

FORM 62-103F1
REQUIRED DISCLOSURE UNDER THE EARLY WARNING REQUIREMENTS

State if the report is filed to amend information disclosed in an earlier report. Indicate the date of the report that is being amended.

Not applicable.

Item 1 - Security and Reporting Issuer

1.1 State the designation of securities to which this report relates and the name and address of the head office of the issuer of the securities.

This report relates to the common shares (the “**Common Shares**”) of:

NXT Energy Solutions Inc. (“**NXT**”)
Suite 302, 3320 17th Avenue SW
Calgary, Alberta, Canada T3E 0B4

1.2 State the name of the market in which the transaction or other occurrence that triggered the requirement to file this report took place.

Toronto Stock Exchange.

Item 2 - Identity of the Acquiror

2.1 State the name and address of the acquiror.

There are two related acquirors.

MCAPM, LP (**MCAPM**)

132 Mill Street, #204
Healdsburg California, 95448

Michael Paul Mork (**M. Mork**, and collectively with MCAPM, **Mork Capital**)

1111 Westside Road
Healdsburg California, 95448

2.2 State the date of the transaction or other occurrence that triggered the requirement to file this report and briefly describe the transaction or other occurrence.

On November 8, 2023, (i) MCAPM entered into a subscription agreement with NXT and received an aggregate principal amount of US\$900,000 (approximately CAD\$1,241,100) of unsecured convertible debentures (the “**Debentures**”) of NXT and (ii) M. Mork entered into a subscription agreement with NXT and received an aggregate principal amount of US\$100,000 (approximately CAD\$137,900), each in a non-brokered private placement. The Debentures bear interest at 10.0% per annum and are due and payable in full on November 8, 2025. The Debentures are convertible into common shares in the capital of NXT (the “**Common Shares**”) at a conversion price of US\$0.1808 (CAD\$0.25) per Common Share, which provides Mork Capital with the right to obtain an additional 5,530,973 Common Shares. However, conversion of the Debentures by Mork Capital is subject to approval of NXT’s shareholders.

2.3 State the names of any joint actors.

Not applicable.

Item 3 – Interest in Securities of the Reporting Issuer

3.1 State the designation and number or principal amount of securities acquired or disposed of that triggered the requirement to file the report and the change in the acquiror's securityholding percentage in the class of securities.

See Item 2.2. above.

Prior to acquiring the Debentures, MCAPM owned 12,035,000 Common Shares of NXT (15.43% of the issued and outstanding Common Shares) and M. Mork owned 2,886,233 Common Shares (3.7% of the issued and outstanding Common Shares) for a total of 14,921,233 Common Shares (or 19.13% of the issued and outstanding Common Shares) held by Mork Capital. After the acquisition of the Debentures, Mork Capital will have the right to own, after conversion of the Debentures, 20,452,206 Common Shares, representing approximately 24.48% of the issued and outstanding Common Shares (after giving effect to the conversion of the full amount of Debentures).

3.2 State whether the acquiror acquired or disposed ownership of, or acquired or ceased to have control over, the securities that triggered the requirement to file the report.

See Item 2.2. above.

3.3 If the transaction involved a securities lending arrangement, state that fact.

Not applicable.

3.4 State the designation and number or principal amount of securities and the acquiror's securityholding percentage in the class of securities, immediately before and after the transaction or other occurrence that triggered the requirement to file this report.

See Items 2.2. and 3.1 above.

3.5 State the designation and number or principal amount of securities and the acquiror's securityholding percentage in the class of securities referred to in Item 3.4 over which

(a) the acquiror, either alone or together with any joint actors, has ownership and control,

See Items 2.2. and 3.1 above.

(b) the acquiror, either alone or together with any joint actors, has ownership but control is held by persons or companies other than the acquiror or any joint actor, and

Not applicable.

(c) the acquiror, either alone or together with any joint actors, has exclusive or shared control but does not have ownership.

Not applicable.

3.6 If the acquiror or any of its joint actors has an interest in, or right or obligation associated with, a related financial instrument involving a security of the class of securities in respect of which disclosure is required under this item, describe the material terms of the related financial instrument and its impact on the acquiror's security holdings.

Not applicable.

3.7 If the acquiror or any of its joint actors is a party to a securities lending arrangement

involving a security of the class of securities in respect of which disclosure is required under this item, describe the material terms of the arrangement including the duration of the arrangement, the number or principal amount of securities involved and any right to recall the securities or identical securities that have been transferred or lent under the arrangement.

State if the securities lending arrangement is subject to the exception provided in section 5.7 of NI 62-104.

Not applicable.

- 3.8 If the acquiror or any of its joint actors is a party to an agreement, arrangement or understanding that has the effect of altering, directly or indirectly, the acquiror's economic exposure to the security of the class of securities to which this report relates, describe the material terms of the agreement, arrangement or understanding.**

Not applicable.

Item 4 – Consideration Paid

- 4.1 State the value, in Canadian dollars, of any consideration paid or received per security and in total.**

The consideration paid by the acquirer was US\$1,000,000 (approximately CAD\$1,379,000).

- 4.2 In the case of a transaction or other occurrence that did not take place on a stock exchange or other market that represents a published market for the securities, including an issuance from treasury, disclose the nature and value, in Canadian dollars, of the consideration paid or received by the acquiror.**

See Item 4.1.

- 4.3 If the securities were acquired or disposed of other than by purchase or sale, describe the method of acquisition or disposition.**

Not applicable.

Item 5 – Purpose of the Transaction

State the purpose or purposes of the acquiror and any joint actors for the acquisition or disposition of securities of the reporting issuer.

Describe any plans or future intentions which the acquiror and any joint actors may have which relate to or would result in any of the following:

- (a) the acquisition of additional securities of the reporting issuer, or the disposition of securities of the reporting issuer;**
- (b) a corporate transaction, such as a merger, reorganization or liquidation, involving the reporting issuer or any of its subsidiaries;**
- (c) a sale or transfer of a material amount of the assets of the reporting issuer or any of its subsidiaries;**
- (d) a change in the board of directors or management of the reporting issuer, including any plans or intentions to change the number or term of directors or to fill any existing vacancy on the board;**

NXT has agreed to appoint a representative from Mork Capital to its board of directors

in the near future.

- (e) ***a material change in the present capitalization or dividend policy of the reporting issuer;***
- (f) ***a material change in the reporting issuer's business or corporate structure;***
- (g) ***a change in the reporting issuer's charter, bylaws or similar instruments or another action which might impede the acquisition of control of the reporting issuer by any person or company;***
- (h) ***a class of securities of the reporting issuer being delisted from, or ceasing to be authorized to be quoted on, a marketplace;***
- (i) ***the issuer ceasing to be a reporting issuer in any jurisdiction of Canada;***
- (j) ***a solicitation of proxies from securityholders;***
- (k) ***an action similar to any of those enumerated above.***

Mork Capital is acquiring the Common Shares for investment purposes. Mork Capital may, from time to time, acquire additional Common Shares or other securities of NXT or dispose of some or all of the Common Shares or other securities of NXT that it owns at such time. Other than as set forth above, Mork Capital currently has no other plans or intentions that relate to or would result in any of the actions listed above, but depending on market conditions, general economic and industry conditions, trading prices of NXT's securities, NXT's business, financial condition and prospects and/or other relevant factors, Mork Capital may develop such plans or intentions in the future.

Item 6 – Agreements, Arrangements, Commitments or Understandings with Respect to Securities of the Reporting Issuer

Describe the material terms of any agreements, arrangements, commitments or understandings between the acquiror and a joint actor and among those persons and any person with respect to securities of the class of securities to which this report relates, including but not limited to the transfer or the voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, guarantees of profits, division of profits or loss, or the giving or withholding of proxies. Include such information for any of the securities that are pledged or otherwise subject to a contingency, the occurrence of which would give another person voting power or investment power over such securities, except that disclosure of standard default and similar provisions contained in loan agreements need not be included.

None

Item 7 – Change in material fact

If applicable, describe any change in a material fact set out in a previous report filed by the acquiror under the early warning requirements or Part 4 in respect of the reporting issuer's securities.

Not applicable.

Item 8 – Exemption

If the acquiror relies on an exemption from requirements in securities legislation applicable to formal bids for the transaction, state the exemption being relied on and describe the facts supporting that reliance.

Not applicable.

Item 9 – Certification

I, as the acquiror, certify, or I, as the agent filing the report on behalf of an acquiror, certify to the best of my knowledge, information and belief, that the statements made in this report are true and complete in every respect.

[Remainder of page intentionally left blank. Signature page follows.]

DATED this 9th day of November, 2023.

(signed) "*Michael Paul Mork*"

By: _____
Michael Paul Mork

MCAPM, LP

(signed) "*Michael Paul Mork*"

By: _____
Michael Paul Mork

Authorized Signatory of MCAPM, LP