

NXT ENERGY SOLUTIONS PROVIDES UPDATE ON TURKISH SFD® SURVEY

CALGARY, AB, January 3, 2024 – NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX: SFD; OTCQB: NSFDF) is pleased to announce that its Turkish customer has requested NXT to add additional line kilometers to the original SFD® survey. NXT's aircraft and equipment remain in Turkiye, to complete the data acquisition phase. Data interpretation and recommendations will be delivered during the first quarter of 2024.

Bruce G. Wilcox, Interim CEO of NXT, stated "We are extremely gratified to have been awarded additional line kilometers by our customer. NXT is now poised to continue its pursuit of new and additional revenue opportunities to enhance shareholder value. I would like to thank the entire NXT team for their efforts so far in Turkiye, and would also like to thank NXT's shareholders for their continued support of the Company."

About NXT Energy Solutions Inc.

NXT Energy Solutions Inc. is a Calgary-based technology company whose proprietary airborne SFD® survey system, applied in numerous basins around the world, uses the principles of quantum mechanics to infer stress anomalies of exploration interest. The method can be used both onshore and offshore to remotely identify areas conducive to fluid entrapment in order to recommend areas with commercial hydrocarbon and/or geothermal 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.

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Forward-Looking Statements

Certain information provided in this press release may constitute forward-looking information within the meaning of applicable securities laws. Forward-looking information typically contains statements with words such as "anticipate", "believe", "estimate", "will", "expect", "plan", "schedule", "intend", "propose" or similar words suggesting future outcomes or an outlook. Forward-looking information in this press release includes, but is not limited to, information regarding: the expected timing of the acquisition, interpretation and recommendations of the SFD® surveys and additional business opportunities in Turkiye. Although the Company believes that the expectations and assumptions on which the forward-looking statements are based are reasonable, undue reliance should not be placed on the forward-looking statements because the Company can give no assurance that they will prove to be correct. Since forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Actual results could differ materially from those currently anticipated due to a number of factors and risks. Risk factors facing the Company are described in its most recent Annual Information Form for the year ended December 31, 2022 and MD&A for the three and nine months ended September 30, 2023, which have been filed electronically by means of the System for Electronic Document Analysis and Retrieval ("SEDAR") located at www.sedarplus.com. The forward-looking statements contained in this press release are made as of the date hereof, and except as may be required by applicable securities laws, the Company assumes no obligation to update publicly or revise any forward-looking statements made herein or otherwise, whether as a result of new information, future events or otherwise.