UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 4 to

FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

NANO NUCLEAR ENERGY INC.

(Exact Name of Registrant as Specified in its Charter)

Nevada

(State or other jurisdiction of incorporation or organization)

4911 (Primary Standard Industrial Classification Code Number) 88-0861977

(I.R.S. Employer Identification No.)

10 Times Square, 30th Floor New York, New York 10018 (212) 634-9206

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

James Walker Chief Executive Officer Nano Nuclear Energy Inc. 10 Times Square, 30th Floor New York, New York 10018 (212) 634-9206

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

with copies to:

Richard I Anslow, Esq. Lawrence A. Rosenbloom, Esq. Ellenoff Grossman & Schole LLP 1345 Avenue of the Americas New York, NY 10105 Phone: (212) 370-1300 Fax: (212) 370-7889 Joseph M. Lucosky, Esq. Scott E. Linsky, Esq. Lucosky Brookman LLP 101 Wood Avenue South, 5th Floor Woodbridge, NJ 08830 Tel. No.: (732) 395-4400 Fax No.: (732) 395-4401

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering. \Box

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer \Box

Accelerated filer \Box

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 to Section 7(a)(2)(B) of the Securities Act. \Box

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the U.S. Securities and Exchange Commission, acting pursuant to Section 8(a), may determine.

EXPLANATORY NOTE

This Amendment No. 4 to the Registration Statement on Form S-1 (333-278076) is being filed solely to refile Exhibit 10.19 noted on the exhibit index herein.

PART II - INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Indemnification of Directors and Officers

Nevada Revised Statutes ("NRS") 78.138(7) provides that, subject to limited statutory exceptions and unless the articles of incorporation or an amendment thereto (in each case filed on or after October 1, 2003) provide for greater individual liability, a director or officer is not individually liable to a corporation or its stockholders or creditors for any damages as a result of any act or failure to act in his or her capacity as a director or officer unless it is proven that: (i) the act or failure to act constituted a breach of his or her fiduciary duties as a director or officer and (ii) the breach of those duties involved intentional misconduct, fraud or a knowing violation of law.

NRS 78.7502(1) provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with the action, suit or proceeding if the person (i) is not liable pursuant to NRS 78.138 or (ii) acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the conduct was unlawful. NRS 78.7502(2) provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses, including amounts paid in settlement and attorneys' fees actually and reasonably incurred by the person in connection with the defense or settlement of the action or suit if the person (i) is not liable pursuant to NRS 78.138 or (ii) acted in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation. To the extent that a director, officer, employee or agent of a corporation has been successful on the merits or otherwise in defense of any such action, suit or proceeding, or in defense of any claim, issue or matter therein, the corporation shall indemnify him or her against expenses, including attorneys' fees, actually and reasonably incurred by him or her in connection with the defense. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, does not, of itself, create a presumption that the person is liable pursuant to NRS 78.138 or did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the corporation, or that, with respect to any criminal action or proceeding, he or she had reasonable cause to believe that the conduct was unlawful. Indemnification may not be made for any claim, issue or matter as to which such a person has been adjudged by a court of competent jurisdiction, after exhaustion of all appeals therefrom, to be liable to the corporation or for amounts paid in settlement to the corporation, unless and only to the extent that the court in which the action or suit was brought or other court of competent jurisdiction determines upon application that in view of all the circumstances of the case, the person is fairly and reasonably entitled to indemnity for such expenses as the court deems proper.

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NRS 78.7502(3) provides that any discretionary indemnification pursuant to NRS 78.7502 (unless ordered by a court or advanced pursuant to NRS 78.751(2)), may be made by the corporation only as authorized in the specific case upon a determination that indemnification of the director, officer, employee, or agent is proper in the circumstances. The determination must be made (i) by the stockholders; (ii) by the board of directors by majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding; (iii) if a majority vote of a quorum consisting of directors who were not parties to the action, suit or proceeding; (iii) if a written opinion; or (iv) if a quorum consisting of directors who were not parties to the action, suit or proceeding cannot be obtained, by independent legal counsel in a written opinion. NRS 78.751(2) provides that the corporation's articles of incorporation or bylaws, or an agreement made by the corporation as they are incurred and in advance of the final disposition of the action, suit or proceeding must be paid by the corporation as they are incurred and in advance of the final disposition of the action, suit or proceeding, upon receipt of an undertaking by or on behalf of the director or officer to repay the amount if it is ultimately determined by a court of competent jurisdiction that the director or officer is not entitled to be indemnified by the corporation.

Under the NRS, the indemnification pursuant to NRS 78.7502 and advancement of expenses authorized in or ordered by a court pursuant to NRS 78.751:

- Does not exclude any other rights to which a person seeking indemnification or advancement of expenses may be entitled under the articles of incorporation or any bylaw, agreement, vote of stockholders or disinterested directors or otherwise, for either an action in the person's official capacity or an action in another capacity while holding office, except that indemnification, unless ordered by a court pursuant to NRS 78.7502 or for the advancement of expenses made pursuant to NRS 78.751(2), may not be made to or on behalf of any director or officer if a final adjudication establishes that the director's or officer's acts or omissions involved intentional misconduct, fraud or a knowing violation of the law and was material to the cause of action; and
- Continues for a person who has ceased to be a director, officer, employee, or agent and inures to the benefit of the heirs, executors and administrators of such a person.

A right to indemnification or to advancement of expenses arising under a provision of the articles of incorporation or any bylaw is not eliminated or impaired by an amendment to such provision after the occurrence of the act or omission that is the subject of the civil, criminal, administrative or investigative action, suit or proceeding for which indemnification or advancement of expenses is sought, unless the provision in effect at the time of such act or omission explicitly authorizes such elimination or impairment after such action or omission has occurred.

Our governing documents provide that to the fullest extent permitted under the NRS (including, without limitation, to the fullest extent permitted under NRS 78.7502 and 78.751(3)) and other applicable law, that we shall indemnify our directors and officers in their respective capacities as such and in any and all other capacities in which any of them serves at our request.

Item 15. Recent Sales of Unregistered Securities

During the past three years, we issued securities that were not registered under the Securities Act as set forth below. The following is a summary of transactions from our inception until the date of this prospectus involving sales of our securities that were not registered under the Securities Act. The offers, sales and issuances of the securities described below were exempt from registration either (i) under Section 4(a)(2) of the Securities Act and the rules and regulations promulgated thereunder in that the transactions were between an issuer and sophisticated investors or members of its senior executive management and did not involve any offering within the meaning of Section 4(a)(2), or (ii) under Regulation S promulgated under the Securities Act in that offers, sales and issuances were not made to persons in the United States and no directed selling efforts were made in the United States, or (iii) under Rule 144A under the Securities Act in that the transactions were under compensatory benefit plans and contracts relating to compensation.

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In February 2022, we issued 10,000,000 shares of common stock to I Financial Ventures Group LLC, of which our President, Secretary, Treasurer, and Chairman of the Board of Directors, Jay Jiang Yu, is the sole shareholder and director, and received proceeds of \$50,000.

Between March 2022 and April 2022, we issued an aggregate of 7,500,000 shares of common stock to certain members of our management team and certain investors, and received an aggregate proceeds of \$375,000.

Between February 2022 and September 2022, we issued an aggregate of 675,000 shares of common stock to certain consultants for services received.

Between April 2022 and February 2023, we issued an aggregate of 4,146,869 shares of common stock to certain investors, and received an aggregate proceeds of \$4,146,869.

Between April 2023 and September 2023, we issued an aggregate of 2,778,000 shares of common stock to certain investors, and received an aggregate proceeds of \$6,945,000.

In January 2024, we issued an aggregate of 822,146 shares of common stock to certain investors, and received an aggregate gross proceeds of \$2,466,437, of which \$2,106,437 was received in advance as of December 31, 2023, and \$360,000 was received in January 2024.

Item 16. Exhibits

The following is a list of exhibits filed as a part of this registration statement:

Exhibit Number	Description of Document			
1.1*	Form of Underwriting Agreement			
3.1*	Articles of Incorporation of the Registrant			
3.2*	Certificate of Amendment to Articles of Incorporation, dated March 4, 2024			
3.3*	Amended and Restated Bylaws of the Registrant			
4.1*	Specimen Common Stock Certificate			
4.2*	Form of Representative's Warrant			
5.1*	Opinion of Parsons Behle & Latimer as to the legality of the securities being registered*			
10.1*^	Consulting Agreement dated February 8, 2022, by and between Registrant and Chief Executive Officer			
10.2*^	Consulting Agreement dated February 8, 2022, by and between Registrant and Chief Financial Officer			
10.3*^	Consulting Agreement dated February 8, 2022, by and between Registrant and Chief Policy Officer			
10.4*^	Consulting Agreement dated February 8, 2022, by and between Registrant and I Financial Ventures Group LLC			
10.5*^	Independent Director Agreement between Registrant and Dr. Tsun Yee Law			
10.6*^	Independent Director Agreement between Registrant and Diane Hare			
10.7*^	Independent Director Agreement between Registrant and Dr. Kenny Yu			
10.8*	2023 Stock Option Plan #1			
10.9*	Form of 2023 Stock Option Agreement under 2023 Stock Option Plan #1			
10.10*	2023 Stock Option Plan #2			
10.11*	Form of 2023 Stock Option Agreement under 2023 Stock Option Plan #2			
10.12*	Lease Agreement and its amendment dated December 1, 2021 and September 1, 2022, respectively, by and between the Registrant and			
	Flewber Global Inc.			
10.13*+^	Services Agreement dated August 2, 2023, by and between the Registrant and Cambridge AtomWorks LLP			
10.14*^	Memorandum of Understanding dated March 30, 2023 by and between HALEU Energy Fuel Inc. and Centrus Energy Corp.			
10.15*	Form of Consulting Agreement by and between Registrant and each Executive Advisory Board Member			
10.16*+^	Strategic Partnership Project Agreement No. 23SP817 and its amendment dated February 14, 2023 and December 6, 2023, respectively, by and			
	between the Registrant and Battelle Energy Alliance, LLC			
10.17*+^	Services Agreement dated January 19, 2024, by and between the Registrant and Nuclear Education and Engineering Consulting LLC			
10.18*+^	Lease Agreement dated March 7, 2024, by and between the Registrant and Charney Management LLC			
10.19**+^	Exclusive Patent License Agreement, dated April 3, 2024, by and between the Registrant and Battelle Energy Alliance, LLC			
14.1*	Code of Business Conduct and Ethics			
19.1*	Insider Trading Policies and Procedures			
21.1*	List of Subsidiaries			
23.1*	Consent of WithumSmith+Brown, PC, Independent Registered Public Accounting Firm			
23.2*	Consent of Parsons Behle & Latimer (contained in Exhibit 5.1)			
24.1*	Power of Attorney (included on signature page of this Registration Statement)			
99.1*	Executive Compensation Clawback Policy			
99.2*	Audit Committee Charter			
99.3*	Compensation Committee Charter			
99.4*	Nominating and Corporate Governance Committee Charter			
107*	<u>Filing Fee Table</u>			

* Previously Filed.

** Filed herewith.

+ 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.

^ Certain portions of the exhibit have been omitted pursuant to Item 601(a)(6) of Regulations S-K. The Company hereby agrees to furnish a copy of any omitted portion to the SEC upon request.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (i) If the registrant is relying on Rule 430B (§230.430B):

(a) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) [§230.424(b)(3)] shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(b) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) [§230.424(b)(2), (b)(5), or (b)(7)] as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) [§230.415(a)(1)(i), (vii), or (x)] for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the registrant is subject to Rule 430C (§230.430C), each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A (§230.430A), shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or made in any such document immediately prior to such date of first use.

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(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) The undersigned registrant hereby undertakes that:
 - (i) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)
 (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
 - (ii) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York on May 1, 2024.

Nano Nuclear Energy Inc.

By: /s/ James Walker

Name: James Walker

Title: Chief Executive Officer

Pursuant to the requirements of the Securities Act, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Jay Jiang Yu Jay Jiang Yu	Chairman of the Board and President	May 1, 2024
/s/ James Walker James Walker	Chief Executive Officer and Director (Principal Executive Officer)	May 1, 2024
/s/ Jaisun Garcha Jaisun Garcha	Chief Financial Officer and Secretary (Principal Accounting Officer)	May 1, 2024
* Dr. Tsun Yee Law	Independent Director	May 1, 2024
* Diane Hare	Independent Director	May 1, 2024
* Dr. Kenny Yu	Independent Director	May 1, 2024
*By: <i>/s/ Jay Jiang Yu</i> Jay Jiang Yu Attorney-in-fact		
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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 [*****]

EXCLUSIVE PATENT LICENSE AGREEMENT

This License Agreement is effective as of the date of the last signature below (EFFECTIVE DATE) and is entered into by Battelle Energy Alliance, LLC (BEA), having its principal place of business at 2525 N. Fremont Avenue, Idaho Falls, ID 83415, and Nano Nuclear Energy Inc. (LICENSEE), having its principal place of business at 1411 Broadway 38th FL, New York, New York 10018 The parties may also be referred to singularly as "Party" or collectively as "Parties."

BACKGROUND

BEA is the management and operating contractor of Idaho National Laboratory (INL) under United States Department of Energy (DOE) Contract No. DE-AC07-05ID14517. BEA desires to grant a license to LICENSED PATENTS.

LICENSEE desires to receive an exclusive license to LICENSED PATENTS from BEA to commercially develop the LICENSED PRODUCTS.

The Parties agree as follows:

Article 1 Definitions

1.1 LICENSED PATENTS means the patents and/or patent applications identified in Appendix A.

1.2 LICENSED FIELD is unlimited.

1.3 LICENSED TERRITORY means the countries or territories covered by the LICENSED PATENTS; it being acknowledged that patent protection may not be sought or available in all countries.

1.4 LICENSED PRODUCTS means any apparatus, article of manufacture, composition of matter, machine, method, product, process, product-byprocess, service using a process, system, or any other instrumentality that embodies claimed subject matter of the LICENSED PATENTS and that, absent the license granted herein, would infringe at least one claim of any of the LICENSED PATENTS.

1.5 NET SALES means the total amount invoiced to purchasers throughout the world for LICENSED PRODUCTS sold, leased, or otherwise made available by LICENSEE or their SUBLICENSEES and for services provided by LICENSEE or their SUBLICENSEES that use LICENSED PRODUCTS less deduction of regular trade and quantity discounts and any allowances and credits because of returns and price adjustments for LICENSED PRODUCTS previously transferred.

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1.6 SUBLICENSEE is a third-party licensee of LICENSEE having a properly executed license agreement with LICENSEE to practice the LICENSED PATENTS and if applicable, to make LICENSED PRODUCTS available to others in accordance with the terms and conditions of this License Agreement.

1.7 PATENT COSTS means all past or ongoing costs and expenses incurred or to be incurred by BEA in preparing, filing, prosecuting and maintaining any of the LICENSED PATENTS, including continuations, re-examinations, reissues, appeals, *inter partes* reviews, post-grant reviews, covered business method reviews, and supplemental examinations.

1.8 NON-ROYALTY SUBLICENSE INCOME means the fair market cash value of any and all consideration received by LICENSEE from SUBLICENSEES under or otherwise in connection with its sublicenses, including without limitation license issue fees, option fees and other licensing fees, milestone payments, minimum annual royalties, equity or other payments of any kind whatsoever (but excluding Running Royalties paid for NET SALES by SUBLICENSEES), or any other consideration, irrespective of the form of payment.

Article 2

License Grant

2.1 In exchange for the obligations set forth in this License Agreement and its Appendices, BEA grants to LICENSEE an exclusive, royalty bearing license under LICENSED PATENTS, to make, have made, use, sell, and import LICENSED PRODUCTS in the LICENSED FIELD within the LICENSED TERRITORY.

2.2 Notwithstanding provision in Section 2.1, the U.S. Government retains a worldwide, nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced the LICENSED PATENTS for or on behalf of the U.S. Government, including, but not limited to, BEA and its successor. BEA retains the right to practice the LICENSED PATENTS for research purposes including research with or for third parties.

2.3 DOE has certain march-in rights to the LICENSED PATENTS in accordance with 48 C.F.R.27.304-1(g).

2.4 LICENSEE must not pledge or attempt to pledge its rights under this License Agreement as collateral to a third party.

Article 3

Sublicensing

3.1 LICENSEE may grant written, non-exclusive Sublicenses to SUBLICENSEE(S). LICENSEE shall have the same responsibility for the activities of any of its SUBLICENSEE(S) as if the SUBLICENSEE(S)'s activities were directly those of LICENSEE. LICENSEE shall request, in writing, approval from BEA for each Sublicense prior to execution. Once approved, a copy of all executed Sublicenses.

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3.2 All sublicense agreements will set forth the U.S. Government's retention of a worldwide, non-exclusive, non-transferrable, irrevocable, paidup license to practice the LICENSED PATENTS for or on behalf of the U.S. Government throughout the world and DOE's rights as set forth in Article 2 (License Grant); a notice of LICENSEE's obligations to assign rights to Sublicenses to BEA as set forth in Article 3 (Sublicensing); the provisions of Articles 5 (Payments), 6 (Reports), 7 (Records and Audits), 8 (Disclaimer of Warranties and Indemnification), 11 (Assignability), 13 (Export Control), 15 (U.S. Manufacturing Preference), and 17 (Governing Law). LICENSEE shall include notice of this provision in any Sublicense.

3.3 If this License Agreement is terminated for any reason, then LICENSEE shall immediately assign all of its rights under all Sublicenses to BEA, including rights to all Sublicense payments to BEA. Prior to execution of each Sublicense, LICENSEE shall include notice of this provision in any sublicense.

3.4 Licensee warrants that it will not grant any rights inconsistent with the terms, scope, duration, and Fields of Use of this Agreement and shall not grant rights to any Sublicensee that BEA itself would be prohibited from entering into by applicable laws, rules and regulations. Copies of all negotiated and executed Sublicenses shall be provided to BEA in accordance with Section 3.1.

Article 4

Obtaining and Maintaining Intellectual Property

4.1 BEA has sole discretion in the preparation, filing, prosecution and maintenance of all patent applications and patents included in the LICENSED PATENTS.

4.2 LICENSEE must reimburse BEA within two (2) months of being invoiced by BEA for all PATENT COSTS.

4.3 Subject to mutual agreement by the Parties, LICENSEE and BEA shall select foreign jurisdictions in which counterpart foreign patent protection of the LICENSED PATENTS is to be sought and included in the LICENSED PATENTS.

4.4 BEA may, at its own expense, file in any foreign country or jurisdiction not mutually agreed upon, which foreign patents will not become part of the LICENSED PATENTS.

Article 5 Payments

5.1 [*****] 5.2 [*****] 5.3 [*****] 5.4 [*****] 5.5 [*****] 5.6 [*****]

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Article 6 Reports

6.1 With each royalty payment, LICENSEE must deliver to BEA a full and accurate report to include the following information:

- (a) The total NET SALES of the LICENSED PRODUCTS, by country;
- (b) Quantity, by country, of the LICENSED PRODUCTS sold, leased or otherwise disposed of by LICENSEE or their SUBLICENSEES;
- (c) Quantity by U.S. Government agency of the LICENSED PRODUCTS produced for or provided to any U.S. Government agency by LICENSEE or their SUBLICENSEES;
- (d) Quantities of the LICENSED PRODUCTS used internally to provide services as reflected in NET SALES by LICENSEE or their SUBLICENSEES;
- (e) Total royalties and other amounts payable to BEA;
- (f) Information sufficient to determine LICENSEE's and SUBLICENSEES' compliance with Article 15 (U.S. Manufacturing Requirement).

6.2 All sales for U.S. Government purposes must be reported under this Article and such reports will include (a) a U.S. Government contract number, (b) identification of the U.S. Government agency, and (c) a description as to how the benefits of the royalty free sales were passed on to the U.S. Government.

6.3 Upon termination or expiration of this License Agreement, LICENSEE shall submit a final report according to this to Article and pay all amounts owing to BEA within two (2) months of the termination date.

Article 7

Records and Audits

7.1 LICENSEE must keep detailed and accurate accounting records containing all information and data necessary for calculating all royalties and payments payable to BEA.

7.2 LICENSEE must keep detailed and accurate accounting records containing all information and data necessary for determining LICENSEE's compliance with Article 15 (U.S. Manufacturing Requirement).

7.3 During the term of this License Agreement and for the five (5) years following the expiration or termination of this License Agreement, LICENSEE must make the records required by this Article available and open for inspection by BEA, or its designee, upon two (2) weeks written notice and at BEA's expense, for verifying LICENSEE's compliance with the requirements of this License Agreement.

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Article 8

Disclaimer of Warranties and Indemnification

8.1 NEITHER BEA NOR THE U.S. GOVERNMENT MAKES ANY REPRESENTATIONS, EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, OR ASSUMES ANY RESPONSIBILITIES WITH RESPECT TO USE, SALE, OR OTHER DISPOSITION BY LICENSEE, OR ITS SUCCESSORS IN INTEREST OF ANY PRODUCTS, PROCESSES, OR MATERIALS DEVELOPED IN CONNECTION WITH OR ARISING OUT OF THE LICENSED PATENTS, OR THAT ANYTHING MADE, USED, OFFERED FOR SALE, SOLD, IMPORTED, OR OTHERWISE DISPOSED OF UNDER ANY LICENSE GRANTED IN THIS LICENSE AGREEMENT IS OR WILL BE FREE FROM INFRINGEMENT OF ANY THIRD PARTY PATENT OR OTHER INTELLECTUAL PROPERTY.

8.2 BEA makes no warranties or representations on the validity of the LICENSED PATENTS. BEA makes no warranties or representations on whether the LICENSED PATENTS may be practiced without infringing patents or other intellectual property rights held by third parties.

8.3 LICENSEE shall indemnify, defend, and hold harmless BEA and the U.S. Government for all damages, costs, and expenses, including BEA and/or U.S. Government attorneys' fees, arising out of or in any way connected with the exercise by LICENSEE of any rights granted and/or obligations undertaken in this License Agreement regardless of whether such damages, costs, and expenses are incurred by LICENSEE, or third parties.

8.4 Neither BEA nor the U.S. Government will be liable for any indirect, special, consequential, or other damages, whether grounded in tort (including negligence), strict liability, contract, or otherwise.

8.5 LICENSEE shall, at its own expense, provide attorneys reasonably acceptable to BEA to defend against any actions brought or filed against any party indemnified above.

8.6 Nothing in this License Agreement is or shall be construed as an obligation for BEA or LICENSEE to bring or prosecute actions or suits against third parties for infringement.

8.7 LICENSEE has had the opportunity to consult with legal counsel in reviewing the LICENSED PATENTS and the terms and conditions of this License Agreement. LICENSEE agrees that both the LICENSED PATENTS and this License Agreement are suitable for LICENSEE's purposes. BEA may share a portion of the income it receives under this License Agreement with the inventors or authors of the LICENSED PRODUCTS as required by BEA's Prime Contract with DOE and its Royalty Sharing Program. BEA, as a result of its parent company being a charitable trust, is required to comply with Section 501(c)(3) of the Internal Revenue Code, and thus cannot renegotiate any terms of this License Agreement in a manner which may create an impermissible private benefit or inurement.

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Article 9

Expiration and Termination

9.1 Unless this License Agreement is sooner terminated as provided in this Article, it will automatically terminate upon the expiration, abandonment, or other termination of all LICENSED PATENTS.

9.2 If either Party is in default of any material obligation, or is adjudged bankrupt, or becomes insolvent, or makes an assignment for the benefit of creditors, or is placed in the hands of a receiver or trustee in bankruptcy, to the extent allowed by law, the other Party may terminate this License Agreement by giving written notice to the other Party, specifying the basis for termination. If within two (2) calendar months after the receipt of the notice, the other Party remedies the condition, this License Agreement will continue in full force and effect.

9.3 If LICENSEE fails to comply with the requirements of Article 15 (U.S. Manufacturing Preference), BEA may terminate this License Agreement by giving written notice to LICENSEE specifying the basis for termination. Termination will be effective on receipt of the notice by LICENSEE, unless BEA provides a time period in the notice in which LICENSEE may remedy its failure to comply.

9.4 LICENSEE has the right to terminate this License Agreement by providing written notice of intent to terminate at least three (3) calendar months prior to date of termination.

9.5 The following rights and obligations survive any termination of this License Agreement:

- (a) BEA's right to receive royalties and LICENSEE's obligation to pay royalties accrued or accruable for payment at the time of any termination as stated in Article 5 (Payments);
- (b) LICENSEE's obligation to supply reports as stated in Article 6 (Reports);
- (c) LICENSEE's obligation to maintain records and allow audits as stated in Article 7 (Records and Audits);
- (d) Any Party's cause of action or claim accrued or to accrue, arising from breach or default by another Party hereto; and
- (e) The provisions contained in Articles 8 (Disclaimer of Warranties and Indemnification), 13 (Export Control), 16 (Patent Notice Marking), 17 (Dispute Resolution), and 18 (Governing Law).

9.6 This License Agreement will automatically terminate if LICENSEE pledges or attempts to pledge its rights under this License Agreement as collateral to a third party.

Article 10

Litigation

10.1 Upon LICENSEE suspecting a third party may be infringing any of the LICENSED PATENTS, LICENSEE shall notify BEA in writing of the suspected infringement of the LICENSED PATENTS and shall also provide or make available to BEA any evidence of the suspected infringement.

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10.2 For as long as LICENSEE retains an exclusive license hereunder, LICENSEE shall have the first right to file suit for infringement against third parties. Subject to approval by DOE, BEA shall, upon LICENSEE's written request, join as a party plaintiff in any lawsuit filed by LICENSEE against a third party, provided that all BEA costs, attorney fees, and expenses are paid by LICENSEE. BEA may, at its own expense, bring the suit or take any other appropriate action if LICENSEE does not file suit within ninety (90) days from receiving written notice from BEA of its desire to bring the infringement suit against a third party on its own behalf.

10.3 The Party bringing suit against a third party under Section 8.2 is entitled to any resulting recovery of damages, subject to LICENSEE's obligation to pay royalties to BEA.

10.4 In infringement suits brought by LICENSEE, pursuant to 8.2 above, twenty-five percent (25%) of all settlements, damages or other monetary awards received by LICENSEE shall be paid to BEA.

10.5 Any settlement by LICENSEE with an infringer requires prior written approval of BEA.

Article 11

Assignability

LICENSEE may not assign any rights or obligations under this License Agreement without the written consent of BEA. BEA may assign its rights in this License Agreement to DOE or DOE's designee without consent of LICENSEE.

Article 12

Severability

If any part of this License Agreement is held invalid under controlling law, all remaining provisions will remain in force.

Article 13

Export Control

13.1 LICENSEE acknowledges that the LICENSED PRODUCTS under this License Agreement are subject to U.S. export control laws that restrict (i) transactions with certain persons, and (ii) the type and level of technologies and services that may be exported. These laws include, without limitation, the Arms Export Control Act, the Export Administration Act, the International Emergency Economic Powers Act, and the Atomic Energy Act and regulations issued pursuant to these, including the Export Administration Regulations (EAR) (15 CFR Parts 730-774), the International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130), and the Nuclear Regulatory Commission and Department of Energy export regulations (10 CFR Parts 110 and 810). Export control requirements may change and that export of goods and/or technical data from the U.S. without an export license or other appropriate governmental authorization may result in criminal liability.

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13.2 LICENSEE agrees to not export, re-export or otherwise transfer, directly or indirectly, including through its employees, agents, affiliates, licensees or subsidiaries the LICENSED PRODUCTS or any related technical data or item provided by BEA without first obtaining all governmental authorizations required for compliance with U.S. law. LICENSEE assumes responsibility to obtain all necessary export licenses and other governmental authorizations required of LICENSEE and all liability for failure to do so. LICENSEE is responsible for all regulatory record keeping requirements associated with the use of all export authorizations it obtains. LICENSEE acknowledges it can contact the U.S. Departments of Commerce, State, Energy and Treasury for guidance as to applicable U.S. licensing requirements and other restrictions. This License Agreement provides no express or implied governmental authorization or export license.

Article 14

Waiver, Integration, Alteration

14.1 The waiver of a breach must be in writing and signed by an authorized representative of the waiving Party and is not a waiver of any other breach.

14.2 This License Agreement forms the entire understanding between the Parties, and supersedes all other license agreements, between the Parties for the LICENSED PATENTS and LICENSED PRODUCTS.

14.3 This License Agreement may be altered only in writing and any modification must be prepared by BEA and signed by an authorized representative of each Party.

Article 15

U.S. Manufacturing Requirement

All LICENSED PRODUCTS must be substantially manufactured in the U.S. unless LICENSEE can show to the satisfaction of DOE that it is not commercially feasible. If DOE agrees to foreign manufacture, DOE will require that the Government's support of the technology be recognized in some appropriate manner, e.g., alternative binding commitments to provide an overall net benefit to the U.S. economy. LICENSEE agrees that it will not license, assign, or otherwise transfer any subject invention to any entity, at any tier, unless that entity agrees to these same requirements. If LICENSEE undergoes a change in ownership amounting to a controlling interest, LICENSEE must ensure continual compliance with the requirements of this Article and must inform BEA and DOE, in writing, of the change in ownership within 3 months of the change.

Article 16

Patent Notice Marking

LICENSEE shall place in a conspicuous location on the LICENSED PRODUCTS or if not possible, on the container thereof, a patent notice in accordance with 35 U.S.C. § 287. LICENSEE agrees to mark each LICENSED PRODUCT, or container thereof, with the number of each applicable patent. LICENSEE shall also respond to any request for disclosure under 35 U.S.C. § 287(b)(4)(B) by notifying BEA of the request.

Article 17

Dispute Resolution

The Parties shall make a good faith effort to promptly settle any controversy or claim arising out of or relating to this License Agreement, or breach thereof, by negotiation between members of the management of each Party having authority to settle any controversy or claim arising out of or relating to this License Agreement. The Parties understand and agree this Article 15 will not preclude a Party from seeking preliminary injunctive relief in order to reasonably prevent irreparable harm to such Party.

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Article 18

Governing Law

This License Agreement will be governed and construed under the laws of the State of Idaho without regard to its conflict of law provisions. Any lawsuits relating to this License Agreement will be brought in a court of competent jurisdiction in the State of Idaho.

Article 19 Notices

All written communication and notices to be submitted between the Parties are to be sent to the following respective addresses:

Battelle Energy Alliance, LLC: USPS Mail Delivery: [*****]

All Other Delivery Services: [*****]

E-mail: [*****] Phone: [*****] Fax: [*****] Nano Nuclear Energy Inc.: [*****]

ATTN: [*****] E-mail: [*****] Phone: [*****]

or any other addresses of which either Party notifies the other Party in writing.

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The Parties have executed this License Agreement as evidenced by their respectively authorized representatives signing on the respective date(s) set forth below; however, this License Agreement will be null and void if not fully executed within sixty (60) days from the date of the first signature below:

	Battelle Energy Alliance, LLC		Nano Nuclear Energy Inc.
By:	/s/ Jason C. Stolworthy	By:	/s/ Jay Yu
	Jason C. Stolworthy	Name:	Jay Yu
	Director, Technology Deployment	Title:	Executive Chairman & President
Date:		Date:	April 3, 2024
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APPENDIX A LICENSED PATENTS

All U.S. patent(s) and patent applications, including divisionals, reissues, reexaminations, continuations, but not continuations-in-part applications, that issue from or claim priority to:

U.S. Patent No. 11,699,534 granted 07/11/2023, entitled "Devices and Systems for Material Transportation, having BEA Attorney Docket No. BA-1298

APPENDIX B LICENSE PAYMENT AND ROYALTIES

B1. License Payment

[*****]

B2. Running and Minimum Annual Royalties

[*****]

B3. NON-ROYALTY SUBLICENSE INCOME

[*****]

B4. Payments

All payments owed to BEA under this License Agreement must include a reference to License Agreement No. 23-LA-132 and be sent to:

Mail

Battelle Energy Alliance, LLC [*****]

Overnight Delivery Battelle Energy Alliance, LLC [*****]

or wire to: (Please add wire transfer fees to the total amount)

[*****]

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To ensure proper recording and verification, a copy of payment documents, regardless of method of payment, must be sent to the Agreements Administrator, via email at [*****], or via physical mail at the address in Article 18 (Notices) above.

B5. Performance Milestones

[*****]

B.5.1 LICENSEE shall notify BEA in writing of completion of each of the specified performance milestones within two (2) months of the completion date. In the event that LICENSEE fails to achieve a performance milestone by the specified date, a written statement to that effect must be furnished by LICENSEE to BEA.

B.5.2 Achievement of the above performance milestones, individually and collectively by LICENSEE, is a material obligation under this License Agreement.

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