



NXT PROVIDES UPDATES ON THE ATARAXIA CONVERTIBLE DEBENTURE AND PREFERRED SHARE TERMS

CALGARY, AB, July 26 2023 – NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX: SFD; OTCQB: NSFDF) is pleased to provide the following updates on the convertible debentures and an amendment to the Preferred Share Terms included as "Schedule C" in its Management Information Circular dated June 30, 2023 ("Schedule C").

1. As per an agreement between NXT and Ataraxia Capital ("Ataraxia"), both parties have agreed to delete Section 6.2 (Post-Liquidation Participation Right) from Schedule C.
2. The convertible debentures are for a term of two years. The terms of the convertible debentures include an annual interest rate of 10%, paid quarterly and a fixed conversion price of US\$0.143 per common share. The debentures may also be converted into voting preferred shares with an annual dividend of 10% payable quarterly in arrears in either cash or shares. The preferred shares are not transferable, but may be converted on a one to one basis into common shares. Holders of preferred shares shall be entitled to one vote for each preferred share held, and shall be entitled to vote as one class with the common shares. Dividends may be declared on the preferred shares at a rate of ten per cent (10%) per annum on the sum of the redemption price thereof and, if declared, shall be compounding and cumulative. Upon liquidation of the Company, holders of such preferred shares shall be entitled to receive the sum of USD \$0.143 per share as the redemption price for such shares. The convertible debentures are payable on demand and are secured by a general security agreement, subordinate to the current long-term debt of the Company.
3. As of July 26, 2023 Ataraxia holds a total of US\$1.4 million worth of convertible debentures. At the option of Ataraxia, it may convert the convertible debentures into 9,790,209 voting convertible preferred shares as defined in Schedule C or 9,790,209 common shares. The Toronto Stock Exchange has approved the listing, in reserve, of an additional 9,790,209 common shares if and when the convertible debentures are converted into common shares.
4. If shareholders do not approve the Preferred Share Resolution, as defined in the Management Information Circular dated June 30, 2023, the convertible debentures may only be converted to common shares of the Company.
5. On May 31, 2023, the Company and Ataraxia agreed to an Investor's Rights Agreement ("IRA") which remains in place as long as Ataraxia holds any principal amount of the convertible debentures or at least 5% of the outstanding common shares of NXT (on an as-converted basis, if Ataraxia holds preferred shares). Material terms of the IRA include:

- a. the right to nominate for election or appointment one person for the Company's board of directors (the "Board"). This right has been fulfilled with the nomination of Theodore Patsellis by Ataraxia and the confirmation of such nomination by the Board. Mr. Patsellis was appointed to the Board on June 12, 2023 to serve until the Annual and Special Meeting of Shareholders to be held on August 2, 2023 (the "AGM"), and Mr. Patsellis has now been added to the slate of directors standing for election in the AGM. The IRA also provides that NXT management will put forward an Ataraxia director nominee for election by the shareholders of NXT at successive shareholder meetings for so long as Ataraxia meets the share ownership thresholds therein; and
- b. the pre-emptive right to purchase up to its pro rata portion of any securities offered by the Company on the terms and conditions applicable to the other purchasers of such securities.

Shareholders are encouraged to carefully review the voting instructions in the Management Information Circular dated June 30, 2023, and the above important information in advance of the AGM.

About NXT Energy Solutions Inc.

NXT Energy Solutions Inc. is a Calgary-based technology company whose proprietary SFD[®] survey system utilizes quantum-scale sensors to detect gravity field perturbations in an airborne survey method which can be used both onshore and offshore to remotely identify traps and reservoirs with hydrocarbon and geothermal exploration potential. The SFD[®] survey system enables our clients to focus their exploration decisions concerning land commitments, data acquisition expenditures and prospect prioritization on areas with the greatest potential. SFD[®] is environmentally friendly and unaffected by ground security issues or difficult terrain and is the registered trademark of NXT Energy Solutions Inc. NXT Energy Solutions Inc. provides its clients with an effective and reliable method to reduce time, costs, and risks related to exploration.

Contact Information

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