOARD COMMITTEES

The Board has the authority to appoint a committee or committees of the Board and may delegate powers to such committees (with the exceptions prescribed by the Act). The matters to be delegated to committees of the Board and the constitution of such committees are assessed annually or more frequently as circumstances require. The following committees have been constituted:

1. the Audit Committee, to deal with financial reporting and control systems;
2. the Compensation Committee, to deal with the assessment of management and succession to key positions and compensation within the Company;
3. the Disclosure Committee, to deal with the Company's approach to disclosure and the promotion of compliance; and
4. the Corporate Governance Committee, to deal with the Company's approach to corporate governance and the promotion of compliance.

COMPOSITION & PROCEDURE

The Board of Directors is elected annually by shareholders. The number of directors to be elected at shareholders meetings is fixed by the by-laws. While the election of directors is ultimately determined by the shareholders, it is the policy of the Board that a majority of the Directors be independent (as defined under applicable stock exchange rules and securities laws).

The Chairman of the Board presides as Chair at all meetings of the Board and shareholders of the Company. The Corporate Secretary or the Recording Secretary attends all meetings of the Board and shareholders and records the proceedings thereof. The Corporate Secretary prepares and keeps minutes and records of all meetings of the Board.

Meetings of the Board, including telephone conference meetings, are to be held at such time and place as the Chairman of the Board, or any two directors, may determine. Notice of meetings shall be given to each director in accordance with the by-laws. Meetings of the Board may be held without formal notice if all of the Directors are present and do not object to notice not having been given, or if those absent waive notice in any manner before or after the meeting.

Notice of meeting may be delivered personally, given by mail, facsimile or other electronic means of communication.

Each Board member is expected to attend Board meetings and meetings of committees of which he or she is a member and to become familiar with deliberations and decisions as soon as possible after any missed meetings. In that regard, members of the Board are expected to prepare for Board (and committee) meetings by reviewing meeting materials distributed to members of the Board, to the extent feasible, in advance of such meetings. Matters of a confidential or sensitive nature may be discussed at Board (or committee) meeting without advance distribution of meeting materials to members of the Board. It is expected that members of the Board will actively participate in determining and setting the long and short-term goals and interests of the Company.

In recognition of its independence, the Board shall regularly hold discussions without management present.

A resolution in writing signed by all the directors entitled to vote on that resolution at a meeting of the directors is as valid as if it had been passed at a meeting of the directors. A copy of any such resolution in writing is kept with the minutes of the proceedings of the directors.

At meetings of the Board, any matter requiring a resolution of the directors is decided by a majority of the votes cast on the question; and in the case of an equality of votes, the Chair of the meeting is entitled to a second or casting vote.

The Board shall ensure that there is a process in place for annually evaluating the effectiveness of the Board, the committees of the Board and individual directors.

COMPENSATION

No Director, unless he or she is an officer of the Company, should receive remuneration from the Company other than compensation received in his or her capacity as a director.