

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): **January 14, 2025 (January 10, 2025)**

Nano Nuclear Energy Inc.

(Exact name of registrant as specified in its charter)

Nevada

(State or other jurisdiction
of incorporation)

001-42044

(Commission
File Number)

88-0861977

(IRS Employer
Identification No.)

**10 Times Square, 30th Floor
New York, New York 10018**

(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: **(212) 634-9206**

Not Applicable

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.0001 per share	NNE	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 1.01 Entry into a Material Definitive Agreement.

Item 2.01 Completion of Acquisition or Disposition of Assets.

USNC Asset Purchase Agreement Closing

As previously disclosed, on December 18, 2024, Nano Nuclear Energy Inc., a Nevada corporation (the “Company”), entered into an Asset Purchase Agreement (as amended, the “APA”) with Ultra Safe Nuclear Corporation, a Delaware corporation, Ultra Safe Nuclear Corporation – Technologies, a Washington corporation, USNC Holdings, LLC, a Washington limited liability company, Global First Power Limited, a Canadian corporation, and USNC-Power, Ltd., a British Columbia corporation (collectively, “Sellers”), pursuant to which, subject to the terms and conditions set forth in the APA, the Company agreed to acquire certain assets of Sellers on an as-is, where-is basis, relating to Sellers’ micro modular nuclear reactor business (marketed as the MMR[®] Energy System) (the “MMR Business”), and transportable fission power system technology business marketed as a Pylon Transportable Reactor Platform (the “Pylon Business”), including certain contracts, intellectual property rights, demonstration projects and, as amended, the equity interests of a Canadian entity (collectively, the “Assets”), free and clear of any liens other than certain specified liabilities of Sellers that are being assumed (collectively, the “Liabilities”) and such acquisition of the Assets and assumption of the Liabilities together, the “Transaction”) for a total purchase price of \$8,500,000 in cash (the “Purchase Price”). The closing of the Transaction (the “Closing”) occurred on January 10, 2025.

The Assets acquired by the Company at the Closing more particularly consist of five contracts with third-party collaborators, 38 issued, pending or published patents, including six issued and four pending or published U.S. utility patents and three issued and four pending Canadian utility patents, 16 registered, pending or published trademarks, and any other technology and intellectual property related to the acquired businesses, rights related to a demonstration project related to the MMR Business in the United States and the business records of the acquired businesses and related confidentiality rights. The Assets related to the MMR Business were assigned to a new wholly-owned subsidiary of the Company, Kronos MMR Inc., a Nevada corporation (“Kronos MMR”), and the Assets related to Pylon Business were assigned to a new wholly-owned subsidiary of the Company, LOKI MMR Inc., a Nevada corporation (“LOKI MMR”).

The Assets also include three contracts with Canadian authorities, the equity interests of a Canadian partnership (the “Canadian Partnership”) and rights related to a demonstration project related to the MMR Business in Canada (the “Canadian Assets”), the transfer of which Canadian Assets are all subject to the consent of the Canadian governmental authorities (the “Canadian Consents”). Pursuant to the APA Amendment, as described below, \$250,000 of the Purchase Price (the “Canadian Escrow Amount”) was set aside in escrow at the Closing, and if the Canadian Consents are not received within 90 days after the Closing, the Company has the right to terminate the acquisition of the Canadian Assets and receive the Canadian Escrow Amount.

In addition, and as described further below, in order to better facilitate the Canadian Consents and to continue diligence of the Canadian Partnership and other Canadian Assets, the Company assigned its rights to the Canadian Assets (the “Canadian Asset Transfer”) to three entities (the “Yu Entities”) owned and/or controlled by Jay Jiang Yu, the Company’s Chairman of the Board and President (“Yu”). In exchange, the Company received an option back from Yu and the Yu Entities to acquire for nominal consideration, for a period of five years after the receipt by the Yu Entities of the Canadian Assets upon receiving the Canadian Consents, any or all of the equity interests of the Yu Entities or the Canadian Partnership, the other Canadian Assets or the material assets and business of the Canadian Partnership.

Sellers are debtors in a voluntary Chapter 11 case before the United States Bankruptcy Court for the District of Delaware (the “Bankruptcy Court”), which commenced on October 29, 2024. The Company participated in an auction conducted by Sellers on December 12, 2024 for the sale of all or substantially all of Sellers’ assets (the “Auction”) and was selected as the winning bidder with respect to the Assets. The Bankruptcy Court approved the Transaction on December 19, 2024. In the Auction, the Company also submitted a bid for the acquisition of substantially all of the assets of Sellers, including their fuel business and their technology assets marketed as EmberCore and Nuclear Thermal Propulsion (NTP) (such assets other than the Assets, the “Other Assets”), and was selected as the back-up bidder for the Other Assets in the Auction. The closing of the acquisition of the Other Assets by the primary bidder for such assets occurred on December 27, 2024, and therefore the Company has no further obligation as back-up bidder to acquire the Other Assets.

APA Amendment

On January 10, 2025, in connection with the Closing, the Company and the Sellers entered into a First Amendment to Asset Purchase Agreement (the “APA Amendment”) to memorialize certain updated agreements of the parties with respect to the Transaction. The APA Amendment amended the APA to, among other matters, (i) remove the shares of Sellers’ United Kingdom subsidiary from the Transaction and have Sellers retain such shares, but notify the Company if such shares or any of the assets of the United Kingdom subsidiary, including intellectual property rights, are sold to a third party, (ii) add certain Canadian governmental contracts to the list of purchased contracts, (iii) delay the transfer of the purchase of the Canadian Assets until the necessary Canadian Consents are obtained, (iv) set aside the Canadian Escrow Amount into escrow at the Closing, and provide that if the Canadian Consents are not received within 90 days after the Closing, the Company has the right to terminate the acquisition of the Canadian Assets and receive the Canadian Escrow Amount, (v) amend the schedules to the APA to remove certain contracts that expired prior to the Closing, as well as to add an additional patent and correct certain other matters, (vi) assign the Company’s rights to acquire the MMR Business to Kronos MMR, (vii) assigned the Company’s rights to acquire the Pylon Business to LOKI MMR, and (viii) assign the Company’s rights to acquire the Canadian Assets to the Yu Entities pursuant to the Canadian Asset Transfer (subject to the Option Agreement as described below).

Option Agreement

As described above, in connection with the Canadian Asset Transfer, on January 10, 2025, Yu and the Yu Entities entered into an Option Agreement (the “Option Agreement”) with the Company, pursuant to which Yu and the Yu Entities agreed to sell to the Company, at the sole election of the Company exercisable in one or more instances at any time beginning with the receipt by the Yu Entities of the Canadian Assets upon receiving the Canadian Consents and ending five years thereafter (the “Option Period”), (a) any or all of the equity interests of the Yu Entities or the Canadian Partnership, (b) any or all of the other Canadian Assets (so long as such acquisition would not reasonably be expected to result in the applicable Yu Entity becoming or remaining insolvent) and/or (c) all or any material portion of the assets and business of the Canadian Partnership (so long as such acquisition would not reasonably be expected to result in the Canadian Partnership becoming or remaining insolvent) (as selected by the Company, an “Acquisition”). Any Acquisition will be made free and clear of liens, charges and encumbrances. The purchase price for the option (the “Option Price”) will be equal to the sum of (i) \$1.00 plus (ii) if the Acquisition is for (A) all or any portion of the equity interests of the Yu Entities, the amount of equity capital contributions made by Yu to the applicable Yu Entities during the Option Period for which the Option Price has previously not been paid pursuant to an earlier exercise of the option, (B) all or any portion of the partnership interests of the Canadian Partnership or all or any material portion of the assets of the Canadian Partnership, the amount of equity capital contributions made by the applicable Yu Entity to the Canadian Partnership during the Option Period for which the Option Price has previously not been paid pursuant to an earlier exercise of the option or (C) all or any of the other Canadian Assets, the amount of equity capital contributions made by Yu to the applicable Yu Entity BC during the Option Period for which the Option Price has previously not been paid pursuant to an earlier exercise of the option. Any Acquisition under the Option Agreement will be subject to the receipt of applicable consents or approvals of third parties, including governmental authorities.

The foregoing summaries of the APA, the APA Amendment and the Option Agreement are not complete and are qualified in their entirety by reference to the full text of the APA, the APA Amendment and Option Agreement, copies of which are attached hereto as Exhibits 10.1, 10.2 and 10.3 and are incorporated herein by reference.

Item 7.01 Regulation FD

On January 13, 2025, the Company issued a press release announcing the Closing. A copy of such release is furnished hereto as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Exhibit
10.1	Asset Purchase Agreement, dated as of December 18, 2024, by and among Sellers and the Company (incorporated by reference to the Company's Current Report on Form 8-K, dated December 26, 2024)*
10.2	First Amendment to Asset Purchase Agreement, dated as of January 10, 2025, by and among Sellers and the Company*+
10.3	Option Agreement, dated as of January 10, 2025, by and among Yu, the Yu Entities and the Company+
99.1	Press Release, dated January 13, 2025
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

*In accordance with Item 601(a)(5) of Regulation S-K, certain schedules or similar attachments to this exhibit have been omitted from this filing.

+ Certain portions of this exhibit are omitted pursuant to Item 601(b)(10)(iv) of Regulations S-K because they are not material and are the type that the registrant treats as private or confidential. The Registrant hereby agrees to furnish a copy of any omitted portion to the SEC upon request.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: January 14, 2025

NANO Nuclear Energy Inc.

By: /s/ James Walker

Name: James Walker

Title: Chief Executive Officer

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED FROM THE EXHIBIT BECAUSE IT IS EITHER (i) NOT MATERIAL AND (ii) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL, OR DISCLOSURE OF SUCH INFORMATION WOULD CONSTITUTE A CLEARLY UNWARRANTED INVASION OF PERSONAL PRIVACY. REDACTED INFORMATION IS MARKED WITH A [***]. CERTAIN SCHEDULES OR SIMILAR ATTACHMENTS HAVE BEEN OMITTED FROM THIS EXHIBIT IN ACCORDANCE WITH ITEM 601(a)(5) of REGULATION S-K.**

FIRST AMENDMENT TO ASSET PURCHASE AGREEMENT

THIS FIRST AMENDMENT TO ASSET PURCHASE AGREEMENT (this “**Amendment**”), dated as of January 10, 2025, by and among Nano Nuclear Energy Inc., a Nevada corporation (including any permitted designee(s), assignee(s), or nominee(s) of Nano Nuclear Energy Inc., including the Buyer Designees described in Section 8 of this Amendment below, collectively, “**Buyer**”), Ultra Safe Nuclear Corporation, a Delaware corporation (“**USNC**”), Ultra Safe Nuclear Corporation – Technologies, a Washington corporation (“**USNC Tech**”), USNC Holdings, LLC, a Washington limited liability company (“**USNC Holdings**”), Global First Power Limited, a Canadian corporation (“**GFP**”), and USNC – Power Ltd., a British Columbia corporation (“**USNC-Power**”, and together with USNC, USNC Tech, USNC Holdings, and GFP, collectively, “**Seller**”). Buyer and Seller are each hereinafter referred to, individually, as a “**Party**” and, collectively, as the “**Parties**”.

RECITALS

A. The Parties entered into that certain Asset Purchase Agreement, dated as of December 18, 2024 (the “**Purchase Agreement**”).

B. The Parties have agreed to amend the Purchase Agreement on the terms set forth herein to reflect certain modifications to the Purchase Agreement.

C. Capitalized terms used herein but not defined shall have the meaning ascribed to them in the Purchase Agreement.

NOW THEREFORE, in consideration of the premises and of the mutual agreements contained in this Amendment and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto, intending to be legally bound, hereby amend the Purchase Agreement as follows:

1. Definitions. Section 1 of the Purchase Agreement is hereby amended as follows:

(a) The following definitions are inserted after the definition of the defined term “Buyer Closing Certificate” and before the definition of the defined term “Cash Consideration”:

“**Canadian Consents**” means the consents of the Canadian Nuclear Safety Commission and Canadian Nuclear Laboratories referenced in Schedule 5.3 for the Canadian Contracts.

“**Canadian Contracts**” means the Designated Contracts identified on the Designated Contracts schedule as the Canadian Consents.”

(b) The definition of “Demonstration Projects” is hereby deleted in its entirety and replaced with the following:

““**Demonstration Projects**” means the University of Illinois and Chalk River demonstration projects being conducted by Seller and the Project Partnership as part of the Business.”

(c) The definition of “Purchased Equity Interests” is hereby deleted in its entirety and replaced with the following:

““**Purchased Equity Interests**” means (i) all limited partnership interests in the Project Partnership, and (ii) all general partnership interests in the Project Partnership.”

(d) The definition of “Purchased Subsidiary” is hereby deleted in its entirety and replaced with the following:

““**Purchased Subsidiary**” means the Project Partnership.”

2. Closing Deliveries.

(a) Section 4.5(a)(vi) of the Purchase Agreement is hereby amended by inserting “and Section 4.7(d)” immediately after “Section 2.2(e)” as it appears therein.

(b) Section 2.1(e), Section 2.1(g) and Section 4.5(a)(x) of the Purchase Agreement are each hereby amended by inserting “subject to Section 4.7(d),” at the beginning of each such Section.

(c) Section 4.5(a)(ix) of the Purchased Agreement is hereby deleted in its entirety and replaced with the following: “[reserved]”

3. Payment of Purchase Price. Section 4.7 of the Purchase Agreement is hereby amended by adding a new Section 4.7(d) and Section 4.7(e) after existing Section 4.7(c) to read as follows:

“(d) Notwithstanding the provisions of this Agreement, including Section 4.7(a), if, on or prior to the Closing, the Canadian Consents have not been received, then (i) the sum of \$250,000 shall be retained in the Escrow Account and continue to be held in escrow by the Escrow Agent pending receipt of the Canadian Consents, (ii) the Canadian Contracts shall not be assumed by the Seller and assigned to Buyer until receipt of the Canadian Consents, and (iii) the Seller shall not transfer, convey, or assign the equity interests in the Project Partnership or any rights of Seller with respect to the Demonstration Project conducted by the Project Partnership to Buyer or one or more designees of Buyer until receipt of the Canadian Consents. From and after the Closing, subject to Section 4.7(e) below, (i) Seller, Buyer, and any one or more designees of Buyer who will assume the Canadian Contracts or acquire the equity interest in the Project Partnership shall use Seller’s, Buyer’s, and any such designees’ respective commercially reasonable efforts to obtain the Canadian Consents and (ii) Seller shall cooperate diligently and in good faith, without further consideration, with Buyer in any commercially reasonable arrangements Buyer may request to provide Buyer with all of the benefits of, or under, the applicable Canadian Contract, the Demonstration Project conducted by the Project Partnership, or with respect to the Project Partnership, including enforcement for the benefit of Buyer of any and all rights of Seller against any party to the applicable Canadian Contract or Demonstration Project arising out of the breach or cancellation thereof by such party, and not taking, or omitting to take, any action with respect to the Project Partnership that would require the approval of the Project Partnership’s board of directors (or similar governing board or person) or equity holders without obtaining the prior written consent of Buyer; provided, however, that to the extent that any such arrangement has been made at the request of Buyer to provide Buyer with the benefits of, or under, the applicable Canadian Contract or Demonstration Project, from and after Closing, Buyer shall be responsible for, and shall promptly pay all payments and other Liabilities of Seller under such Canadian Contract or Demonstration Project or in respect of the Project Partnership (all of which shall constitute, and shall be deemed to be, Assumed Liabilities hereunder) to the same extent as if such Canadian Contract or Demonstration Project or the equity interests in the Purchased Subsidiary had been assigned or transferred at Closing.

(e) Upon receipt of the Canadian Consents, (i) the Seller shall assume and assign to Buyer the Canadian Contracts, (ii) the Seller shall (A) deliver to Buyer or one or more of Buyer's designees the documentation described in Section 4.5(a)(x) and (B) transfer, convey, and assign any rights of the Seller with respect to the Demonstration Project conducted by the Project Partnership to Buyer or one or more of designees of Buyer, and (iii) Seller and Buyer shall direct the Escrow Agent to disburse the sum of \$250,000 to Seller; provided, however, that if the Canadian Consents are not received within ninety (90) days after the Closing, then at any time thereafter at the sole election of Buyer by providing written notice thereof to Seller, the Canadian Contracts shall be deemed to be Retained Contracts, Seller shall have no further obligations to assume and assign the Canadian Contracts to Buyer, the equity interests in the Project Partnership and any rights of Seller with respect to the Demonstration Project conducted by the Project Partnership shall be deemed to be Retained Assets and shall not be purchased by Buyer, Seller and Buyer shall direct the Escrow Agent to disburse the sum of \$250,000 to Buyer, and the Purchase Price shall be deemed to be reduced by \$250,000."

4. Allocation of Purchase Price. Section 4.8 of the Purchase Agreement is hereby amended by deleting the second sentence thereof and inserting the following as the second sentence of Section 4.8:

"Buyer agrees to prepare the Allocation Schedule based on Seller's balance sheet dated as of October 31, 2024 (a true, complete, and accurate copy of which is attached as Schedule 4.8) utilizing similar proportionate allocations for the Purchased Assets, except as otherwise agreed by Seller, such agreement not to be unreasonably withheld, delayed or conditioned."

5. Jurisdiction of Formation. The first sentence of Section 5.1(a) of the Purchase Agreement is hereby amended by deleting the word “Each” as it appears at the beginning thereof and inserting in place thereof “Except as provided on Schedule 5.1, each”.

6. Amended Schedules.

(a) Schedule 2.1(c) to the Purchase Agreement is hereby amended by adding the following patent to Schedule 2.1(c) Attachment Patents:

[*****]

(b) Schedule 5.1 to the Purchase Agreement is hereby deleted and Schedule 5.1 attached to this Amendment is inserted as Schedule 5.1 to the Purchase Agreement

(c) Schedule 5.2 to the Purchase Agreement is hereby amended by deleting the following:

Ultra Safe Nuclear Corporation UK Limited Francesco Venneri Director

(d) Buyer and Seller acknowledge and agree that (i) the Contracts with Battelle Energy Alliance and the State of Alabama set forth on Schedule 2.2(a)-1 to the Purchase Agreement have each expired in accordance with the respective terms of such Contracts, (ii) such Contracts are deemed to be deleted from Schedule 2.2(a)-1 to the Purchase Agreement, and (iii) the references to such Contracts and the applicable counterparties on Schedule 5.3 to the Purchase Agreement are deemed to be deleted from Schedule 5.3 to the Purchase Agreement.

7. Designated Contracts. The Parties acknowledge and agree that notwithstanding anything to the contrary in the Purchase Agreement or any certificate or notice delivered pursuant thereto, the Designated Contracts are those set forth on Schedule 7 hereto (including for purposes of the “Canadian Contracts” definition set forth in Section 1(a) hereof).

8. Buyer Designees. The Parties hereby acknowledge and agree that, in accordance with and subject to the Purchase Agreement, Buyer is assigning and delegating Buyer’s rights and obligations under the Purchase Agreement with respect to the Purchased Assets and Assumed Liabilities (other than the Purchased Subsidiary, the Canadian Contracts and any rights of Seller with respect to the Demonstration Project conducted by the Project Partnership) that are part of (a) the Business described in clause (i) of the definition thereof (the “**MMR Business**”) to Buyer’s subsidiary Kronos MMR Inc., a Nevada corporation (“**Kronos MMR**”), and (b) the Business described in clause (ii) of the definition thereof (the “**Pylon Business**”) to Buyer’s subsidiary LOKI MMR Inc., a Nevada corporation (“**LOKI MMR**”). The Parties hereby further acknowledge and agree that Buyer is (a) assigning Buyer’s rights and obligations to acquire (i) the general partnership interests in the Project Partnership to Modular Micro Reactor Technologies Inc., a company organized in British Columbia (f/k/a 1519188 B.C. Ltd.) (“**MMR BC**”), which is not a subsidiary of Buyer, but is owned by an officer and shareholder of Buyer, and (ii) the limited partnership interests in the Project Partnership to Modular Micro Power Inc., a company organized in British Columbia (f/k/a 1519191 B.C. Ltd.) (“**MMP BC**”), which is not a subsidiary of Buyer, but is owned by an officer and shareholder of Buyer, and (b) assigning and delegating Buyer’s rights and obligations with respect to the assumption of the Canadian Contracts and all rights of Seller, if any, to be sold, transferred and conveyed under the Purchase Agreement with respect to the Demonstration Project conducted by the Project Partnership to 1520572 B.C. Ltd., a company organized in British Columbia (“**MMR Contracts BC**”, and collectively with Kronos MMR, LOKI MMR, MMR BC and MMP BC, the “**Buyer Designees**”), which is not a subsidiary of Buyer, but is owned by an officer and shareholder of Buyer. Pursuant to and in accordance with Section 8.11 of the Purchase Agreement, Seller hereby consents to the assignments and delegations described in this Section 8. Notwithstanding any assignment or delegation by Buyer to the Buyer Designees, Buyer shall remain secondarily liable to Seller for any assigned or delegated obligations in accordance with Section 8.11 of the Purchase Agreement.

9. UK Project Company. The Parties hereby acknowledge and agree that the Purchase Agreement is being amended pursuant to this Amendment to exclude the equity interests of the UK Project Company and the rights to the related UK Advance Modular Reactor Demonstration Project as Purchased Assets and Assumed Liabilities, and such assets, properties and rights will instead be Retained Assets (provided, that, for the avoidance of doubt, the UK Project Company shall not have any ownership or license of, or other rights to use, the Intellectual Property that is a Purchased Asset, including the Intellectual Property rights that are part of the MMR Business). In consideration of the foregoing, Seller hereby agrees that it will notify Buyer in writing at least five (5) Business Days in advance of (i) any sale, transfer, issuance or other disposition of all or any portion of the equity interests of the UK Project Company (whether by equity sale, merger, amalgamation or otherwise), or (ii) the sale, license or other transfer of the UK Project Company's assets, including intellectual property rights and/or the rights to the related UK Advance Modular Reactor demonstration project, in any case of clauses (i) or (ii), to any other Person.

10. Full Force and Effect. Except as specifically amended herein, all of the terms, covenants, conditions, and stipulations contained in the Purchase Agreement are hereby ratified and confirmed in all respects and shall continue to apply with full force and effect, on the terms and subject to the conditions set forth therein. This Amendment does not constitute, directly or by implication, an amendment or waiver of any provision of the Purchase Agreement, or any other right, remedy, power or privilege of any party, except as expressly set forth herein. Any reference to the Purchase Agreement in the Purchase Agreement or any other agreement, document, instrument or certificate entered into or issued in connection therewith shall hereinafter mean the Purchase Agreement, as amended by this Amendment (or as the Purchase Agreement may be further amended or modified after the date hereof in accordance with the terms thereof). The Purchase Agreement, as amended by this Amendment, and the documents or instruments attached hereto or thereto or referenced herein or therein, constitutes the entire agreement between the parties with respect to the subject matter of the Purchase Agreement, and supersedes all prior agreements and understandings, both oral and written, among the parties with respect to its subject matter.

11. Governing Law. The laws of the State of Delaware, without giving effect to its principles of conflicts of law, shall govern this Amendment and all adversarial proceedings arising out of this Amendment. Without limiting the foregoing, this Amendment shall be governed, enforced, interpreted and construed in a manner consistent with the Purchase Agreement.

12. Counterparts. This Amendment may be executed in one or more counterparts, each one of which shall be deemed an original, but all of which together shall constitute one and the same instrument. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains a portable document format (.pdf) file of an executed signature page, such signature page shall create a valid and binding obligation of the Party executing (or on whose behalf such signature is executed) with the same force and effect as if such signature page were an original thereof.

[Signature Page to Follow]

IN WITNESS WHEREOF, the Parties have caused this Amendment to be executed as of the date first above written.

SELLER:

ULTRA SAFE NUCLEAR CORPORATION,
a Delaware corporation

By: /s/ Steven Cuevas

Name: Steven J. Cuevas

Title: EVP Legal Affairs (General Counsel)

ULTRA SAFE NUCLEAR CORPORATION – TECHNOLOGIES,
a Washington corporation

By: /s/ Steven Cuevas

Name: Steven J. Cuevas

Title: Director

USNC HOLDINGS, LLC,
a Washington limited liability company

By: /s/ Steven Cuevas

Name: Steven J. Cuevas

Title: Authorized Signatory

GLOBAL FIRST POWER LIMITED

By: /s/ Steven Cuevas

Name: Steven J. Cuevas

Title: Authorized Signatory and EVP Legal Affairs (General Counsel)

USNC-POWER LTD.

By: /s/ Steven Cuevas

Name: Steven J. Cuevas

Title: Secretary and EVP Legal Affairs (General Counsel)

BUYER:

NANO NUCLEAR ENERGY, INC.,
a Nevada corporation

By: /s/ James Walker

Name: James Walker

Title: CEO

[Signature Page to First Amendment to Asset Purchase Agreement]

Schedule 5.1

Existence, Good Standing, and Enforceability

[Omitted]

Schedule 7

Designated Contracts

<u>Debtor Name</u>	<u>Designation</u>	<u>Contract Counterparty</u>	<u>Contract Category</u>	<u>Contract No.</u>	<u>Estimated Cure Costs</u>
USNC	MMR Business	[*****]	Service Provider Agreement		[*****]
USNC-Power*	MMR Business	[*****]	Service Provider Agreement		[*****]
USNC-Power*	MMR Business	[*****]	Service Provider Agreement	[*****]	[*****]
GFP*	MMR Business	[*****]	Services Agreement		[*****]

Additional Assignable Contracts

<u>Debtor Name</u>	<u>Designation</u>	<u>Contract Counterparty</u>	<u>Contract Category</u>	<u>Estimated Cure Costs</u>
USNC Tech	Pylon Business	[*****]	MOU	[*****]
USNC Tech	Pylon Business	[*****]	Grant for Government Subcontract	[*****]
USNC Tech	Pylon Business	[*****]	Grant for Government Subcontract	[*****]
USNC Tech	Pylon Business	[*****]	Grant for Government Subcontract	[*****]

* *Canadian Contracts*

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED FROM THE EXHIBIT BECAUSE IT IS EITHER (i) NOT MATERIAL, OR (ii) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL

OPTION AGREEMENT

THIS OPTION AGREEMENT (this “*Agreement*”) is dated as of January 10, 2025

BY AND AMONG:

JIANG YU
10 Times Square
30th Floor
New York, NY 10018
(the “*Owner*”)

MODULAR MICRO REACTOR TECHNOLOGIES INC. (f/k/a 1519188 B.C. Ltd.)
595 Howe Street, Suite 704, Box 35
Vancouver, British Columbia, V6C 2T5
(“*MMR BC*”)

MODULAR MICRO POWER INC (f/k/a 1519191 B.C. Ltd.)
595 Howe Street, Suite 704, Box 35
Vancouver, British Columbia, V6C 2T5
(“*MMP BC*”)

1520572 B.C. LTD.
595 Howe Street, Suite 704, Box 35
Vancouver, British Columbia, V6C 2T5
(“*MMR Contracts BC*”, and together with MMR BC and MMP BC, the “*Companies*” and each, a “*Company*”, and collectively with the Owner, the “*Optionors*”).

OF THE FIRST PART

AND:

NANO NUCLEAR ENERGY INC.
10 Times Square
30th Floor
New York, NY 10018
(the “*Optionee*”)

OF SECOND PART

WHEREAS:

- A.** Each Company is a company duly incorporated under the laws of the Province of British Columbia, having its registered office as Suite 704, 595 Howe Street, Vancouver, British Columbia, V6C 2T5.
 - B.** The Owner is the owner of 100% percent of the issued and outstanding shares of each Company.
 - C.** Optionee is a party to that certain Asset Purchase Agreement, dated as of December 18, 2024 (as amended by a First Amendment to Asset Purchase Agreement, dated as of January 10, 2025 (the “*APA Amendment*”), the “*Purchase Agreement*”), by and among Optionee, Ultra Safe Nuclear Corporation, a Delaware corporation (“*USNC*”), Ultra Safe Nuclear Corporation – Technologies, a Washington corporation (“*USNC Tech*”), USNC Holdings, LLC, a Washington limited liability company (“*USNC Holdings*”), Global First Power Limited, a Canadian corporation (“*GFP*”), and USNC – Power Ltd., a British Columbia corporation (“*USNC-Power*” and together with USNC, USNC Tech, USNC Holdings, and GFP collectively, “*Sellers*”).
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- D. Pursuant to the APA Amendment, Optionee (a) assigned Optionee's rights and obligations under the Purchase Agreement to acquire from the Sellers (i) the general partnership interests of Global First Power Limited Partnership, an Ontario limited partnership (the "**Partnership**"), to MMR BC, and (ii) the limited partnership interests of the Partnership to MMP BC, and (b) assigned and delegated Optionee's rights and obligations with respect to the assumption of certain contracts, which are identified on Schedule 1 hereto (the "**Canadian Contracts**") and all rights of the Sellers, if any, to be sold, transferred and conveyed under the Purchase Agreement with respect to the Chalk River demonstration project conducted by the Partnership (the "**Partnership Demonstration Project**") to MMR Contracts BC; provided, that the transfer from the Sellers of the Partnership interests, the Canadian Contracts and the Partnership Demonstration Project rights (collectively, the "**Canadian Assets**") are subject to the prior receipt of the consents of the Canadian Nuclear Safety Commission and Canadian Nuclear Laboratories (the "**Canadian Consents**"), with the Canadian Assets transferring only upon receipt of the Canadian Consents, even if after the closing under the Purchase Agreement (the "**Closing**"), and with Optionee having the right to terminate the transfer of the Canadian Assets and receive a refund of \$250,000 of the purchase price under the Purchase Agreement if the Canadian Consents are not received within 90 days after the Closing.
- E. In consideration of such assignment and delegation of the Canadian Assets to the Companies under the APA Amendment, the Optionors are agreeing to grant to Optionee an option to purchase all or any portion of the equity interests of the Companies or the Partnership or the assets of the Partnership or MMR Contracts BC, on the terms and conditions in this Agreement.

NOW THEREFORE THIS AGREEMENT WITNESSES that in consideration of the foregoing, and the respective representations, warranties, covenants, and agreements of the parties hereinafter set forth, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. OPTION

1.1 The Optionors hereby jointly and severally grant to the Optionee, for a period beginning on the later of (i) the date of this Agreement and (ii) the receipt of the Canadian Assets upon obtaining the Canadian Consents (the "**Option Start Date**"), and ending on the five (5) year anniversary of the Option Start Date (such period, the "**Option Period**"), the sole and exclusive right (the "**Option**"), at the sole election of the Optionee, to acquire any of the foregoing, as selected by the Optionee (as selected, an "**Acquisition**"): (a) all or any portion of the shares of any or all of the Companies; (b) all or any portion of the general partnership interests of the Partnership; (c) all or any portion of the limited partnership interests of the Partnership; (d) all or any material portion of the assets and business of the Partnership (provided, that such asset sale shall not reasonably be expected to result in the Partnership becoming or remaining insolvent); or (e) all or any of the Canadian Contracts or the Partnership Demonstration Project rights owned by MMR Contracts BC (provided, that such asset sale shall not reasonably be expected to result in MMR Contracts BC becoming or remaining insolvent). The Optionee may exercise the Option at its sole discretion at any time during the Option Period by providing written notice thereof to the Optionors, subject to the payment of the Purchase Price as described below. To the extent that the Option is not exercised for all of the issued and outstanding shares of all three Companies, the Option may continue to be exercised by Optionee at any time during the Option Period in one or more additional exercises until the Optionee owns all of the issued and outstanding shares of all three Companies. Any Acquisition pursuant to the Option will be made free and clear of all liens, charges and encumbrances whatsoever (other than those imposed by applicable securities laws, the organizational documents of the issuer of any equity securities that are acquired or those incurred by the Optionee).

1.2 Upon any exercise of the Option, the Optionee will pay to the Owner an amount (the "**Purchase Price**") equal to the sum of (a) US\$1.00, plus (b) if the Acquisition is for (i) all or any portion of the shares of any or all of the Companies, the amount of equity capital contributions made by the Owner to the applicable Company or Companies during the Option Period for which the Purchase Price has previously not been paid pursuant to an earlier exercise of the Option, (ii) all or any portion of the partnership interests of the Partnership or all or any material portion of the assets of the Partnership, the amount of equity capital contributions made by the applicable Company to the Partnership during the Option Period for which the Purchase Price has previously not been paid pursuant to an earlier exercise of the Option or (iii) all or any of the Canadian Contracts or the Partnership Demonstration Project rights owned by MMR Contracts BC, the amount of equity capital contributions made by the Owner to MMR Contracts BC during the Option Period for which the Purchase Price has previously not been paid pursuant to an earlier exercise of the Option.

1.3 This Agreement is an option only, and is exercisable at the sole election and discretion of the Optionee.

1.4 To the extent that any consent or approval of, permit by, notice to or filing with, a third party, including any governmental or regulatory agency or body, is required in connection with the Acquisition, unless otherwise waived in writing by the Optionee, such Acquisition will be contingent upon obtaining such consent, approval or permit or making such notice or filing, and the Optionors will cooperate with Optionee and use their best efforts to obtain any such consent, approval or permit and make any such notice or filing (including using their best efforts to cause the Partnership and the respective officers, directors, employees, contractors and other agents and legal representatives of the Partnership and the Companies to cooperate and assist with such efforts).

2. REPRESENTATIONS, WARRANTIES AND COVENANTS

2.1 The Optionors hereby jointly and severally represent, warrant and covenant to the Optionee that:

- (A) All of the issued and outstanding shares or other equity interests of each Company are, and until the end of the Option Period will be (except to the extent acquired by Optionee hereunder pursuant to the Option), legally and beneficially owned by Owner, free and clear of all liens, charges and encumbrances whatsoever (other than those imposed by applicable securities laws or the organizational documents of the applicable Company). All such shares of each Company are validly issued and outstanding as fully paid and a non-assessable shares in the capital of the applicable Company.
- (B) All of the issued and outstanding partnership interests of the Partnership are as of the Option Start Date, and during the Option Period will be (except to the extent acquired by Optionee hereunder pursuant to the Option), legally and beneficially owned by the Companies, free and clear of all liens, charges and encumbrances whatsoever (other than those imposed by applicable securities laws or the organizational documents of the Partnership).
- (C) Each Optionor has due and sufficient right and authority to enter into this Agreement on the terms and conditions set forth in this Agreement, to perform its obligations under this Agreement and to consummate the transactions contemplated hereby.
- (D) No person or entity currently has, or at any time until the end of the Option Period will have, any agreement, option or right to: (i) purchase or otherwise acquire any of the equity interests of any Company or any of the unissued shares or other equity interests in the capital of any Company; or (ii) require an Optionor to sell, transfer, assign, pledge, charge, mortgage or in any other way dispose of or encumber any of the equity interests of any Company, other than under this Agreement.
- (E) Other than the rights of the Optionee pursuant to this Agreement, no person or entity currently has, or at any time prior to the end of the Option Period will have, any agreement, option or right to:
 - a. Purchase or otherwise acquire any of the equity interests of any Company or the Partnership or any of the unissued shares or other equity interests in the capital of any Company or the Partnership or all or any material portion of the assets or business of the Partnership or any or all of the Canadian Contracts or the Partnership Demonstration Project rights owned or to be owned by MMR Contracts BC; or

b. Require an Optionor to sell, transfer, assign, pledge, charge, mortgage or in any other way dispose of or encumber any of the equity interests of any Company or the Partnership or all or any material portion of the assets or business of the Partnership or any or all of the Canadian Contracts or the Partnership Demonstration Project rights owned or to be owned by MMR Contracts BC.

(F) There are no actions, suits, investigations or proceedings before any court, arbitrator, administrative agency or other tribunal or governmental authority, whether current, pending or threatened, which directly or indirectly relate to or affect the equity interests of any Company or, to the knowledge of the Optionors, the Partnership or the interests of any Optionor therein or, to the knowledge of the Optionors, the rights or obligations under any of the Canadian Contracts or the Partnership Demonstration Project rights owned or to be owned by MMR Contracts BC, nor is any Optionor aware of any acts that would reasonably be expected to result in any such action, suit, investigation or proceeding being initiated or threatened.

(G) Any Acquisition pursuant to the Option will be made free and clear of all liens, charges and encumbrances whatsoever (other than those imposed by applicable securities laws, the organizational documents of the issuer of any equity securities that are acquired or those incurred by the Optionee).

(H) No proceedings are pending for, and to the knowledge of each Optionor, there is no basis for the institution of any proceedings leading to, the placing of an Optionor in bankruptcy.

2.2 The Optionee hereby represents and warrants to the Optionors that:

(A) It has been duly incorporated and is a valid and subsisting body corporate under the laws of its jurisdiction of incorporation and is duly qualified to carry on business and to hold an interest in the equity interests or assets acquired pursuant to the Option.

(B) No proceedings are pending for, and to the knowledge of Optionee, there is no basis for the institution of any proceedings leading to, its dissolution or winding up or the placing of it into bankruptcy or its subjection to any other law governing the affairs of bankrupt or insolvent persons.

(C) It has full right, power and authority to enter into and accept the terms of this Agreement, to perform its obligations hereunder and to carry out the transactions contemplated herein.

3. TERMINATION OF OPTION

3.1 The Option shall terminate and no longer be exercisable after the end of the Option Period; provided, that such termination of the Option shall not affect the parties' respective obligations to continue to fulfil any exercise of the Option made during the Option Period.

4. NOTICES

- 4.1 All notices, consents, waivers and other communications hereunder shall be in writing and shall be deemed to have been duly given when delivered (i) in person, (ii) by facsimile or other electronic means, with affirmative confirmation of receipt, (iii) one business day after being sent, if sent by reputable, nationally recognized overnight courier service or (iv) three (3) business days after being mailed, if sent by registered or certified mail, pre-paid and return receipt requested, in each case to the applicable party at the following addresses (or at such other address for a party as shall be specified by like notice):

If to any Optionor, to:

Jiang Yu
10 Times Square, 30th Floor
New York, NY 10018

If to the Optionee, to:

Nano Nuclear Energy Inc.
10 Times Square, 30th Floor
New York, NY 10018
Attention: James Walker, CEO

with a copy (which will not constitute notice) to:

Ellenoff Grossman & Schole LLP
1345 Avenue of the Americas, 11th Floor
New York, New York 10105, U.S.A.
Attn: Richard Anslow, Esq.,
Matthew A. Gray, Esq.,
Lawrence Rosenbloom, Esq.
Email: ranslow@egsllp.com,
mgray@egsllp.com,
lrosenbloom@egsllp.com

5. GENERAL TERMS AND CONDITIONS

- 5.1 The parties hereto hereby covenant and agree that they will execute such further agreements, conveyances and assurances as may be requisite, or which counsel for the parties may deem necessary to effectually carry out the intent of this Agreement.
- 5.2 All parties confirm that each has been given the opportunity to seek and obtain independent legal advice prior to execution of this Agreement and enter into this Agreement and execute this Agreement on the same equal footing, with equal understanding of the Agreement.
- 5.3 This Agreement shall constitute the entire agreement among the parties with respect to the subject matter hereof. No representations or inducements have been made save as herein set forth. No changes, alterations or modifications of this Agreement shall be binding upon any party until and unless a memorandum in writing to such effect shall have been signed by all parties hereto. This Agreement shall supersede all previous written, oral or implied understandings among the parties with respect to the matters covered hereby.
- 5.4 No party shall have any power or any right to assign or transfer, in whole or in part, this Agreement, or any of its rights or any of its obligations hereunder, without the prior written consent of the other parties hereto and any such purported assignment in contravention of the provisions herein shall be null and void and of no force or effect; provided, that the Optionee may assign any or all of its rights hereunder to one or more of its subsidiaries without the consent of any Optionors. Nothing contained in this Agreement or in any instrument or document executed by any party in connection with the transactions contemplated hereby shall create any rights in, or be deemed to have been executed for the benefit of, any person or entity that is not a party hereto or thereto or a successor or permitted assign of such a party,
- 5.5 Time shall be of the essence of this Agreement.
- 5.6 The titles to the sections in this Agreement shall not be deemed to form part of this Agreement but shall be regarded as having been used for convenience of reference only.
- 5.7 Wherever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision shall be prohibited by or be invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

- 5.8 This Agreement shall be governed by and interpreted in accordance with the laws of British Columbia and the laws of Canada applicable therein.
- 5.9 Each party acknowledges that the rights of each party to consummate the transactions contemplated by this Agreement are unique, recognizes and affirms that in the event of a breach of this Agreement by any party, money damages may be inadequate and the non-breaching parties may have not adequate remedy at law, and agree that irreparable damage may occur in the event that any of the provisions of this Agreement were not performed by an applicable party in accordance with their specific terms or were otherwise breached. Accordingly, each party shall be entitled to seek an injunction, restraining order or other equitable remedy to prevent or remedy any breach of this Agreement and to seek to enforce specifically the terms and provisions hereof, in each case, without the requirement to post any bond or other security or to prove that money damages would be inadequate, this being in addition to any other right or remedy to which such party may be entitled under this Agreement, at law or in equity. Each party agrees that it will not oppose the granting of an injunction, specific performance or other equitable relief on the basis that the other party has an adequate remedy at law or that an award of specific performance is not an appropriate remedy for any reason at law or equity.
- 5.10 This Agreement shall enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and assigns.
- 5.11 This Agreement may be amended, supplemented or modified only by execution of a written instrument signed by the Optionee and the Optionors. Any waiver of the provisions of this Agreement shall be valid only if set forth in an instrument in writing signed by the party or parties to be bound thereby. No failure or delay by a party in exercising any right hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise of any other right hereunder.
- 5.12 The section headings contained in this Agreement are solely for the purpose of reference and shall not in any way affect the meaning or interpretation of this Agreement. In this Agreement, unless the context otherwise requires: (a) any pronoun used shall include the corresponding masculine, feminine or neuter forms, and words in the singular, including any defined terms, include the plural and vice versa; (b) reference to any person or entity includes such person's or entity's successors and assigns but, if applicable, only if such successors and assigns are permitted by this Agreement, and reference to a person or entity in a particular capacity excludes such person or entity in any other capacity; (c) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding or succeeding such term and shall be deemed in each case to be followed by the words "without limitation"; (d) the words "herein," "hereto," and "hereby" and other words of similar import in this Agreement shall be deemed in each case to refer to this Agreement as a whole and not to any particular section or other subdivision of this Agreement; and (e) a "business day" means any day other than a Saturday, Sunday or a legal holiday on which commercial banking institutions in New York, New York are authorized to close for business, excluding as a result of "stay at home", "shelter-in-place", "non-essential employee" or any other similar orders or restrictions or the closure of any physical branch locations at the direction of any governmental authority so long as the electronic funds transfer systems, including for wire transfers, of commercially banking institutions in New York, New York are generally open for use by customers on such day.
- 5.13 The parties have participated jointly in the negotiation and drafting of this Agreement. Consequently, in the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto, and no presumption or burden of proof shall arise favouring or disfavouring any party by virtue of the authorship of any provision of this Agreement.
- 5.14 This Agreement may be executed in one or more counterparts, each of which so signed, whether in original or facsimile form, shall be deemed to be an original and bear the dates as set out above and all of which together will constitute one and the same instrument.

{Remainder of Page Intentionally Left Blank; Signature Page Follows}

IN WITNESS WHEREOF this Agreement has been executed by the parties hereto as of the day and year first above written.

The Optionors:

/s/ Jay Yu

Jiang Yu

**MODULAR MICRO REACTOR TECHNOLOGIES INC.
(f/k/a 1519188 B.C. Ltd.)**

By: */s/ Jay Yu*

Name: Jiang Yu

Title:

**MODULAR MICRO POWER INC.
(f/k/a 1519191 B.C. Ltd.)**

By: */s/ Jay Yu*

Name: Jiang Yu

Title:

1520572 B.C. LTD.

By: */s/ Jay Yu*

Name: Jiang Yu

Title:

The Optionee:

NANO NUCLEAR ENERGY INC.

By: */s/ James Walker*

Name: James Walker

Title: Chief Executive Officer

{Signature Page to Canadian Option Agreement}

Schedule 1 to Option Agreement

Canadian Contracts

<u>Debtor Name</u>	<u>Contract Counterparty</u>	<u>Contract Category</u>	<u>Contract No.</u>
USNC-Power	[*****]	Service Provider Agreement	
USNC-Power	[*****]	Service Provider Agreement	[*****]
GFP	[*****]	Services Agreement	



NANO Nuclear Energy Closes Acquisition of Patented Micro Modular Reactor (MMR[®]) and Pylon Transportable Reactor Technologies

Acquisition immediately adds one of the highest technology readiness level advanced nuclear reactors in development and significantly expands NANO Nuclear's patent portfolio.

Acquisition also brings important contracts, collaboration and adds to existing pipeline of cutting edge small nuclear reactor technologies

New York, N.Y., Jan. 13, 2025 — **NANO Nuclear Energy Inc. (NASDAQ: NNE)** (“**NANO Nuclear**” or “**the Company**”), a leading advanced nuclear energy and technology company focused on developing clean energy solutions, today announced that it has closed its previously announced acquisition of select nuclear energy technology assets, including the patented **Micro Modular Reactor (MMR[®]) Energy System** and **Pylon Transportable Reactor Platform**, from Ultra Safe Nuclear Corporation and certain of its subsidiaries (collectively, “**USNC**”).

The acquisition of these assets and related intellectual property and contracts significantly expands NANO Nuclear’s patent portfolio and adds to its existing pipeline of cutting edge small nuclear reactor technologies in development. The assets include **38 issued and pending or published patents**, including six issued and four pending or published U.S. utility patents and three issued and four pending Canadian utility patents, as well as associated trademarks.

The acquisition also brings important demonstration project collaborations related to the MMR[®] system, notably at the University of Illinois at Urbana-Champaign. Pending Canadian governmental approvals, the acquisition would also bring certain Canadian government relationships and support. Further, certain of the technology acquired by NANO Nuclear in this acquisition was being used by an affiliate of USNC to develop related technology in the United Kingdom, and NANO Nuclear may be able to explore a potential future license or acquisition of such related technology in the United Kingdom, which could be accompanied by U.K. government support.

NANO Nuclear paid a total of \$8.5 million in cash for these assets in connection with USNC’s Chapter 11 bankruptcy proceedings (including deposit amounts previously made in connection with the signing of the acquisition agreement), with \$250,000 of such funds being set aside in escrow pending the receipt of certain governmental approvals of the acquisition in Canada related to the Canadian portion of the acquired assets.



Figure 1 – Renditions of NANO Nuclear Energy's newly acquired technologies: Pylon for terrestrial (bottom) and space (top) applications and the Modular Micro Reactor (MMR[®]) Energy System (right).

NANO Nuclear plans to extend an existing MMR[®] collaboration with the University of Illinois at Urbana-Champaign with the aim of demonstrating the reactor's high technology readiness level at the University. In parallel, NANO Nuclear will continue the MMR[®] licensing process with the U.S. Nuclear Regulatory Commission. Pending Canadian governmental approvals of the acquisition, further demonstrations of the MMR[®] are expected to take place at the Canadian Nuclear Laboratories. The MMR[®] is the first small modular reactor to enter the Canadian Nuclear Safety Commission's formal licensing review.

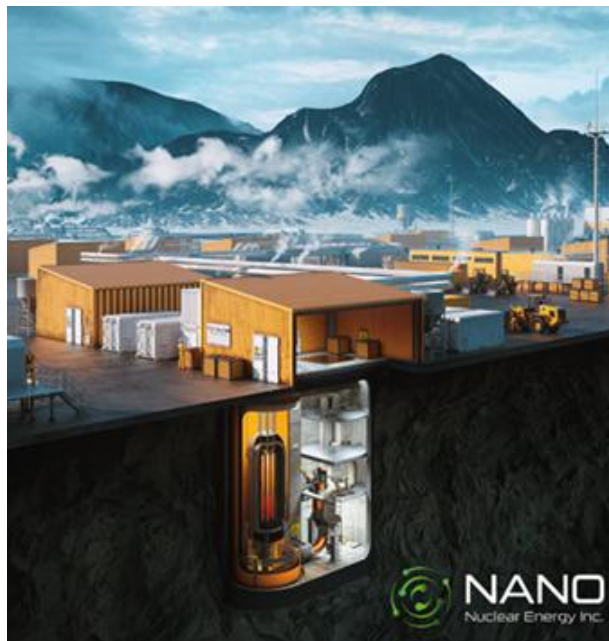


Figure 2 - Rendition of NANO Nuclear Energy's newly acquired Modular Micro Reactor (MMR[®]) Energy System.

The **MMR[®] Energy System** compliments NANO Nuclear's own 'ZEUS' and 'ODIN' microreactors in development and could be used to provide carbon-free, high-quality process heat for co-located industrial applications, and for high-efficiency hydrogen production. Whereas 'ZEUS' and 'ODIN' are being designed to be portable and produce 1 to 1.5 megawatts thermal ("MWth") of power, the MMR[®] Energy System designed as a stationary installation capable of producing power up to 45 MWth.

The **Pylon Transportable Reactor Platform** is a portable nuclear reactor designed for versatility in application and deployment. Designed to provide between 1 MWth and 5MWth of power, it is tailored to specific applications ranging from remote terrestrial, marine, and space deployments. NANO Nuclear will continue efforts to demonstrate the reactor at the Idaho National Laboratory's DOME facility by 2027, following USNC's selection for the National Reactor Innovation Center (NRIC) Front-End Engineering program.



Figure 3 - Rendition of NANO Nuclear Energy's newly acquired Pylon reactor in terrestrial applications.

The patented MMR[®] Energy System and Pylon reactor will augment NANO Nuclear's existing portfolio of innovative nuclear power systems, which are designed for remote, industrial, infrastructural, maritime, and extra-terrestrial applications. The integration of the MMR[®] Energy System specifically will enable NANO Nuclear to better serve growing markets that have high energy demands, including large-scale data and artificial intelligence centers and other energy-intensive operations in manufacturing and infrastructure.

“We are delighted to start off the new year by completing this exciting acquisition,” said **Jay Yu, Founder and Chairman of NANO Nuclear Energy**. “The addition of the patented MMR[®] Energy System and Pylon transportable reactor enable us to expand our business strategy and further positions NANO Nuclear as an emerging leader in the advanced nuclear reactor technology market. These technologies significantly strengthen our intellectual property foundation and create additional commercial shots on goal for us as we continue to mature our reactor technologies through design, testing and demonstration towards regulatory licensing and eventual commercial deployment.”



Figure 4 - Rendition of NANO Nuclear Energy's newly acquired Pylon reactor in space applications.

“The acquisition of these technologies marks another fulfillment of our strategy to add complimentary assets with key intellectual property and relationships to our company,” said **James Walker, Chief Executive Officer and Head of Reactor Development of NANO Nuclear Energy**. “Their addition increases our flexibility and helps expand into new market segments, enabling us to meet the growing power requirements of sectors like large-scale data centers, which will demand substantial energy. Furthermore, the extensive patents, trademarks, and collaborations obtained through this acquisition empower us as we move forward with licensing and demonstration processes for our reactor systems. We look forward to highlighting the high technology readiness level of these newly acquired reactor technologies, which will further position NANO Nuclear as an innovator in the advanced nuclear technology sector.”

To accommodate the need for certain Canadian government approvals for the acquisition and continued diligence of the USNC Canadian entity, assets and contracts to be acquired upon such approvals, Canadian entities controlled by Mr. Yu acquired the Canadian portion of the assets (other than the Canadian issued and pending patents) and granted NANO Nuclear an option to purchase those assets for nominal consideration.

Further details regarding this transaction will be provided by NANO Nuclear in a Current Report on Form 8-K to be filed with the U.S. Securities and Exchange Commission.

About NANO Nuclear Energy, Inc.

NANO Nuclear Energy Inc. (NASDAQ: NNE) is an advanced technology-driven nuclear energy company seeking to become a commercially focused, diversified, and vertically integrated company across five business lines: (i) cutting edge portable and other microreactor technologies, (ii) nuclear fuel fabrication, (iii) nuclear fuel transportation, (iv) nuclear applications for space and (v) nuclear industry consulting services. NANO Nuclear believes it is the first portable nuclear microreactor company to be listed publicly in the U.S.

Led by a world-class nuclear engineering team, NANO Nuclear’s reactor products in development include “**ZEUS**”, a **solid core battery reactor**, and “**ODIN**”, a **low-pressure coolant reactor**, each representing advanced developments in clean energy solutions that are portable, on-demand capable, advanced nuclear microreactors. NANO Nuclear is also developing patented stationary **Micro Modular Reactor (MMR®) Energy System** and space focused **Pylon Transportable Reactor Platform**.

Advanced Fuel Transportation Inc. (AFT), a NANO Nuclear subsidiary, is led by former executives from the largest transportation company in the world aiming to build a North American transportation company that will provide commercial quantities of HALEU fuel to small modular reactors, microreactor companies, national laboratories, military, and DOE programs. Through NANO Nuclear, AFT is the exclusive licensee of a patented high-capacity HALEU fuel transportation basket developed by three major U.S. national nuclear laboratories and funded by the Department of Energy. Assuming development and commercialization, AFT is expected to form part of the only vertically integrated nuclear fuel business of its kind in North America.

HALEU Energy Fuel Inc. (HEF), a NANO Nuclear subsidiary, is focusing on the future development of a domestic source for a High-Assay, Low-Enriched Uranium (HALEU) fuel fabrication pipeline for NANO Nuclear's own microreactors as well as the broader advanced nuclear reactor industry.

NANO Nuclear Space Inc. (NNS), a NANO Nuclear subsidiary, is exploring the potential commercial applications of NANO Nuclear's developing micronuclear reactor technology in space. NNS is focusing on applications such as the Pylon transportable reactor system and other power systems for extraterrestrial projects and human sustaining environments, and potentially propulsion technology for long haul space missions. NNS' initial focus will be on cis-lunar applications, referring to uses in the space region extending from Earth to the area surrounding the Moon's surface.

For more corporate information please visit: <https://NanoNuclearEnergy.com/>

For further NANO Nuclear information, please contact:

Email: IR@NANONuclearEnergy.com

Business Tel: (212) 634-9206

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Cautionary Note Regarding Forward Looking Statements

This news release and statements of NANO Nuclear's management in connection with this news release contain or may contain "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. In this context, forward-looking statements mean statements related to future events, which may impact our expected future business and financial performance, and often contain words such as "expects", "anticipates", "intends", "plans", "believes", "potential", "will", "should", "could", "would" or "may" and other words of similar meaning. In this press release, forward-looking statements include those related to the anticipated benefits to NANO Nuclear of the assets acquired from USNC as well as the prospects for required governmental approvals of the acquisition and the development and regulatory licensing of such assets. These forward-looking statements are based on information available to us as of the date of this news release and represent management's current views and assumptions. Forward-looking statements are not guarantees of future performance, events or results and involve significant known and unknown risks, uncertainties and other factors, which may be beyond our control. For NANO Nuclear, particular risks and uncertainties that could cause our actual future results to differ materially from those expressed in our forward-looking statements include but are not limited to the following: (i) risks related to our U.S. Department of Energy ("DOE") or related state nuclear fuel licensing submissions, (ii) risks related the development of new or advanced technology and the acquisition of complimentary technology or businesses, including difficulties with design and testing, cost overruns, regulatory delays, integration issues and the development of competitive technology, (iii) our ability to obtain contracts and funding to be able to continue operations, (iv) risks related to uncertainty regarding our ability to technologically develop and commercially deploy a competitive advanced nuclear reactor or other technology in the timelines we anticipate, if ever, (v) risks related to the impact of government regulation and policies including by the DOE and the U.S. Nuclear Regulatory Commission, including those associated with the recently enacted ADVANCE Act, and (vi) similar risks and uncertainties associated with the operating an early stage business a highly regulated and rapidly evolving industry. Readers are cautioned not to place undue reliance on these forward-looking statements, which apply only as of the date of this news release. These factors may not constitute all factors that could cause actual results to differ from those discussed in any forward-looking statement, and NANO Nuclear therefore encourages investors to review other factors that may affect future results in its filings with the SEC, which are available for review at www.sec.gov and at <https://ir.nanonuclearenergy.com/financial-information/sec-filings>. Accordingly, forward-looking statements should not be relied upon as a predictor of actual results. We do not undertake to update our forward-looking statements to reflect events or circumstances that may arise after the date of this news release, except as required by law.
