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 3, 2024

Item 3 News Release

The press releases were disseminated on January 3, 2024.

Item 4 Summary of Material Change

Vancouver, British Columbia, January 3, 2024 – Nuclear Fuels Inc. (CSE:NF OTCQX:NFUNF) ("Nuclear Fuels" or the "Company") today announced that it has entered into an agreement with PI Financial Corp., as sole bookrunner, ("Bookrunner") along with PowerOne Capital Markets Limited as co-leads, ("PowerOne", together with PI Financial, the "Underwriters") pursuant to which the Underwriters have agreed to purchase, on "bought deal" basis by way of private placement, 8,333,334 units (the "Units") of the Company at a price of C\$0.60 per Unit for gross proceeds of approximately C\$5 million (the "Offering").

Vancouver, British Columbia, January 3, 2024 – Nuclear Fuels Inc. (CSE:NF OTCQX:NFUNF) ("Nuclear Fuels" or the "Company") today announced that due to strong institutional investor demand, it has entered into an agreement with PI Financial Corp., as sole bookrunner, ("Bookrunner") along with PowerOne Capital Markets Limited as co-leads, ("PowerOne", together with PI Financial, the "Underwriters") to increase the size of the previously announced bought deal private placement from C\$5.0 million to C\$6.4 million (the "Offering").

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 4, 2024



NEWS RELEASE CSE:NF OTCQX:NFUNF January 3, 2024

Not for distribution in the United States or to U.S. newswire services

Nuclear Fuels Announces \$5 Million Bought Deal Private Placement

Vancouver, British Columbia, January 3, 2024 – Nuclear Fuels Inc. (CSE:NF OTCQX:NFUNF) ("Nuclear Fuels" or the "Company") today announced that it has entered into an agreement with PI Financial Corp., as sole bookrunner, ("Bookrunner") along with PowerOne Capital Markets Limited as co-leads, ("PowerOne", together with PI Financial, the "Underwriters") pursuant to which the Underwriters have agreed to purchase, on "bought deal" basis by way of private placement, 8,333,334 units (the "Units") of the Company at a price of C\$0.60 per Unit for gross proceeds of approximately C\$5 million (the "Offering").

Each Unit shall consist of one common share ("Share") and one half of one transferable common share purchase warrant (each whole such common share purchase warrant, a "Warrant"). Each Warrant shall be exercisable into one additional common share ("Warrant Share") of the Company for 36 months from the closing date at an exercise price of C\$0.80.

The Company has also granted the Underwriters an option to cover over-allotments (the "Underwriters' Option"), which will allow the Underwriters to offer up to an additional 15% of the Offering, on the same terms as the Units. The Underwriters' Option may be exercised in whole or in part at any time prior to the closing of the Offering.

The Offering is expected to close on or about January 24, 2024 (the "Closing Date"), or such other date as agreed between the Company and the Underwriters and is subject to satisfaction of customary closing conditions.

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

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

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.

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 completing the Offering, 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.sedar.com 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.



NEWS RELEASE CSE:NF OTCQX:NFUNF January 3, 2024

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Nuclear Fuels Announces Upsize of Bought Deal Private Placement Financing to C\$6.4 Million

Vancouver, British Columbia, January 3, 2024 – Nuclear Fuels Inc. (CSE:NF OTCQX:NFUNF) ("Nuclear Fuels" or the "Company") today announced that due to strong institutional investor demand, it has entered into an agreement with PI Financial Corp., as sole bookrunner, ("Bookrunner") along with PowerOne Capital Markets Limited as co-leads, ("PowerOne", together with PI Financial, the "Underwriters") to increase the size of the previously announced bought deal private placement from C\$5.0 million to C\$6.4 million (the "Offering").

Pursuant to the amended terms, the Offering will consist of 10,600,000 units (the "Units") of the Company at a price of C\$0.60 per Unit for gross proceeds of approximately C\$6.4 million. Each Unit shall consist of one common share ("Share") and one half of one transferable common share purchase warrant (each whole such common share purchase warrant, a "Warrant"). Each Warrant shall be exercisable into one additional common share ("Warrant Share") of the Company for 36 months from the closing date at an exercise price of C\$0.80.

The Company has also granted the Underwriters an option to cover over-allotments (the "Underwriters' Option"), which will allow the Underwriters to offer up to an additional 20% of the Offering, on the same terms as the Units. The Underwriters' Option may be exercised in whole or in part at any time prior to the closing of the Offering.

The Offering is expected to close on or about January 24, 2024 (the "Closing Date"), or such other date as agreed between the Company and the Underwriters and is subject to satisfaction of customary closing conditions.

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

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

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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.

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