Form 51-102F3

MATERIAL CHANGE REPORT

Item 1 Name and Address of Company

Nuclear Fuels Inc. Suite 1020, 800 West Pender Street Vancouver, BC V6C 2V6

Item 2 Dates of Material Change

January 24, 2024

Item 3 News Release

The press release was disseminated on January 24, 2024.

Item 4 Summary of Material Change

Vancouver, British Columbia – (January 24, 2024) – Nuclear Fuels Inc. (CSE: NF, OTCQX:NFUNF) ("Nuclear Fuels" or the "Company") is pleased to announce that it has closed its previously announced private placement consisting of an aggregate of 12,720,000 units (the "Units"), including exercise in full of the underwriter's overallotment option, at a price of \$0.60 per Unit (the "Issue Price") for aggregate gross proceeds to the Company of \$7,632,000 (the "Offering"). Each Unit consists of one common share of the Company and one-half of one common share purchase warrant (each whole warrant, a "Warrant"). Each whole Warrant entitles the holder to purchase one common share of the Company at a price of \$0.80 per share until January 24, 2027. The Warrants were issued pursuant to a warrant indenture dated January 24, 2024 between the Company and Endeavor Trust Corporation, as warrant agent.

PI Financial Corp. ("**PI Financial**") as sole bookrunner, along with PowerOne Capital Markets Ltd. (collectively with PI Financial, the "**Underwriters**") as co-lead, acted as the Underwriters in connection with the Offering. In consideration for the services provided by the Underwriters in connection with the Offering, the Company paid the Underwriters a cash commission of \$413,204.88 and issued to the Underwriters an aggregate of 620,024 compensation options (the "**Compensation Options**"). Each Compensation Option is exercisable into one common share of the Company at a price of \$0.60 per share until January 24, 2027.

The Company intends to use the net proceeds from the Offering for exploration and development expenses for the Kaycee, Moonshine and other projects and for general working capital purposes.

The securities issued in connection with the Offering, including any underlying securities, are subject to a hold period of four months, expiring on May 25, 2024, in accordance with applicable securities laws.

Item 5 Full Description of Material Change

See attached press releases for details.

Item 6 Reliance on subsection 7.1(2) or (3) of National Instrument 51–102

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Executive Officer

Michael Collins, CEO Phone: 778 763 4670

Item 9 Date of Report

January 24, 2024

NEWS RELEASE NOT FOR DISTRIBUTION IN THE UNITED STATES OR TO U.S. NEWSWIRE SERVICES

Nuclear Fuels Announces Completion of Bought Deal Offering, Including Full Exercise of Over-Allotment Option

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Related Party Transaction

enCore Energy Corp. ("enCore"), an insider of the Company, participated in the Offering, acquiring 1,716,260 Units for a total value of \$1,029,756. The insider participation constitutes a "related party transaction" under Multilateral Instrument 61-101 - *Protection of Minority Security Holders in Special Transactions* ("MI 61-101"). After the Offering, enCore holds an 18.3% stake in the Company. The Company will be relying on the exemptions from the formal valuation requirements contained in section 5.5(b) of MI 61-101 and the minority shareholder approval requirements contained in section 5.7(1) (a) of MI 61-101, as the Company is not listed on specified markets and the fair market value of the insider participation in the Offering does not exceed 25% of the Company's market capitalization, as determined in accordance with MI 61-101. The Company did not file a material change report 21 days before closing of the Offering as the details of the insider participation were not known at that time.

This news release does not constitute an offer to sell or a solicitation of an offer to buy any of the securities in the United States of America. The securities have not been and will not be registered under the United States Securities Act of 1933 (the "1933 Act") or any state securities laws, and may not be offered or sold within the United States or to U.S. Persons (as defined in the 1933 Act) unless registered under the 1933 Act and applicable state securities laws, or an exemption from such registration is available.

Early Warning Disclosure

EnCore acquired 1,716,260 Units at a price of \$0.60 per Unit for the aggregate purchase price of \$1,029,756 pursuant to the Offering. Immediately prior to the Offering, enCore held 9,327,800 common shares of the Company, representing approximately 19.59% of the issued and outstanding common shares of the Company on an undiluted basis. Following the Offering, enCore holds 11,044,060 common shares of the Company and 858,130 Warrants, representing approximately 18.3% of the issued and outstanding common shares of the Company on an undiluted basis and approximately 19.45% of the issued and outstanding common shares of the Company on a partially diluted basis, assuming the exercise of all Warrants held by encore.

enCore acquired the securities of the Company for investment purposes, and may, depending on market and other conditions, increase or decrease its beneficial ownership of the Company's securities, whether in the open market, by privately negotiated agreements or otherwise, subject to a number of factors, including general market conditions and other available investment and business opportunities.

The disclosure respecting enCore's security holdings of the Company contained in this news release is made pursuant to National Instrument 62-103 - *The Early Warning System and Related Take-Over Bid and Insider Reporting Issues* and National Instrument 62-104 - *Take-Over Bids and Issuer Bids*, and a report respecting the above acquisition will be filed with the applicable securities regulatory authorities and will be available for viewing under the Company's profile on the SEDAR+ website at www.sedarplus.ca.

No securities regulatory authority has either approved or disapproved of the contents of this news release.

About Nuclear Fuels Inc.

Nuclear Fuels Inc. (CSE:NF) (OTCQX:NFUNF) is committed to aggressive exploration of district-scale In-Situ Recovery ("ISR") uranium projects in proven and prolific jurisdictions. Focused on its priority Kaycee Project, located in Wyoming's Powder River Basin, our goal is to advance the project onto a path to production. With existing historic resources through a 33-mile trend, 110+ miles of mapped roll-fronts and 3,800 drill holes, Nuclear Fuels has secured the district under one company's control for the first time since the early 1980's. Nuclear Fuels also provides a unique model for development of our other uranium projects and has established a pipeline of future opportunities in known uranium jurisdictions.

For further information:

Michael Collins, Chief Executive Officer P: 778-763-4670 E: info@nuclearfuels.energy W: www.nuclearfuels.energy

The Canadian Securities Exchange has not reviewed this press release and does not accept responsibility for the adequacy or accuracy of this news release.

Forward-looking Statements

Certain information in this news release constitutes forward-looking statements under applicable securities laws. Any statements that are contained in this news release that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often identified by terms such as "may", "should", "anticipate", "expect", "potential", "believe", "intend" or the negative of these terms and similar expressions. Forward-looking statements in this news release include, but are not limited to, statements relating to the Offering and planned exploration programs and the results of additional exploration work in seeking to establish mineral resources as defined in NI43-

101 on any of our properties. Forward-looking statements necessarily involve known and unknown risks, including, without limitation, risks associated with the planned exploration programs and the results of those programs; the ability to access additional capital to fund planned and future operations; regulatory risks including exploration permitting; risks associated with title to our mineral projects; the ability of the company to implement its business strategies; and other risks including risks contained in documents available for review at www.sedarplus.ca under the Company's profile. Readers are cautioned not to place undue reliance on forward-looking statements as there can be no assurance that the plans, intentions or expectations upon which they are placed will occur. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement.