

EARLY WARNING REPORT

(Form 62-103F1)

Made Pursuant To
NATIONAL INSTRUMENT 62-103
*The Early Warning System and Related Take-Over Bid and
Insider Reporting Issues*

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.**

Securities: Convertible Debentures (“**Convertible Debentures**”) convertible into common shares (“**Shares**”) or preferred shares of the Corporation

Issuer: NXT Energy Solutions Inc. (the “**Corporation**” or “**Issuer**”)
3320 – 17th Avenue SW
Calgary, Alberta
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.**

Not applicable.

ITEM 2 - IDENTITY OF THE ACQUIROR

- 2.1 **State the name and address of the acquiror.**

Ataraxia Capital (the “**Acquiror**”)
5th Floor The CORE Building, No.62, ICT Avenue,
Cybercity, Ebene, Mauritius

- 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 October 30, 2024, the Acquiror acquired ownership of a Convertible Debenture of the Corporation in the aggregate principal amount of US\$500,000, which aggregate amount was provided to the Issuer by the Acquiror, by way of a private placement (the “**Private Placement**”).

The Convertible Debenture bears interest at a rate of ten percent (10%) per annum and the principal amount thereof becomes due and payable on the earlier of (i) demand by the Acquiror, or (ii) October 30, 2026 (the “**Maturity Date**”). Interest on the principal amount of the Debenture shall be due and payable in quarterly instalments.

All or any portion of the outstanding principal amount of indebtedness under the Convertible Debenture will be convertible at the option of the Acquiror into Shares at a conversion price of US\$0.24 per Share at any time prior to the Maturity Date.

Prior to the completion of the Private Placement, Ataraxia held 9,790,209 Shares of the Company representing 11.1% of the outstanding Shares of the Company on a partially diluted basis.

Upon completion of the Private Placement, Ataraxia holds 11,873,542 Shares of the Company representing 13.15% of the outstanding Shares of the Company on a partially diluted basis.

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 security holding percentage in the class of securities.

The Acquiror acquired the Convertible Debenture by providing US\$500,000 to the Issuer, as described in Section 2.2 above.

Prior to the completion of the Private Placement, Ataraxia held 9,790,209 Shares of the Company representing 11.1% of the outstanding Shares of the Company on a partially diluted basis.

Upon completion of the Private Placement, Ataraxia holds 11,873,542 Shares of the Company representing 13.15% of the outstanding Shares of the Company on a partially diluted basis.

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 3.1.

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 item 3.1.

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 item 3.1

(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.

Not applicable.

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 Debenture was issued to the Acquiror for aggregate proceeds of US\$500,000 to the Issuer.

- 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 above.

- 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;

The Acquiror will have the ability to appoint one (1) director to the board of the Issuer so long as the Acquiror holds a Convertible Debenture or at least 5% of the issued and outstanding Shares.

- (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.

The Acquiror currently has no other plans or intentions that relate to or would result in the matters listed in rest of the clauses above. Depending on market conditions, general economic and industry conditions, the Corporation's business and financial condition and/or other relevant factors, the Acquiror 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.

Not applicable.

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 described the facts supporting that reliance.

Not applicable.

CERTIFICATE

I, as the 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.

Date: October 31, 2024

Per: "Daere Akobo"

Ataraxia Capital

Name: Daere Akobo

Title: Chief Executive Officer