

MATERIAL CHANGE REPORT

Item 1 Name and Address of Company

NXT Energy Solutions Inc. ("NXT" or the "Company")
Suite 1400, 505 3rd Street, S.W.,
Calgary, Alberta, Canada T2P 3E6

Item 2 Date of Material Change

March 7, 2012

Item 3 News Release

A news release disclosing the material change was issued on March 8, 2012.

Item 4 Summary of Material Change

On March 7, 2012, NXT issued an aggregate of 2,002,839 units ("Units") at a price of US \$0.75 per Unit on a private placement basis (the "Financing"), each Unit consisting of one Common Share ("Share") and one warrant ("Warrant"). Each Warrant entitles the holder to acquire an additional Share at a price of US \$1.20 per Share on or before March 7, 2014, subject to certain acceleration terms described below.

Item 5.1 Full Description of Material Change

On March 7, 2012, NXT issued an aggregate of 2,002,839 Units at a price of US \$0.75 per Unit, each Unit consisting of one Share and one Warrant. Each Warrant is subject to acceleration in the event the Company issues a press release advising that the Shares have traded on the Nasdaq OTCBB at a price per share greater than US \$1.50 for 20 consecutive trading days. Warrants subject to acceleration will expire on the 30th day following the issuance of the press release. A maximum of 50% of the Warrants issued to subscribers are subject to acceleration within the first 6 months of closing.

In connection with the Financing, the Company paid finder's fees of US \$70,000 and issued 93,336 finders warrants. The finders warrants are subject to the same terms as the Warrants. Total gross proceeds from the Financing was US \$1,502,130 (US \$1,432,130 net of finder's fees). A total of \$141,604 was subscribed for by persons who are Insiders or advisors of NXT.

The Shares and Warrants issued pursuant to the Financing are subject to a hold period that expires July 8, 2012.

Item 5.2 Disclosure of Restructuring Transactions

Not applicable.

Item 6 Reliance on subsection 7.1(2) of National Instrument 51-102

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Executive Officer

Gregory Leavens, Vice President Finance and Chief Financial Officer of NXT, is knowledgeable about the material change described herein and may be reached at (403) 206-0805

Item 9 Date of Report

March 17, 2012