

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

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.)

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New York, New York 10018
(212) 634-9206**

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

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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.

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.

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.

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

Accelerated filer

Non-accelerated filer

Smaller reporting company

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

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.

The information contained in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the U.S. Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS

SUBJECT TO COMPLETION, DATED OCTOBER 7, 2024



[] Units consisting of [] Shares of
Common Stock and Warrants to Purchase up to [] Shares of Common Stock
(and Shares of Common Stock issuable upon exercise of the Warrants)

We are offering, on an underwritten, firm commitment basis, [] units (the “Units”), with each Unit consisting of one (1) share of common stock and a warrant to purchase up to one-half (0.5) of a share of common stock (the “Warrant”, or collectively, the “Warrants”) based on an assumed offering price of \$[] per Unit, which was the last reported sale price of our common stock on the Nasdaq Capital Market (or Nasdaq) on October [], 2024. We do not intend to apply for listing of the Warrants on any national securities exchange or other trading market, and we do not believe any such market will develop. Therefore, the liquidity of the Warrants will be limited and should be considered illiquid. The Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. The shares of common stock and the Warrants underlying the Units are immediately separable and will be issued separately in this offering. The Warrants will have an exercise price of \$[] per whole share and will be exercisable from the initial issuance date until they expire on the five-year anniversary of the original issuance date. The assumed offering price and related share numbers used throughout this prospectus have been included for illustration purposes only. The actual offering price may differ materially from the assumed price used in the prospectus and will be determined by negotiations between us and the representative of the underwriters and may not be indicative of prices that will prevail in the trading market.

This offering also relates to the shares of common stock issuable upon exercise of the Warrants sold in this offering. The shares of common stock can each be purchased in this offering only with the accompanying Warrants (other than pursuant to the underwriters’ warrant to purchase additional shares of common stock as part of the Units).

Our common stock is listed on Nasdaq under the symbol “NNE”. On October 2, 2024, the last reported sales price of a share of our common stock on Nasdaq was \$17.58.

We are an emerging growth company under the Jumpstart Our Business Startups Act of 2012 and a “smaller reporting company” as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended, and, as such, may elect to comply with certain reduced public company reporting requirements for this prospectus and future filings. See “Summary — Implications of Being an Emerging Growth Company” and “Summary — Implications of Being a Smaller Reporting Company.”

Investing in our common stock is speculative and involves a high degree of risk. Before making any investment decision, you should carefully review and consider all the information in this prospectus, including the risks and uncertainties described under “Risk Factors” beginning on page 16.

Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Unit	Total
Public offering price	\$	\$
Underwriting discounts ⁽¹⁾	\$	\$
Proceeds to us, before expenses ⁽²⁾	\$	\$

(1) Represents underwriting discounts equal to (i) seven percent (7%) per Unit (or \$[] per Unit), which is the underwriting discounts we have agreed to pay to the underwriters.

(2) Does not include a non-accountable expense allowance equal to one percent (1%) of the gross proceeds of this offering, payable to the representative of the underwriters, or the reimbursement of certain expenses of the underwriters. We have also agreed to issue warrants to the representative of the underwriters to purchase a number of shares of common stock equal to seven percent (7%) of the total number of shares of common stock included as part of the Units sold in this offering at an exercise price equal to one hundred and twenty-five percent (125%) of the public offering price of the Units sold in this offering. For a description of the other terms of compensation to be received by the underwriters, see “Underwriting.”

We have granted a 30-day option to the representative of the underwriters to purchase up to an additional [] shares of common stock and/or additional Warrants to purchase up to [] shares of common stock solely to cover over-allotments, if any. If the representative of the underwriters exercises the option in full, the total underwriting discounts will be approximately \$[] and the additional proceeds to us, before expenses, from the over-allotment option exercise will be approximately \$[].

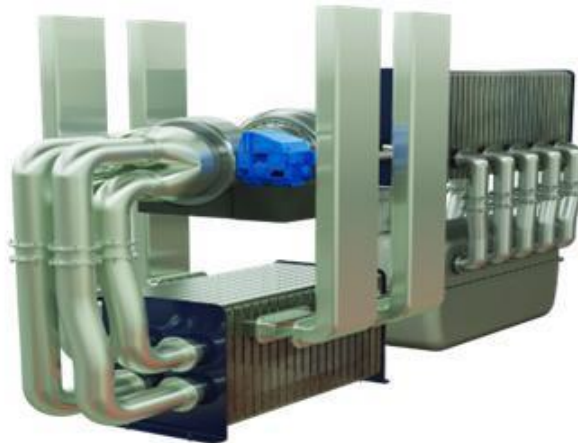
The underwriters expect to deliver the Units to purchasers on or about [●], 2024.

The Benchmark Company

The date of this prospectus is [●], 2024

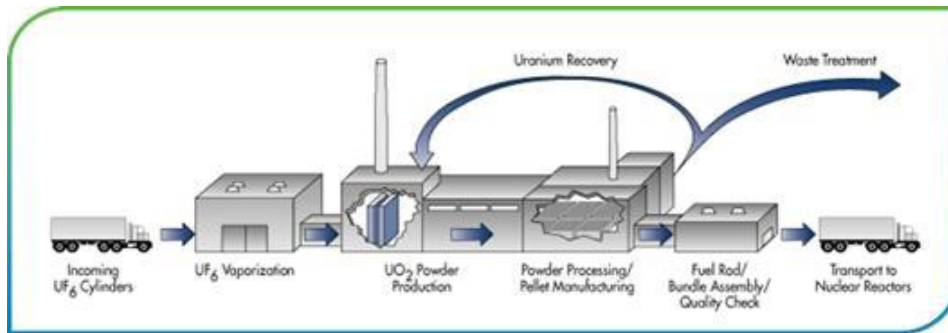


Renderings of proposed "Zeus" Microreactor





Renderings of proposed "Odin" Microreactor



Proposed HALEU Fuel Processing Facility

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You should only rely on the information contained in this prospectus and in any free writing prospectus prepared by or on behalf of us and delivered or made available to you. Neither we nor the underwriters have authorized anyone to provide you with additional or different information. We are offering to sell, and seeking offers to buy, the Units only in jurisdictions where offers and sales are permitted. The information contained in this prospectus or a free writing prospectus is accurate only as of its date, regardless of its time of delivery or of any sale of the Units offered hereby. Our business, financial condition, operating results, and prospects may have changed since that date.

For investors outside the United States: Neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the Units, and the distribution of this prospectus outside of the United States.

INDUSTRY AND MARKET DATA

Unless otherwise indicated, information in this prospectus concerning economic conditions, our industry, our markets and our competitive position is based on a variety of sources, including information from third-party industry analysts and publications and our own estimates and research. Some of the industry and market data contained in this prospectus are based on third-party industry publications. This information involves a number of assumptions, estimates and limitations.

The industry publications, surveys and forecasts and other public information generally indicate or suggest that their information has been obtained from sources believed to be reliable. None of the third-party industry publications used in this prospectus were prepared on our behalf. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in “Risk Factors” in this prospectus. These and other factors could cause results to differ materially from those expressed in these publications.

TRADEMARKS

We own or have rights to trademarks or trade names that we use in connection with the operation of our businesses, our corporate names, logos and website names. This prospectus contains references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent possible under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies’ trade names, trademarks, or service marks to imply a relationship with, or endorsement or sponsorship of us by any other companies. All other trademarks are the property of their respective owners.

PROSPECTUS SUMMARY

This summary highlights certain information appearing elsewhere in this prospectus. Because it is only a summary, it does not contain all of the information that you should consider before investing in the Units offered hereby and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus. This summary contains forward-looking statements that involve risks and uncertainties, such as statements about our plans, objectives, expectations, assumptions, or future events. These statements involve estimates, assumptions, known and unknown risks, uncertainties and other factors that could cause actual results to differ materially from any future results, performances or achievements expressed or implied by the forward-looking statements. See “Cautionary Note Regarding Forward-Looking Statements.” Before you decide to invest in our common stock, you should also read the entire prospectus carefully, including “Risk Factors” beginning on page 16, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” beginning on page 41, and the financial statements and related notes included in this prospectus.

Unless the context indicates otherwise, as used in this prospectus, the terms “we,” “us,” “our,” “our company,” “Nano Nuclear” and “our business” refer to Nano Nuclear Energy Inc. and its consolidated subsidiaries.

Overview

We are an early-stage nuclear energy company developing smaller, cheaper, and safer advanced portable clean energy solutions, utilizing proprietary reactor designs, intellectual property, and research methods, to contribute towards a sustainable future. Led by a world class scientific and management team, our business plan involves a comprehensive engagement across every sector of the nuclear power industry, traversing the path from sourcing raw materials through to developing cutting edge advanced nuclear microreactors. Our dedication extends further, encompassing both commercial nuclear fuel transportation and consulting services.

Currently, we are in the pre-revenue stage and are principally focused on four business lines as part of our development strategy:

- **Micro Nuclear Reactor Business.** We are developing the next-generation of advanced nuclear microreactors, in particular **ZEUS**, a solid core battery reactor, and **ODIN**, a low-pressure salt coolant reactor. With these products, we are advancing the development of the next generation of portable, on-demand capable, advanced nuclear microreactors. Through a collaboration of our world-renowned nuclear scientists and engineers, the national laboratories, and government support, we believe our reactors will have the potential to impact on the global energy landscape. Our goal is to commercially launch one of these products by 2030-2031.

Both our **ZEUS** and **ODIN** microreactors have moved from the design stages to physical test work stages, with initial rig construction currently underway, to ensure model accuracy and material and dimension optimization. We have conducted and completed external design audits on both the Zeus and ODIN reactor designs to provide external validation and assistance to our designs. The design audits for the reactors were conducted and completed by the Idaho National Laboratory (INL). We are currently identifying sites for our test bed reactor site for the purpose of conducting testing experiments using nuclear material for both microreactors. We have communicated with the U.S. Nuclear Regulatory Commission (or NRC) and DOE, informing them of the status of our microreactor designs and the estimated internal timelines for our microreactor developments, with an understanding that definite timelines will be provided once available, to allow the NRC to arrange the necessary personnel to oversee the microreactor licensing process. We have increased the size of the technical teams to expedite the development of the reactor systems, as well as recruited former NRC personnel to oversee our regulatory licensing processes, and to engage directly with the NRC to facilitate the commercialization planning.

In addition, in August 2024, we purchased a 14,000 sq. ft., 2-story building in Oak Ridge, Tennessee for \$1.71 million to house our Nuclear Technology Headquarters. We expect to grow the number of personnel working at the facility over the next year and expect to ultimately employ up to 30 personnel at the facility.

- **Fuel Processing Business** . Through our subsidiary, HALEU Energy Fuel Inc., and in coordination with DOE, we are seeking to develop a domestic High-Assay Low-Enriched Uranium (HALEU) fuel supply chain to supply the fuel – not only for our own reactors – but to the broader advanced nuclear reactor industry in general. We have identified the site we intend to construct the facilities and have begun to build the team to design and develop these facilities.

We have also made a strategic investment in and entered into a collaboration with a laser-based uranium enrichment technology company, LIS Technologies Inc. (“LIST”) (which is a related party), to support the development of their technology. Through this investment and related collaboration, we aim to assist in advancing LIST’s technologies to secure a reliable low enriched uranium fuel supply at a reduced cost to us for our future operations and the broader nuclear energy industry. Through collaboration with LIST, we anticipate we will build the supportive facilities around LIST’s enrichment facility, including facilities as deconversion and fuel processing. Please see “*Investment in the Only U.S. Origin and Patented Laser Uranium Enrichment Company*” for further information.

- **Fuel Transportation Business.** Our transportation business will build on existing work completed at INL, Oak Ridge National Laboratory (or ORNL) and Pacific Northwest National Laboratory (PNNL), the world’s premier U.S.-backed nuclear research facilities. We received an exclusive license for a high capacity HALEU fuel transportation basket design in April 2024, which will form the basis of a complete transportation system. This license grants us, as the licensee, exclusive rights for use and development of the technology. In addition, the licensor is not permitted to license the technology to any other parties within the specified scope. We believe this technology is the most advanced concept in the United States for moving HALEU in commercial quantities. We are currently conducting work to modify the design to accommodate a variety of different fuel forms, so we are positioned to move fuel for both of our reactors and also we are able to provide transportation services to any nuclear company looking to move commercial quantities of fuel. We intend to license, our high-capacity HALEU transportation system to move commercial quantities of HALEU fuel around North America and internationally. If developed and commercialized, we believe this product will serve as the basis for a domestic HALEU transportation company capable of providing commercial quantities of HALEU fuel. We hope to put our fuel transportation business into operation by 2026. We have also brought on two former United Parcel Service (UPS) executives, one of which works for our fuel transportation subsidiary, with the other sitting on our Executive Advisory Board, to assist in growing the transportation business around our technology.

- **Nuclear Consultation Services.** We also plan on providing nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally. This includes, in coordination with the Cambridge Nuclear Energy Centre, the development of education resources. This business opportunity represents our most near-term revenue generating opportunity as we hope to begin providing these services in 2024. By the end of 2024, we expect to start providing nuclear service support and consultation services for the nuclear energy industry, both domestically and internationally. In addition to these rendered services, our company is examining strategic acquisitions to expand our business and consultancy services and as of the date of this prospectus, we have not engaged in any material discussions with any potential target for such acquisitions. We have had preliminary discussions with several potential acquisition targets but have not progressed to definitive understandings or agreements. In combination with our intention to acquire existing revenue generating consultancy businesses, we are focusing on building our own internal nuclear consultation business in coordination with certain outside academic institutions, which we anticipate would require approximately \$1 million over the next twelve months to recruit additional staff and build corresponding infrastructure to be capable of providing these services.

Our mission is to become a commercially focused, diversified and vertically integrated nuclear energy company that will capture market share in the very large and growing nuclear energy sector. To implement our plans, since our founding in 2022, our management has had constant communications with key U.S. government agencies, including the DOE, the INL and ORNL, which are a part of the DOE's national nuclear laboratory system. Our company also maintains important collaborations with leading researchers from the Cambridge Nuclear Energy Centre and The University of California, Berkeley.

As a result of our receipt of the net proceeds of this offering, over the next twelve months, we will continue to progress the development of our advanced microreactors, ZEUS and ODIN, and our vertically integrated fuel manufacturing business, with estimated expenditures to be approximately \$8 million. This allocation comprises approximately \$6 million dedicated to the research and development of nuclear energy related products and technologies, with a specific focus on the refinement of our microreactors and our planned HALEU fuel processing facilities alongside LIST, the related-party uranium enrichment company with whom we collaborate and in which we've made a strategic investment. The remaining \$2 million is earmarked for miscellaneous costs essential to propelling the progress of our microreactors, encompassing the support of current personnel engaged in executive, finance, accounting, and other administrative functions. We estimate that our microreactor demonstration work will be conducted between 2024 and 2026, our microreactor licensing application will be processed between 2026 and 2031, and our microreactors will be launched between 2030 and 2031. We also plan on providing nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally. If we are unable to acquire such a business by the end of 2024, we will focus on building our own internal nuclear consultation business in coordination with certain outside academic institutions, which we anticipate would require approximately an additional \$2 million over the next twelve months to recruit additional staff and build corresponding infrastructure to be capable of providing these services. Notwithstanding the foregoing, the outlined expenditures and our anticipated timelines are estimations only. These are inherently subject to change due to certain factors, including adjustments in the microreactor development plan and uncertainties associated with the licensing approval process. Given that these elements may exceed our initial expectations or lie beyond our control, we cannot guarantee the accuracy of the actual expenditures and timelines.

As of the date of this prospectus, we have not generated any revenues. We have incurred accumulated net losses of \$14,942,045 since inception through June 30, 2024.

Our Vision, Market Opportunity and Key Government Support

We believe our achievements to date and our business plans are positioning our company to be a leading participant in the U.S. nuclear industry through simultaneously rebuilding and introducing national capabilities to drive the resurgent nuclear energy industry. We further believe that our timing and approach into the industry have been optimal, with insight into national capability deficiencies and an understanding of the difficulties faced by other commercial nuclear energy, particularly microreactor, companies. Almost all microreactor companies have advanced using funds acquired from government grants or awards. Even with private funding, they have been stifled by lack of investor interest because of the long return timelines and high risks.

Despite the early stage of our company, we believe we are competitively differentiated in many ways.

- **No Government Funding.** Most SMR and microreactor companies are reliant on government grants and financing to progress their concepts. Consequently, their progress can cease once government funding is not available. Currently, we do not rely on government funding to sustain our business operations. While we will seek available government funding opportunities in future, the absence of government support does not impede our progress in advancing our research, business, or technological developments. Our leadership team possesses extensive experience in successfully securing funding from both private and public sources. Additionally, our investor base includes capital from industry professionals who recognize the immense potential of our company. Notwithstanding the foregoing, our limited operating history and early stage of business makes an evaluation of our business and prospects very difficult, we have a new and unproven technology model and may need to raise additional capital to implement our business plans.
- **Industry Investors.** Our investor base includes a large component of capital raised from nuclear industry professionals who have reviewed our plans, concepts, and technologies, and found our company to have enormous potential. The high proportion of investment from experts in the industry has been an endorsement that has provided investors without a nuclear background with the confidence to invest.

- **Technical Insight.** On the technical front, we have benefited from insight into the problems which affected earlier movers within the nuclear technology space. Large SMR companies have raised billions of dollars for development but have been stalled by the lag in developing or acquiring the fuel necessary to advance their reactors. This led to our investigations into de-risking our own fuel supply by pursuing development and investment into our own fuel processing facility, as well as using more conventional fuel with greater operational history. We believe we have identified certain problems affecting the industry and we are taking early action to surmount potential roadblocks. Our new and unproven technology model will necessitate a significant infusion of additional capital for successful deployment, even following this offering. This imperative business requirement has influenced our strategic decision to diversify our operations, with the aim of establishing nearer term revenue streams which we are seeking to initiate prior to the anticipated commercial launch of microreactor technology.
- **Government Contacts.** We have secured important high placed government contacts, several of whom sit on our Executive Advisory Board, including former military and government veterans. This was complemented by bringing in experts involved in every major part of the nuclear industry, from regulation to laboratories, to technical teams. We believe we will benefit from those government contacts as our company will be afforded access to highly skilled personnel possessing advanced expertise in the energy and nuclear sectors. We expect these individuals to provide support and services to us, thereby facilitating the progression of our ambitions and projects. Furthermore, given the nuclear industry has been comprehensively intertwined with government agencies, the value of access to government and regulatory personnel cannot be overstated. These contacts provide guidance and insights to us, informing us of both conventional and unconventional challenges that warrant our consideration. Such guidance is an invaluable resource, fortifying our endeavors to systematically mitigate risks associated with our business operations.
- **World Class Team.** Our technical team is world class, with simple and realizable reactor concepts that do not require exotic fuels and who are aware of all the difficulties faced by almost every other reactor company who has chosen alternative designs. Our team has a deep knowledge of applicable regulatory requirements surrounding safety, transportation, and decommissioning, and our designs have incorporated all these considerations from the outset.

The SMR market has a high barrier to entry because of the expertise required, and the larger investment necessary to progress reactor designs to prototype, and then through licensing. This high barrier to entry has acted in our favor, giving us open opportunities. To date, we are not aware of any commercial microreactor prototypes, microreactor companies with applicable governmental licenses, microreactor or SMR companies in the revenue generating stage, HALEU fuel processing facilities, or commercial transportation system for HALEU. These huge national capability gaps have been left in a large market, caused predominantly by this high barrier to entry. These capability gaps are also exacerbated by nuclear companies being unwilling to branch into areas outside their focused business, such as SMR companies expanding into fuel and transport, or enrichment companies expanding into fuel processing. We are seeking to address all of these gaps in the industry.

Moreover, government investment has not compensated for the lack of private investment going into the commercial nuclear sector. Previous strategies to purchase military grade nuclear materials to down blend to required fuel enrichment level for certain programs have allowed these capability gaps to persist. This creates industry opportunities for development. We have begun and expect to continue to bring private investment to these undeveloped areas and quickly establish ourselves as a necessary component in the national infrastructure system, while providing us with advantages to develop business and revenue sources to de-risk our microreactor development.

We strongly support objectives of DOE and the International Atomic Energy Agency (IAEA) for the peaceful use of nuclear energy, and we intend for our technology to form part of the U.S. foreign policy to advance the peaceful use of nuclear energy, science and technology, and drive new resources to projects and activities in developing countries with the greatest need. A key part of our business plan will seek to become a nuclear technology organization that can grow the U.S. global energy market engagement and concurrently support global market opportunities.

We believe that our microreactors can address various environmental and energy challenges through their innovative design and capacities, including their versatile and easily deployable nature in remote locations. We plan to target business development activities for our microreactors in several sectors, including data centers, artificial intelligence computer and quantum computing; crypto mining; military applications; disaster relief; transportation (including shipping); mining projects; water desalination and green hydrogen plants; and space exploration. As a result, we intend to support a broad set of clean energy applications.

We also support the long-term strategy of the United States Government to reach net zero carbon emissions by no later than 2050, but these goals will require actions spanning every sector of the economy. We plan to utilize our advanced nuclear reactor technologies, and our fuel processing plans through our subsidiary HALEU Energy to support the next generation of nuclear professionals. These investments are critical to immediately accelerate our emissions reductions domestically and internationally.

Our Competitive Strengths

We believe we have the following competitive strengths relating to our various business lines:

Microreactor Business

We enjoy a competitive advantage over other groups in the microreactor space by having a board of directors and management team with extensive market and financing experience. Academically initiated projects often rely largely on government grants and awards to progress. Whether we receive government grants or not, we can progress our research, development, and engineering, through our own financing channels. This fund-raising advantage has given us the ability to quickly expand, as further opportunities are not dictated by grant application success. We believe we also have an expertise advantage over other companies developing microreactors, as we can recruit the best scientists and engineers in the world from any country or institution, without being constrained by the available personnel located within certain academic and professional institutions. We had the fortune to connect with professors and scientists from around the world, with the opportunity to work freely on entirely funded projects, with few constraints, drawing from their specializations and expert areas. The technical personnel involved in the current design of our reactors have been involved with the design and development of dozens of different reactors. In addition, as described below, we recently acquired a nuclear reactor cooling technology that we believe will give our microreactor designs a competitive advantage.

Fuel Processing Business

We believe, based on our market research, that no company is currently developing a CAT II facility to fabricate non-TRi-structural ISOtropic particle fuel (TRISO) HALEU fuel for SMRs and microreactors. Several companies have invested in establishing their own facilities to manufacture TRISO fuel for their reactors, such as Terrapower and X-Energy, though these facilities were not established to sell fuel commercially. Currently, TRISO development has also stalled due to technical challenges, due partly to no operational history from which to draw data, combined with other technical challenges and current lack of funding. Developing fuel for SMRs and microreactors has become one of the main obstacles and causes of delay for companies expanding into these markets. We responded to the difficulties observed at other reactor development companies and acted to mitigate against the obstacles afflicting other developers. A CAT II fuel processing facility allows for the processing and handling of U235 up to 20% U235 enrichment. We believe, based on our market research, that we are progressing towards being the only CAT II non-TRISO facility operator in the country, giving our business an enormous competitive advantage for both reactor development and establishing multiple sources of future revenue to de-risk our company. We have sought to de-risk our fuel business and establish a competitive advantage, by building our fuel facilities near an existing U.S. national nuclear laboratory that can facilitate our development with their own existing capabilities, as well as collaborating with a related-party uranium enrichment technology company, LIST, to address the anticipated national fuel supply shortfall.

We are a member of the DOE's HALEU Consortium, which is an integral component of the HALEU Availability Program established by DOE, aiming for HALEU to be deployed in civilian domestic research, development, demonstration and commercial applications. We are also part of the HALEU Availability Program, which was established by the DOE to spur demand for additional HALEU production and private investment in the nation's nuclear fuel supply infrastructure, ultimately removing the federal government's initial role as a supplier.

Fuel Transportation Business

As we developed our business and analyzed the market to anticipate future obstacles which would affect our success, we observed that no transportation company existed which could transport and deliver commercial quantities of HALEU fuel across North America. We believe this national capability gap is both a significant risk to our proposed transportation operations but also a significant opportunity to enter a new market within the nuclear industry, which would have the benefit of both increased revenue for our company and would provide extra security for our future operations.

We identified a transportation concept which investigated a high capacity HALEU fuel transportation basket design, which has been developed by INL, ORNL and PNNL, and funded by the DOE. The technology was developed to form the basis of a full HALEU transportation package, which provided the most advanced solution we could identify to address the technological challenge of moving commercial quantities of HALEU fuel around North America. The development of this concept had not been continued by the DOE due to lack of funding. On April 3, 2024, we entered into an exclusive patent license agreement (“BEA License”) with Battelle Energy Alliance, LLC, the manager of the INL (BEA), and have been working with the groups capable of aiding us in the development of the concept into a governmentally certificated and licensed product proficient in the transportation of enriched fuels.

Pursuant to the BEA License, we received an exclusive, royalty-bearing license from BEA for a U.S. patent that can be used worldwide related to devices and systems used for HALEU transportation. The BEA License grants us, as the licensee, exclusive rights for the use of this patent and the licensor is not permitted to license the patent to any other parties within the specified scope. As part of the BEA License, we agreed to pay BEA royalties on net worldwide sales and any sublicense worldwide sales related to the use of this patent as well as certain licensing payments. We also agreed to meet specific performance milestones related to HALEU fuel transportation within the first 48 months of the agreement’s effective date. Under the BEA License, we are obligated to reimburse BEA for all costs incurred in the preparation, filing, prosecuting, and maintenance of the licensed patent. The BEA License has an indefinite term and will automatically terminate upon the expiration, abandonment, or other termination of the licensed patent covered by the BEA License. The BEA License may also be terminated immediately by BEA in the event of our default on any material obligations, and we may terminate the BEA License at any time if we provide at least three months’ written notice to BEA. The BEA License contains customary representations, warranties, and indemnifications of the parties.

To provide our company further advantage in this space, we recruited two former executives of the world’s largest shipping company as our consultants who are assisting us in developing a North American transportation company using our licensed or developed technology to deliver (subject to applicable government licensing and certification) nuclear fuel for a wide customer base, including SMR and microreactor companies, national laboratories, military, and DOE programs.

Our Challenges

We are a young company seeking to develop and launch an integrated nuclear energy business. Our efforts face and will continue to face many significant challenges, as our business involves complex nuclear technology, regulatory hurdles, and shifting market dynamics. These challenges include, but not limited to, the following:

- Obtaining the necessary permits and licenses for nuclear reactors, facilities and transportation capabilities is a time-consuming, expensive and highly regulated process. Microreactors must meet stringent safety and environmental standards, and gaining regulatory approval can be a lengthy endeavor. Additionally, ensuring the safety of a microreactor throughout its lifecycle is paramount. Developing, implementing, and maintaining robust safety systems and protocols are critical challenges. Implementing robust security measures to protect against theft, sabotage, or unauthorized access is also critical for both regulatory compliance and public safety.
- Building and operating a microreactor can be capital-intensive. Securing the significant amount of necessary funding and managing costs, including but not limited to operational and maintenance costs, are ongoing challenges for our business.
- The political and regulatory landscape can change, impacting the stability and viability of nuclear projects. International agreements and geopolitical factors can also affect nuclear technology access and export.

Recent Developments

July 2024 Firm Commitment Public Offering

On July 15, 2024, we consummated a firm commitment underwritten follow-on public offering (the “July 2024 Follow-on Offering”) of an aggregate of 900,000 units, consisting of an aggregate of 900,000 shares of common stock and 900,000 warrants to purchase up to 450,000 shares of common stock based on an offering price of \$20.00 per unit (“July 2024 Follow-on Offering Price”), generating gross proceeds of approximately \$18.0 million, less underwriting discounts and other expenses. The units issued in the July 2024 Follow-on Offering have no stand-alone rights, are not certificated and have not been issued as stand-alone securities. In connection with the July 2024 Follow-on Offering, we granted the lead managing underwriter an option exercisable for 30 days from July 15, 2024, to purchase up to an additional 135,000 shares of common stock and 135,000 warrants to purchase 67,500 shares of common stock from us at the July 2024 Follow-on Offering Price, less underwriting discounts and other expenses, to cover over-allotments in the July 2024 Follow-on Offering. On July 12, 2024, the underwriter exercised the option in full with respect to the over-allotment warrants, which closed on July 15, 2024 for nominal consideration.

On July 16, 2024, the underwriter exercised the over-allotment option in full with respect to the over-allotment shares, and on July 18, 2024, the closing of the purchase of the over-allotment shares occurred, generating gross proceeds to us of approximately \$2.70 million and net proceeds of approximately \$2.48 million.

Acquisition of ALIP Technology

On June 21, 2024, we closed an acquisition of a novel annular linear induction pump (ALIP) intellectual property used in small nuclear reactor cooling from noted physicist, research engineer and project manager Carlos O. Maidana, PhD. of Maidana Research. We call this transaction the “ALIP Acquisition”.

In connection with the transaction, Dr. Maidana has agreed to collaborate with us as a consultant on further development of the ALIP technology with a view towards achieving SBIR Phase III Award status. These efforts will build on previous DOE grants for the technology aggregating over \$1.37 million in prior phases. Pursuant to a consulting agreement between us and Dr. Maidana, we will provide funding (estimated to be approximately \$350,000) and other resources necessary for the Phase III project, and Dr. Maidana will be the Principal Investigator on this project.

The SBIR program is a federal initiative designed to support small businesses in conducting research and development with strong potential for commercialization. By funding these projects, the SBIR program aims to stimulate technological innovation and facilitate the transition of research into

viable products and services. SBIR Phase I focuses on feasibility and technical merit, Phase II involves further development and prototype creation, and Phase III centers on commercialization, requiring external funding to bring the innovation to market.

The ALIP technology, which is based on electromagnetic (rather than moving) pumps, is a key-enabling technology to our ODIN microreactor in development. Following the previously announced completion of INL's review of the ODIN microreactor design in February 2024, our engineers have diligently worked to identify relevant technologies to further optimize and simplify ODIN's design. The acquired ALIP technology, to be refined during the SBIR Phase III program, is an example of this strategy in action.

Moreover, we believe there is significant potential for this technology to be separately commercialized within a year as a component for all salt-based coolant reactors and fusion reactors. There are numerous advanced reactor designs which utilize salt-based coolants in fission and fusion energy industries, as well as in the advanced materials, space exploration, marine propulsion, and high-temperature and industrial process sectors.

The SBIR Phase III project acquired by us integrates several previous SBIR efforts, specifically:

- **Grant Number DE-SC0019835:** Development of a Small Electromagnetic Pump for Molten Salt.
- **Grant Number DE-SC0022805:** Software for Multiphysics Analysis and Design of Annular Linear Induction Pumps.
- **Grant Number DE-SC0013992:** Computational Tools for the Design of Liquid Metal Thermomagnetic Systems.

As part of this transaction, Dr. Maidana assigned us all intellectual property rights associated with the ALIP product, his work on the foregoing grants and the proposal for the SBIR Phase III program.

As consideration for the acquisition, we (i) issued 50,000 shares of common stock to Dr. Maidana and (ii) paid Dr. Maidana a cash consideration of \$50,000. Additionally, we agreed to deliver to Dr. Maidana an additional (x) 50,000 shares of common stock and (y) cash consideration of \$50,000, contingent upon the successful completion of SBIR Phase III project prior to June 21, 2025, without additional expense to, or funding requirement by, us.

Investment in the Only U.S. Origin and Patented Laser Uranium Enrichment Company

In August 2024, we invested \$2,000,000 as an equity investment into LIST, a related party, as part of its \$11.88 million seed funding round. This additional capital into LIST is anticipated to help fuel the development of its proprietary, patented advanced laser enrichment technology.

LIST is a U.S. based, proprietary developer of a patented advanced laser technology, making use of infrared wavelengths to selectively excite the molecules of desired isotopes to separate them from other isotopes. The Laser Isotope Separation Technology (“L.I.S.T”) has a huge range of applications, including being the only U.S.-origin (and patented) laser uranium enrichment company, and several major advantages over traditional methods such as gas diffusion, centrifuges, and prior art laser enrichment. The L.I.S.T proprietary laser-based process is more energy-efficient and has the potential to be deployed with highly competitive capital and operational costs due to high throughput, high duty cycle and reduced complexity compared to competing technologies.

L.I.S.T is optimized for LEU (Low Enriched Uranium) for existing civilian nuclear power plants, HALEU for the next generation of Small Modular Reactors (SMRs) and microreactors like the ones we are developing, the production of stable isotopes for medical and scientific research, and applications in quantum computing manufacturing for semiconductor technologies. For laser enrichment of uranium, this method has sufficient selectivity that will enable the production of LEU in a single stage and HALEU in two stages.

Concurrently with our investment in LIST, we entered into an agreement with LIST to collaborate and assist in developing their technologies to secure a fuel supply at a reduced cost to us for our future operations and the wider nuclear energy industry. Through collaboration with LIST, we anticipate that we will build supportive facilities around LIST’s enrichment facility, including such facilities as deconversion and fuel fabrication.

We also leased approximately 7,000 square feet of dedicated space within our Oak Ridge, Tennessee based nuclear technology facility to LIST to enable the next phase of the revitalization of its proprietary laser-based process. We lease this space to LIST for \$7,000 per month. The lease is effective on September 2, 2024 and has a term ending on September 1, 2034.

Our relationship with LIST is considered a related party transaction since certain of our executive directors and officers, including Jay Jiang Yu, Jaisun Garcha, and Dr. Tsun Yee Law, also serve as directors and officers for LIST, and James Walker serves as a consultant to LIST. Our investment in LIST was unanimously approved by all of our disinterested independent directors.

U.S. Department of Energy’s GAIN Voucher Award

In September 2024, we were granted a DOE Gateway for Accelerated Innovation in Nuclear (GAIN) Nuclear Energy (NE) voucher award for the independent assessment of its novel heat exchanger concept for open-air Brayton cycle in collaboration with the INL. The heat exchanger concept provides a turnkey solution for our patent-pending, proprietary and portable ‘ZEUS’ microreactor, currently in development.

With this voucher award, we will collaborate with INL to conduct an independent evaluation of the heat exchanger design for the ‘ZEUS’ microreactor. Designed to fit within a 45-foot high-cube container, the patent-pending ‘ZEUS’ microreactor features a power conversion unit capable of generating 1 to 2 MW of electricity without the use of fluid coolant. A key aspect of this design is its ability to dissipate heat from the reactor vessel using an open-air Brayton cycle. The collaboration with INL will involve the development of a computational model to analyze and verify critical attributes of the heat exchanger essential to reactor operations, providing a comprehensive assessment of its performance.

The U.S. Department of Energy Office of Nuclear Energy (DOE-NE) launched the GAIN program in 2016 to offer technical, regulatory, and financial support to help the nuclear industry advance innovative technologies toward commercialization. Since its launch, the program has awarded over 100 NE vouchers. GAIN NE voucher recipients do not receive direct financial awards as the vouchers provide funding to DOE laboratories (in this case INL) to help businesses overcome critical technological and commercialization challenges. These vouchers thus grant innovators like us access to the extensive nuclear research expertise and capabilities across the DOE national laboratory complex.

Corporate History and Structure

We were incorporated under the laws of the State of Nevada on February 8, 2022. We are primarily engaged in the design and development of mobile, easily deployable microreactors, the development of a commercial CAT II facility for fuel processing, and the creation of a commercial transportation technology and business, with the capacity to move fuel enriched up to 19.75% U235 across North America.

HALEU Energy Fuel Inc. (which we refer to herein as HALEU Energy), incorporated on August 30, 2022 under the laws of Nevada, is our wholly-owned subsidiary. Through HALEU Energy, we are seeking to develop a domestic HALEU fuel processing facility to supply the next generation of

American Uranium Inc. (which we refer to herein as American Uranium), incorporated on February 9, 2022 under the laws of Nevada, is our wholly-owned subsidiary. Through American Uranium, we are engaged in the acquisition, exploration & development of uranium mineral resource properties in the U.S. American Uranium has not commenced operation as of the date of this prospectus.

Advanced Fuel Transportation Inc. (which we refer to herein as Advanced Fuel Transportation), incorporated on June 21, 2023 under the laws of Nevada, is our wholly owned subsidiary. Through Advanced Fuel Transportation, we plan to manufacture a licensed high-capacity HALEU transportation system and produce a governmentally licensed and permitted high-capacity HALEU transportation system, capable of moving commercial quantities of HALEU fuel around North America. Advanced Fuel Transportation has not commenced operation as of the date of this prospectus.

Nano Nuclear Space Inc. (which we refer to herein as Nano Nuclear Space), incorporated on July 24, 2024 under the laws of Nevada, is our wholly-owned subsidiary. Through Nano Nuclear Space, we are seeking to explore the potential commercial applications of our developing micronuclear reactor technology in space, including the ALIP technology. In September 2024, Dr. Carlos Maidana was appointed to lead our Nano Nuclear Space activities.

The chart below summarizes our corporate structure, including our 100% wholly owned subsidiaries in the U.S., as of the date of this prospectus:



Summary of Significant Risks

Investing in our common stock is speculative and involves a high degree of risk. These risks are discussed more fully in “Risk Factors” and elsewhere in this prospectus. We urge you to read “Risk Factors” beginning on page 16 and this prospectus in full. Our significant risks may be summarized as follows:

Risks Related to Our Industry and Business

- We have incurred losses and have not generated any revenue since our inception. We anticipate that we will continue to incur losses, and expect that we will not generate revenue, for the foreseeable future.
- We are an early-stage company in an emerging market with an unproven business model, a new and unproven technology model, and a short operating history, which makes it difficult to evaluate our current business and prospects and may increase the risk of your investment.
- Our business plans will require us to raise substantial additional amounts of capital. Future capital needs will require us to sell additional equity or debt securities that will dilute or subordinate the rights of our common stockholders. In addition, we may be unable to secure government grants as part of our funding strategy.
- We and our officers and directors are presently parties to securities law and fiduciary duty lawsuits relating to our public statements made since our initial public offering. Our reputation may be damaged by these suits, and if we are unable to have them dismissed or should we receive adverse outcomes, our business and results of operations may suffer, including as a result of our indemnification obligations to our directors and officers.
- The failure of production and commercialization of nuclear micro reactors as planned will adversely and materially affect our business, financial condition, and result of operations.
- We are in the process of developing a domestic HALEU fuel processing facility to supply next generation of advanced nuclear reactors. The failure of completion and operation of such facility as planned will adversely and materially affect our business, financial condition, and result of operations.
- We plan to produce a regulatorily licensed, high-capacity HALEU transportation system, capable of moving commercial quantities of HALEU fuel around North America. The failure of production and commercialization of such products as planned will adversely and materially affect our business, financial condition, and result of operations.
- We plan to provide nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally. Failure to do so as planned will adversely and materially affect our business, financial condition, and result of operations.
- The cost of electricity generated from nuclear sources may not be cost competitive with other electricity generation sources in some markets, which could materially and adversely affect our business.
- The market for SMRs generating nuclear power is not yet established and may not achieve the growth potential we expect or may grow more slowly than expected.
- Certain officers of our company have management, advisory or directorship positions with other companies and may allocate their time to other businesses, which may pose certain risks in fulfilling their obligations with us.

Risks Related to Our Intellectual Property

- If we fail to develop, gain approval for, protect or enforce our intellectual property or proprietary rights, our business and operating results could be harmed.
- We rely on our unpatented proprietary technology, trade secrets, designs, experiences, work flows, data, processes, software and know-how.
- We may be accused of infringing intellectual property rights of third parties and content restrictions of relevant laws, which may materially and adversely affect our business, financial condition and results of operations.

Risks Related to Regulation and Compliance

- Our business is subject to a wide variety of extensive and evolving government laws and regulations. Changes in and/or failure to comply with such laws and regulations could have a material adverse effect on our business.
- If we fail to comply with the laws and regulations relating to the collection of sales tax and payment of income taxes in the various states in which we do business, we could be exposed to unexpected costs, expenses, penalties, and fees as a result of our non-compliance, which could harm our business.

General Risks Associated with Our Company

- We are highly dependent on our senior management team and other highly skilled personnel. If we are unable to attract, retain and maintain highly qualified personnel, including our senior management team, we may not be able to implement our business strategy and our business and results of operations would be harmed.
- Mr. Jay Jiang Yu, our President, Secretary, Treasurer, and Chairman of the Board, has a significant influence over our company due to his ownership of a material percentage of our outstanding common stock. Also, his interests may not always be aligned with the interests of our other stockholders, which may lead to conflicts of interest that harm our company.
- We have undertaken and may continue pursue strategic acquisitions to accelerate our growth. These acquisitions may not be successful. We may not be able to successfully integrate our previous and future acquisitions or generate sufficient revenues from future acquisitions, which could cause our business to suffer.
- Our ability to effectively manage our anticipated growth and expansion of our operations will also require us to enhance our operational, financial and management controls and infrastructure, human resources policies and reporting system. These enhancements and improvements will require significant capital expenditures and allocation of valuable management and employee resources.
- We will incur significantly increased costs as a result of, and devote substantial management time to operating as, a public company.
- We are an “emerging growth company,” and we cannot be certain if the reduced reporting and disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

Risks Related to Our Securities and this Offering

- The trading market for our common stock is very new, and consistently robust and liquid trading market may not develop or be sustained over the long term.
- If you purchase securities in this offering, you may incur immediate and substantial dilution in the book value of your shares of our common stock.
- The trading price of our common stock has been and may continue to be volatile, and you could lose all or part of your investment.
- There is no public market for the Warrants being offered in this offering, so an investment in the Warrants should be considered illiquid.
- If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.
- Future sales of our common stock or securities convertible into our common stock may depress our stock price.
- Our directors, executive officers and principal stockholders will continue to have substantial control over our company after this offering, which could limit your ability to influence the outcome of key transactions, including a change of control.

Implications of Being an Emerging Growth Company

We qualify as an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”). For as long as we remain an emerging growth company, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies. These provisions include, but are not limited to:

- being permitted to have only two years of audited financial statements and only two years of related selected financial data and management’s discussion and analysis of financial condition and results of operations disclosure;
- an exemption from compliance with the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, as amended (the “Sarbanes-Oxley Act”);
- reduced disclosure about executive compensation arrangements in our periodic reports, registration statements, and proxy statements; and
- exemptions from the requirements to seek non-binding advisory votes on executive compensation or golden parachute arrangements.

In particular, in this prospectus, we have provided only one year of audited financial statements and have not included all of the executive compensation-related information that would be required if we were not an emerging growth company. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock.

In addition, the JOBS Act permits emerging growth companies to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We are not choosing to “opt out” of this provision. We will remain an emerging growth company until the earliest of: (i) the last day of the first fiscal year in which our annual gross revenues exceed \$1.235 billion, (ii) the date on which we first qualify as a large accelerated filer under the rules of the Securities and Exchange Commission, or SEC, (iii) the date on which we have, in any three-year period, issued more than \$1.0 billion in non-convertible debt securities, and (iv) the last day of the fiscal year following the fifth anniversary of the completion of our initial public offering (which closed in May 2024).

Implications of Being a Smaller Reporting Company

We are a “smaller reporting company” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended. We may take advantage of certain of the scaled disclosures available to smaller reporting companies until the fiscal year following the determination that our voting and non-voting common stock held by non-affiliates is more than \$250 million measured on the last business day of our second fiscal quarter, or our annual revenues are less than \$100 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700 million measured on the last business day of our second fiscal quarter.

Corporate Information

We were incorporated under the laws of the State of Nevada on February 8, 2022. Our principal executive office is located at 10 Times Square, 30th Floor, New York, NY 10018, and our telephone number is (212) 634-9206. Our website is www.nanonuclearenergy.com. Information contained on, or available through, our website does not constitute part of, and is not deemed incorporated by reference into, this prospectus, and investors should not rely on such information in deciding whether to purchase the Units offered hereby.

THE OFFERING

Securities Offered by Us

[] Units, with each Unit consisting of one (1) share of common stock and a Warrant to purchase up to one-half (0.5) of a share of common stock, on a firm commitment basis (or [] Units if the representative of the underwriters exercises its over-allotment option in full).

The shares of common stock and the Warrants underlying the Units are immediately separable and will be issued separately in this offering.

Each Warrant issued in this offering will have an exercise price of \$[] per whole share and will be exercisable from the initial issuance date until they expire on the five-year anniversary of the original issuance date.

Common Stock Outstanding Prior to This Offering

30,715,663 shares of common stock

Common Stock to Be Outstanding Immediately After Completion of This Offering ⁽¹⁾

[] shares of common stock (or [] shares of common stock if the over-allotment option is exercised in full) assuming no exercise of the Warrants.

Over-allotment Option

We have granted the representative of the underwriters a 30-day option to purchase up to an additional [] shares of common stock and/or additional Warrants to purchase up to [] shares of common stock at the public offering price in this offering (less underwriting discounts) to cover over-allotments, if any. The over-allotment option may be exercised by the representative in any combination of shares and/or Warrants up to the maximum amounts indicated above.

Use of Proceeds

The net proceeds to us from this offering, after deducting the underwriting discounts and estimated offering expenses payable by us, will be approximately \$[] million, or approximately \$[] million if the over-allotment option is exercised in full, based on the assumed public offering price of \$[] per Unit.

The net proceeds received by us from this offering will be used for (i) research and development of our products and technologies, including microreactor and nuclear fuel transportation design optimization, fuel facility investigations and development, test work and scoping studies, and our work with LIST; (ii) marketing, promotion and business development activities; and (iii) regulatory compliance, intellectual property protection, hiring additional employees, retaining additional contractors and building out our facility in Oak Ridge, Tennessee. We may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies, or additional businesses; however, we currently have no agreements or commitments with respect to any such transaction. See “*Use of Proceeds*.”

Representative’s Warrants

The registration statement of which this prospectus is a part also registers a common stock purchase warrant (which we refer to herein as the Representative’s Warrant) to purchase [] shares of our common stock (or 7% of the shares of common stock included as part of the Units sold in this offering) and the shares of our common stock issuable upon exercise of the Representative’s Warrant. The Representative’s Warrant is being issued to the representative of the underwriters as a portion of the underwriting compensation payable in connection with this offering. The Representative’s Warrant shall contain customary “cashless exercise” provisions and shall be exercisable at any time, and from time to time, in whole or in part, during the four-and-a-half-year period commencing six months after the closing of this offering at an exercise price of 125% of the public offering price of the Units sold in this offering. Please see “*Underwriting — Representative’s Warrant*” for further information.

Nasdaq symbol

“NNE”

Risk Factors

Investing in our common stock is speculative and involves a high degree of risk. See “Risk Factors” beginning on page 16 and the other information in this prospectus for a discussion of the factors you should consider carefully before you decide to invest in our common stock.

Lock-Up

No lock-up agreements will be required in connection with this offering. Notwithstanding the foregoing, in connection with our initial public offering, we, our executive officers, directors, and our existing stockholders holding five percent (5%) or more of our common stock prior to this offering have agreed not to offer, issue, sell, contract to sell, encumber, grant any option for the sale of or otherwise dispose of any of our securities for a period of six (6) months following the closing of our initial public offering (which closed in May 2024). In addition, each existing stockholder of our company who holds less than five percent (5%) of our common stock prior to our initial public offering is subject to lock-up agreement with leak out provisions restricting sales of certain percentages of their common stock during a period ranging from 30 days to 150 days following the closing of our initial public offering. See “Underwriting” beginning on page 104 for more information.

Transfer Agent

The transfer agent and registrar for our common stock and our warrant agent for the Warrants is VStock Transfer LLC.

(1) The number of shares of our common stock to be outstanding upon completion of this offering will be [_____] shares assuming no exercise of the over-allotment option for this offering, which is based on [_____] shares of our common stock outstanding as of the date of this prospectus, and excludes, as of the date of this prospectus:

- [_____] shares of common stock issuable upon the exercise of the Warrant;
- [_____] shares of common stock issuable upon the exercise of the Representative’s Warrant at an exercise price of 125% of estimated offering price;
- 63,000 shares of common stock issuable upon the exercise of a warrant issued to the representative of the underwriters in our July 2024 offering at an exercise price per share of \$25.00;
- 179,375 shares of common stock issuable upon the exercise of a warrant issued to the representative of the underwriters in our May 2024 initial public offering at an exercise price per share of \$5.00;
- 453,725 shares of common stock issuable upon exercise of outstanding common stock purchase warrants issued to investors in our July 2024 offering with an exercise price per share of \$20.00;
- 3,819,883 shares of our common stock reserved under our 2023 Stock Option Plan #1, with a fixed exercise price of \$1.50 per share;
- 2,015,226 shares of our common stock reserved under our 2023 Stock Option Plan #2, with a fixed exercise price of \$3.00 per share; and
- 385,000 shares of our common stock underlying options which are not governed by either our 2023 Stock Option Plan #1 or our Stock Option Plan #2, with a fixed exercise price of \$3.00 per share.

Unless otherwise indicated, this prospectus reflects and assumes (i) no exercise by the representative of the underwriters of its over-allotment option and (ii) no exercise of the outstanding warrants or stock options described above.

SUMMARY OF CONSOLIDATED FINANCIAL INFORMATION

The following table sets forth summary financial and other data for the periods ended and at the dates indicated below. Our summary financial information for the year ended September 30, 2023 and for the period from February 8, 2022 (inception) through September 30, 2022 has been derived from our audited financial statements included in this prospectus. Our summary financial information for the nine months ended June 30, 2024 and 2023 has been derived from our unaudited financial statements included in this prospectus. The financial data set forth below should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the financial statements and notes thereto included elsewhere in this prospectus.

Statements of Operations

	For the Nine Months Ended June 30, 2024	For the Nine Months Ended June 30, 2023
Operating expenses		
General and administrative	\$ 4,553,512	\$ 3,722,232
Research and development	2,830,367	1,183,750
Change in Fair Value of contingent consideration	385,500	-
Loss from operations	(7,769,379)	(4,905,982)
Other income	109,559	1,753
Net loss	\$ (7,659,820)	\$ (4,904,229)
Net loss per share of common stock:		
Basic	\$ (0.31)	\$ (0.22)
Diluted	\$ (0.31)	\$ (0.22)
Weighted-average shares of common stock outstanding:		
Basic	24,919,094	22,121,634
Diluted	24,919,094	22,121,634
	For the Year Ended September 30, 2023	For the Period from February 8, 2022 (Inception) through September 30, 2022
Operating expenses		
General and administrative	\$ 4,749,395	\$ 919,520
Research and development	1,534,000	140,304
Loss from operations	(6,283,395)	(1,059,824)
Other income	32,994	28,000
Net loss	\$ (6,250,401)	\$ (1,031,824)
Net loss per share of common stock:		
Basic	\$ (0.28)	\$ (0.06)
Diluted	\$ (0.28)	\$ (0.06)

Statements of Stockholder's Equity

For the Nine Months Ended June 30, 2024

	Mezzanine Equity		Common shares	Amount	Additional paid-in capital	Accumulated deficit	Total Stockholders' equity
	Shares	Amount					
Balance as of September 30, 2023	2,000,000	\$ 5,000,000	23,184,869	\$ 2,319	\$ 9,288,553	\$ (7,282,225)	\$ 2,008,647
Mezzanine equity conversion	(2,000,000)	(5,000,000)	2,000,000	200	4,999,800	-	5,000,000
Offering common stock issuances	-	-	3,769,019	376	14,253,561	-	14,253,937
Offering costs	-	-	-	-	(1,538,405)	-	(1,538,405)
Acquisition common stock issuances	-	-	50,000	5	786,495	-	786,500
Equity-based compensation	-	-	-	-	152,457	-	152,457
Net loss	-	-	-	-	-	(7,659,820)	(7,659,820)
Balance as of June 30, 2024	-	\$ -	29,003,888	\$ 2,900	\$27,942,461	\$ (14,942,045)	\$ 13,003,316

For the Nine Months Ended June 30, 2023

	Mezzanine Equity		Common shares	Amount	Additional paid-in capital	Accumulated deficit	Total Stockholders' equity
	Shares	Amount					
Balance as of September 30, 2022	2,000,000	\$ 5,000,000	20,501,500	\$ 2,050	\$ 3,139,450	\$ (1,031,824)	\$ 2,109,676
Common stock issuances	-	-	2,598,369	260	3,765,109	-	3,765,369
Equity-based compensation	-	-	85,000	9	2,114,005	-	2,114,014
Net loss	-	-	-	-	-	(4,904,229)	(4,904,229)
Balance as of June 30, 2023	2,000,000	\$ 5,000,000	23,184,869	\$ 2,319	\$ 9,018,564	\$ (5,936,053)	\$ 3,084,830

For the Year Ended September 30, 2023

	Mezzanine Equity		Permanent Equity				
	Shares	Amount	Shares	Amount	Additional paid-in capital	Accumulated deficit	Total
Balance as of September 30, 2022	-	\$ -	20,501,500	\$ 2,050	\$ 3,139,450	\$ (1,031,824)	\$ 2,109,676
Common stock issuances	2,000,000	5,000,000	2,598,369	260	3,765,109	-	3,765,369
Equity-based compensation	-	-	85,000	9	2,383,994	-	2,384,003
Net loss	-	-	-	-	-	(6,250,401)	(6,250,401)
Balance as of September 30, 2023	2,000,000	\$ 5,000,000	23,184,869	\$ 2,319	\$ 9,288,553	\$ (7,282,225)	\$ 2,008,647

For the Period From February 8, 2022 (Inception) through September 30, 2022

	Mezzanine Equity		Permanent Equity				
	Shares	Amount	Shares	Amount	Additional paid-in capital	Accumulated deficit	Total
Balance as of February 8, 2022 (Inception)	-	\$ -	-	\$ -	\$ -	\$ -	\$ -
Common stock issuances	-	-	19,826,500	1,982	2,749,518	-	2,751,500
Equity-based compensation	-	-	675,000	68	389,932	-	390,000
Net loss	-	-	-	-	-	(1,031,824)	(1,031,824)
Balance as of September 30, 2022	-	\$ -	20,501,500	\$ 2,050	\$ 3,139,450	\$ (1,031,824)	\$ 2,109,676

Statements of Cash Flows

	For the Nine Months Ended June 30, 2024	For the Nine Months Ended June 30, 2023
OPERATING ACTIVITIES		
Net loss	\$ (7,659,820)	\$ (4,904,229)
Adjustments to reconcile net loss to net cash used in operating activities:		
Equity-based compensation	152,457	2,114,014
Amortization of right of use asset	53,893	-
R&D acquisition paid in equity	786,500	-
Change in assets and liabilities:		
Prepaid expenses	(324,331)	(38,588)
Deposits	(235,235)	-
Accounts payable and accrued liabilities	41,606	147,028
Due to related parties	(35,000)	(10,000)
Lease liability	44,135	-
Contingent liability	1,222,000	-
Net cash used in operating activities	(5,953,795)	(2,691,775)
FINANCING ACTIVITIES		
Proceeds from common stock issuances	14,253,937	8,765,369
Offering costs	(1,408,405)	-
Payment of deferred offering costs	(55,000)	(75,000)
Net cash provided by financing activities	12,790,532	8,690,369
Net increase in cash	6,836,737	5,998,594
Cash and cash equivalents, beginning of period	6,952,795	2,129,999
Cash and cash equivalents, end of period	\$ 13,789,532	\$ 8,128,593
Non-cash transactions:		
Conversion from Mezzanine Equity to Stockholders' Equity	\$ (5,000,000)	\$ -
Inception of Right of Use Asset / Liability	\$ 1,926,656	\$ -

	For the Year Ended September 30, 2023	For the Period from February 8, 2022 (Inception) through September 30, 2022
OPERATING ACTIVITIES		
Net loss	\$ (6,250,401)	\$ (1,031,824)
Adjustments to reconcile net loss to net cash used in operating activities:		
Equity-based compensation	2,384,003	390,000
Change in assets and liabilities:		
Prepaid expenses	(88,409)	(117,448)
Accounts payable and accrued liabilities	87,234	102,771
Due to related parties	-	35,000
Net cash used in operating activities	(3,867,573)	(621,501)
FINANCING ACTIVITIES		
Proceeds from common stock issuances	8,765,369	2,751,500
Payment of deferred offering costs	(75,000)	-
Net cash provided by financing activities	8,690,369	2,751,500
Net increase in cash	4,822,796	2,129,999
Cash, beginning of period	2,129,999	-
Cash, end of period	\$ 6,952,795	\$ 2,129,999

RISK FACTORS

An investment in our securities is speculative and involves a high degree of risk. You should carefully consider the risks described below, which we believe represent certain of the material risks to our business, together with the information contained elsewhere in this prospectus, before you make a decision to invest in the Units. Please note that the risks highlighted here are not the only ones that we may face. For example, additional risks presently unknown to us or that we currently consider immaterial or unlikely to occur could also impair our operations. If any of the following events occur or any additional risks presently unknown to us actually occur, our business, financial condition and operating results may be materially adversely affected. In that event, the trading price of our securities could decline and you could lose all or part of your investment.

Risks Related to Our Industry and Business

We have incurred losses and have not generated any revenue since our inception. We anticipate that we will continue to incur losses, and expect that we will not generate revenue, for the foreseeable future.

Since inception, we have incurred significant operating losses and have an accumulated deficit of \$14.9 million and negative operating cash flow as of June 30, 2024. We expect that operating losses and negative cash flows will increase in the coming years because of additional costs and expenses related to our research and development (which we refer to herein as R&D), business development activities and our status as a publicly traded company.

To date, we have not generated any revenue. We do not expect to generate any revenue unless and until we are able to commercialize our reactors and/or other lines of business. As we have incurred losses and experienced negative operating cash flows since our inception, and accordingly we have undertaken equity financing from investors to satisfy our funding needs, and we will consider applications for government grants; however, we may not raise adequate funding to offset our expenses and losses. Moreover, we may encounter unforeseen expenses, difficulties, complications, delays, and other unknown factors that may adversely affect our business. The magnitude of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate and grow revenue. We cannot predict the outcome of the actions to generate liquidity to fund our operations, whether such actions would generate the expected liquidity to fund our operations as currently planned or whether the costs of such actions will be available on reasonable terms or at all. Our continued solvency is dependent upon our ability to obtain additional working capital to complete our reactor development, to successfully market our reactors and to achieve commerciality for our reactors. Our prior losses and expected future losses have had and may continue to have adverse effects on our stockholders' equity (deficit) and working capital and may lead to the failure of our business.

We are an early-stage company in an emerging market with an unproven business model, a new and unproven technology model, and a short operating history, which makes it difficult to evaluate our current business and prospects and may increase the risk of your investment.

We only have a limited operating history upon which to base an evaluation of our current and future business prospects. We were founded in February 2022 and are currently in the process of developing our nuclear microreactors and other lines of business as more fully described in the "Business" section of this prospectus. We anticipate that it will take several years for us to commence generating meaningful revenues. Moreover, we will be required to make significant expenditures over the near and long term just to achieve any level of revenues.

As a result of our receipt of the net proceeds of this offering, over the next twelve months, we will continue to progress our development of advanced nuclear microreactors, ZEUS and ODIN, and our vertically integrated fuel manufacturing business, with estimated expenditures to be approximately \$8 million. This allocation comprises approximately \$6 million dedicated to the research and development of nuclear energy related products and technologies, with a specific focus on the refinement of our microreactors and our HALEU fuel manufacturing processes. The remaining \$2 million is earmarked for miscellaneous costs essential to propelling the progress of our microreactors, encompassing the support of current personnel engaged in executive, finance, accounting, and other administrative functions. We estimate that our microreactor demonstration work will be conducted between 2024 and 2026, our microreactor licensing application will be processed between 2026 and 2031, and our microreactors will be launched between 2030 and 2031. We also plan on providing nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally. If we are unable to acquire such a business by the end of 2024, we will focus on building our own internal nuclear consultation business in coordination with certain outside academic institutions, which we anticipate would require approximately an additional \$2 million over the next twelve months to recruit additional staff and build corresponding infrastructure to be capable of providing these services. Notwithstanding the foregoing, the outlined expenditures and our anticipated timelines are estimations only. These are inherently subject to change due to certain factors, including adjustments in the microreactor development plan and uncertainties associated with the licensing approval process. Given that these elements may exceed our initial expectations or lie beyond our control, we cannot guarantee the accuracy of the actual expenditures and timelines.

Our limited operating history and early stage of our business makes an evaluation of our business and prospects difficult. You must consider our business and prospects in light of the risks and difficulties we encounter as an early-stage company in the new and rapidly evolving market of the nuclear energy industry. These risks and difficulties include, but are not limited to, the following:

- Obtaining the necessary permits and licenses can be a lengthy and complex process, subject to rigorous safety and environmental regulations. Delays or denials in obtaining these approvals can significantly impact a project's timeline and cost.
- Ensuring the safety of the reactor during operation and in case of accidents is paramount. Microreactors must be designed with robust safety features to prevent accidents, and emergency response plans must be in place to mitigate any potential incidents.

- Security concerns, including the risk of theft or sabotage, need to be addressed through physical security measures and cybersecurity protocols.
- Microreactor projects are very capital-intensive, and securing adequate financing can be a significant hurdle. Economic risks related to cost overruns, construction delays, or market uncertainties must be managed effectively.
- The demand for microreactor-generated power may be uncertain, especially in the early stages of the business. Market fluctuations and changing energy policies can affect the profitability of the venture.
- Microreactors rely on specialized components and materials, which may have limited availability or long lead times. Supply chain disruptions can impact project timelines and costs.
- Addressing environmental concerns, including radioactive waste management and minimizing environmental impact, is essential for regulatory compliance and public acceptance. Proper disposal and management of radioactive waste and decommissioning plans need to be in place from the outset. Failing to account for these end-of-life considerations can lead to significant liabilities. Additionally, any adverse environmental impact can lead to public opposition and regulatory penalties.
- Public perception of nuclear technology can be a challenge. Overcoming public skepticism or opposition and gaining social acceptance for the microreactor project is important.

We may not be able to successfully address any of these risks or others. Failure to adequately do so could seriously harm our business and cause our operating results to suffer.

Our nuclear microreactors are still at the development stage and have not been put into production yet. Developing, producing, and commercializing nuclear reactors is a complex and challenging endeavor due to various technical, regulatory, financial, and public perception obstacles, which may adversely and materially affect our business, financial condition and results of operation. No assurances can be given that we will be able to develop and commercialize our microreactors and other technologies on the timelines we currently anticipate, or at all, and our failure to do so would likely lead to the loss of your investment in our company.

Our business plans will require us to raise substantial additional amounts of capital. Future capital needs will require us to sell additional equity or debt securities that will dilute or subordinate the rights of our common stockholders. In addition, we may be unable to secure government grants as part of our funding strategy.

Our business plan will be costly, more costly than the net proceeds we will receive from this offering. To develop and implement our businesses as currently planned, we will need to raise substantial amounts of additional capital, potentially hundreds of millions of dollars. We expect that we will need to make substantial investments in research and development of our products and technologies and other substantial investments before we can generate meaningful revenues. Moreover, our costs and expenses may be even greater than currently anticipated, and there may be investments or expenses that are presently unforeseen. In any case, we may be unable to raise sufficient capital to fund these costs and achieve significant revenue generation. In addition, given the relatively early stage of our company, our future capital requirements are also difficult to predict with precision, and our actual capital requirements may differ substantially from those we currently anticipate.

As a result, even following this offering, we will need to seek equity or debt financing to finance a large portion of our future capital requirements. Such financing might not be available to us when needed or on terms that are acceptable, or at all. We will likely issue additional equity securities and may issue debt securities or otherwise incur debt in the future to fund our business plan. If we issue equity or convertible debt securities to raise additional funds, our existing stockholders will experience dilution, and the new equity (including preferred equity) or debt securities or other indebtedness may have rights, preferences, and privileges senior to those of our existing stockholders. If we incur additional debt, it may increase our leverage relative to our earnings or to our equity capitalization, requiring us to pay additional interest expenses.

Our ability to obtain the necessary capital in the form of equity or debt to carry out our business plan is subject to several risks, including general economic and market conditions, as well as investor sentiment regarding our planned business. These factors may make the timing, amount, terms and conditions of any such financing unattractive or unavailable to us. The prevailing macroeconomic environment may increase our cost of financing or make it more difficult to raise additional capital on favorable terms, if at all. If we are unable to raise sufficient capital, we may have to significantly reduce our spending and/or delay or cancel our planned activities.

We may also seek to raise additional funds through collaborations and licensing arrangements. These arrangements, even if we are able to secure them, may require us to relinquish some rights to our technologies, or to grant licenses on terms that are not favorable to us.

Finally, we plan to apply for government funding in the form of grants or other funding from agencies such as the DOE. We may not receive such funding for a variety of reasons, including the size of our company and the government's assessment of our prospects. Even if we do receive such funding, the government could condition such funding on contractual provisions such as granting the government rights to our technology or products. Moreover, federal funding is subject to at least annual Congressional appropriations, which may not be forthcoming. The federal budget process is complex — the budget justification and Presidential budget requests are often incomplete; Congress may appropriate different amounts than those requested; and the DOE has varying degrees of discretion to reprogram or transfer appropriated funds. Nonetheless, to the extent Presidential budget requests or DOE budget justifications result in a shift of Congressional appropriations away from SMR funding generally or projects we are developing specifically, those shifts could materially and adversely affect the amount of DOE funding available to us and our business.

As a result of the foregoing, we might not be able to obtain any financing, and we might not have sufficient capital to conduct our business as projected, both of which could mean that we would be forced to curtail or discontinue our operations. If we cannot raise additional capital when we need or want to, our operations and prospects could be negatively affected, and our business could fail.

We and our officers and directors are presently parties to securities law and fiduciary duty lawsuits relating to our public statements made since our initial public offering. Our reputation may be damaged by these suits, and if we are unable to have them dismissed or should we receive adverse outcomes, our business and results of operations may suffer, including as a result of our indemnification obligations to our directors and officers.

On August 9, 2024, a putative securities class action lawsuit was filed against us and certain of our officers in the United States District Court for the Southern District of New York, captioned *Yvette Yang v. Nano Nuclear Energy Inc., et al.*, No. 1:24-cv-06057 (S.D.N.Y.). The complaint asserts claims for alleged violations of federal securities laws related to statements concerning the our business, including our progress toward our microreactor development. The plaintiff seeks to represent a class of certain persons who purchased or otherwise acquired our common stock during the period from May 8, 2024 through July 18, 2024 and seeks unspecified damages and other relief. We dispute the allegations in the complaint and intends to defend the case vigorously.

In addition, on August 23, 2024, a putative shareholder derivative lawsuit was filed purportedly on behalf of our company, as nominal defendant, against certain of our directors and officers in the Eighth Judicial District Court of Clark County, Nevada, captioned *William Latza, Derivatively on Behalf of Nano Nuclear, Inc. v. James Walker, et al.*, No. A-24-900423-C. The complaint asserts claims for alleged breach of fiduciary duties and corporate waste, among others, related to statements concerning our business and prospects, including our progress toward microreactor development. On behalf of our company, the plaintiff seeks damages from the director and officer defendants and an order directing our company to take actions to reform and improve corporate governance and internal procedures. The director and officer defendants deny all allegations of liability and intend to vigorously defend against all claims. Given the preliminary stage of the lawsuit and the inherent uncertainties of litigation, we cannot determine with certainty the outcome of the case at this time.

Ongoing securities law and fiduciary duty lawsuits may divert significant financial and human resources away from our core business operations, increasing legal expenses and reducing available capital for other strategic initiatives. If the lawsuits result in adverse outcomes, such as judgments or settlements, we could face substantial monetary damages, penalties, or fines, which could negatively impact our financial position, cash flow, and overall business operations. These lawsuits may harm our reputation with investors, suppliers, and business partners. Even if we successfully defend against the claims, the mere existence of these lawsuits may erode confidence in our management, corporate governance, and financial reporting. The uncertainty surrounding the outcome of these lawsuits could create volatility in our stock price, leading to a decrease in investor confidence and possible difficulties in raising future capital.

Our officers and directors, who are critical to our leadership and decision-making, may be distracted by these lawsuits, which could lead to delays or inefficiencies in executing our business strategy. If these lawsuits persist or lead to unfavorable publicity, it may become more challenging to attract and retain qualified employees, including key executives, due to perceived instability or legal risk associated with our company.

The current lawsuits may encourage other parties to file additional claims or lawsuits, increasing our legal risks and further burdening our resources. The case is still at an early stage and we cannot reasonably estimate the amount of any potential financial loss or cost that could result from this lawsuit. If we are unable to have them dismissed or should we receive adverse outcomes, our business and results of operations may suffer. The lawsuits may prompt increased scrutiny from regulatory authorities, leading to additional investigations, fines, or compliance requirements, which could further affect our business.

Further, under certain circumstances, we may have contractual or other legal obligations to indemnify and to incur legal expenses on behalf of investors, directors, officers, employees, or other third parties. Our business contractual and legal obligations related to indemnification and the coverage of legal expenses for investors, directors, officers, employees, and other third parties are critical components of our risk management and corporate governance. These obligations are typically outlined in various agreements, contracts, and corporate bylaws.

In our company, the key aspects of indemnification will be included in our directors and officers (D&O) insurance, our corporate governing documents, and investor agreements and other relevant arrangements. Nuclear companies often purchase director and officer insurance policies to indemnify their directors and officers against personal liability for actions taken in their roles. These policies provide financial protection for individuals in the event of lawsuits, regulatory actions, or other legal proceedings related to their corporate duties. The corporate governing documents may include provisions that obligate our company to indemnify its directors, officers, and sometimes employees to the extent allowed by law, with some conditions or limitations on indemnification as applicable. In cases where investors, such as venture capitalists or private equity firms, are involved, investment agreements may include indemnification clauses that protect the investors from certain liabilities related to their investment in our company. In our agreements with third parties, such as suppliers, partners, or service providers, indemnification provisions may also be included to specify who is responsible for indemnifying the other party in the event of specified breaches, disputes, or liabilities.

We may also be required to cover the legal expenses and other costs on behalf of individuals or third parties incurred during any applicable legal proceedings, which may divest our company's resources and the management's attention, thus materially and adversely affect our business, financial condition and results of operations and result in our inability to establish and grow our business.

The failure of production and commercialization of nuclear micro reactors as planned will adversely and materially affect our business, financial condition, and result of operations.

We are in the process of developing the next-generation advanced nuclear microreactors, **ZEUS**, a solid core battery reactor, and **ODIN**, a low-pressure salt coolant reactor. With these products, we are advancing the development of the next generation of portable, on-demand capable, advanced nuclear microreactors. Through a collaboration of our world-renowned nuclear scientists and engineers, the national laboratories, and government support, we believe our reactors will have the potential to impact to the global energy landscape. Our goal is to commercially launch one of these products by 2030-2031. If our plan to develop, manufacture or commercialize these products is delayed, suspended, interrupted, or cancelled for whatever reason, our business, financial condition, and results of operations will be adversely and materially disrupted, and the value of our securities may significantly decline or become worthless.

We are in the process of developing a domestic HALEU fuel processing facility to supply the next generation of advanced nuclear reactors. The failure of completion and operation of such facility as planned will adversely and materially affect our business, financial condition, and result of operations.

Building a nuclear fuel processing facility to produce commercial nuclear fuel for SMRs and Microreactor companies involves a highly specialized and regulated process. There will be specific challenges at each stage of development, including but not limited to the following:

- Obtaining the necessary licenses and permits from regulatory authorities can be a complex and time-consuming process. Compliance with stringent safety, security, and environmental regulations is crucial.
- Ensuring the safety and security of the facility and the nuclear materials within it is of utmost importance. Robust safety measures and security protocols must be implemented to prevent accidents, theft, or unauthorized access.

- Fabricating nuclear fuel assemblies and components requires specialized knowledge and expertise in nuclear materials, metallurgy, and manufacturing processes. Recruiting and retaining a skilled workforce can be a challenge.
- Maintaining strict quality control and assurance processes is essential to ensure the reliability and safety of the nuclear fuel. Any defects or substandard materials can have serious consequences.
- Building and operating a nuclear fuel processing facility can be capital-intensive. Managing costs, including construction, operational, and maintenance expenses, is essential for the facility's financial viability.
- Construction delays, regulatory approvals, and unforeseen technical challenges can extend the timeline for facility development, potentially affecting market entry and revenue generation.
- The demand for nuclear fuel can fluctuate based on the deployment of SMRs and Microreactors. Competition from other fuel suppliers and alternative energy sources can also affect market share and profitability.

In 2023, we established a subsidiary, HALEU Energy, to concentrate specifically on creating a domestic HALEU fuel processing facility to supply the next generation of advanced nuclear reactors. In February 2023, we were selected as an official founding member of the DOE's new HALEU Consortium to develop the U.S.' domestic capability for the manufacture of HALEU and its processing. Currently we are still in the process of developing such facility and target to have such facility in operation as soon as 2028.

In March 2023, we entered into a memorandum of understanding with Centrus Energy Corp. (or Centrus), an energy fuel company who will provide HALEU to support HALEU Energy's research and development and commercialization on initial test reactor cores and its commercial variant reactors. However, such a memorandum is not binding on both parties with certain exceptions, such as confidentiality. There is no assurance that we will enter into any purchase agreement with Centrus in future.

If our plan to complete and operate such facility is delayed, suspended, interrupted, or cancelled for whatever reason, our business, financial condition and results of operations will be adversely and materially disrupted, and the value of our securities may significantly decline or become worthless.

We plan to produce a regulatorily licensed, high-capacity HALEU transportation system, capable of moving commercial quantities of HALEU fuel around North America and worldwide . The failure of production and commercialization of such products as planned will adversely and materially affect our business, financial condition, and result of operations.

We intend to produce a regulatorily licensed, high-capacity HALEU transportation system, capable of moving commercial quantities of HALEU fuel around North America and beyond. We received an exclusive license for a high capacity HALEU fuel transportation basket design in April 2024, which will form the basis of a complete transportation package able to move the most commonly utilized fuel. The license grants us, as the licensee, exclusive rights for the use and development of certain transportation technology. If developed and commercialized, we believe this product would be the only one of its kind in North America and would serve as the basis for a domestic HALEU transportation company capable of providing commercial quantities of HALEU fuel. We are targeting to have our fuel transportation business in operation by 2027. However, there is no assurance that we can successfully produce such a product and operate such a business as planned. If our plan to produce and commercialize such product is delayed, suspended, interrupted or cancelled for whatever reason, our business, financial condition and results of operations will be adversely and materially disrupted, and the value of our securities may significantly decline or become worthless.

We plan to provide nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally. Failure to do so as planned will adversely and materially affect our business, financial condition, and result of operations.

We plan to provide nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally. This business opportunity represents our most near-term revenue generating opportunity as we hope to begin providing these services in 2024. By the end of 2024, we expect to start providing nuclear service support and consultation services for the nuclear energy industry, both domestically and internationally. This timeline is based on our plan to acquire a nuclear business services and consultancy provider . We have had preliminary discussions with several potential acquisition targets but have not progressed to definitive understandings or agreements. In combination with our intention to acquire existing revenue generating consultancy businesses, we are focusing on building our own internal nuclear consultation business in coordination with certain outside academic institutions, which we anticipate would require approximately \$1 million over the next twelve months to recruit additional staff and build corresponding infrastructure to be capable of providing these services. No assurances can be given that we will be able to successfully establish and grow our own consultation business, and our failure to do so would adversely affect our nearer term revenue prospects. Moreover, the outlined expenditures and the timelines are estimations only. These are inherently subject to change due to certain factors, including adjustments in the microreactor development plan and uncertainties associated with the licensing approval process. Given that these elements may exceed our initial expectations or lie beyond our control, we cannot guarantee the accuracy of the actual expenditures and timelines.

The current upsurge in interest in nuclear energy, combined with the increased investment from both private and governmental sources within the nuclear space, as well as the global push for zero carbon technologies, has created a demand for nuclear energy expertise which exceeds supply. The increased demand in personnel and nuclear related business activity will create increased demand for personnel involved in the licensing and regulator aspects of the industry, which provide us with potential to root in this area. We have already identified several nuclear business services and consultancy providers, which have been assessed as potentially suitable for acquisition by our company. However, there is no assurance that we can acquire them successfully or as planned. If our plan to start the consulting services is delayed, suspended, interrupted or cancelled for whatever reason, our business, financial condition and results of operations will be adversely and materially disrupted, and the value of our securities may significantly decline or become worthless.

Providing a nuclear consulting service as a business comes with a unique set of difficulties and challenges due to the complexity and sensitivity of the nuclear industry. These challenges and difficulties include, but are not limited to:

- Providing valuable nuclear consulting services requires a deep understanding of nuclear science, engineering, and technology. Maintaining a team with the necessary expertise can be difficult.
- Consulting on nuclear projects involves addressing safety and security issues. Ensuring that clients are compliant with safety protocols and security measures is a critical responsibility.
- Handling sensitive nuclear information and data requires strict security measures and confidentiality protocols to protect classified or proprietary information.
- As a consultant, we may face liability issues if our advice leads to undesirable outcomes or non-compliance with regulations. Managing and mitigating these risks is essential.
- The nuclear consulting market can be competitive, with established consulting firms and experts in the field. Standing out and securing clients can be challenging, especially for newcomers.
- The nuclear industry is evolving with new technologies, safety standards, and market dynamics. Staying updated and adapting to these changes is vital to remain relevant and competitive.
- Managing multiple projects for different clients with varying timelines and needs can be challenging. Effective project management is essential to meet deadlines and deliver quality results.
- Meeting and managing client expectations can be demanding. Clients may have high expectations for the outcomes of their nuclear projects, and effective communication is essential to align expectations with reality.
- Leveraging data analytics and technological advancements can be challenging, especially when dealing with legacy system in the nuclear industry.

For our nuclear consulting business to be viable and grow, it will be crucial for us build a strong team with diverse expertise, stay current with industry trends and regulations, prioritize security and confidentiality, and maintain high ethical standards. Effective communication, networking, and relationship-building with our clients and the regulatory authorities are also essential for establishing our credibility and trust in the industry. Notwithstanding the foregoing, there is no assurance we can address these or similar challenges and difficulties, the failure of which may adversely and materially affect our business, financial condition and results of operation.

If we experience significant fluctuations in our operating results and rate of growth and fail to meet revenue and earnings expectations, our stock price may fall rapidly and without advance notice.

Due to our limited operating history, our unproven and evolving business model and the unpredictability of our emerging industry, we may not be able to accurately forecast our rate of growth. We base our current and future expense levels and our investment plans on estimates of future revenue and future rate of growth. Our expenses and investments are, to a large extent, not fixed and we expect that these expenses will increase in the future. We may not be able to adjust our spending quickly enough if our revenue falls short of our expectations.

Our results of operations depend on both the growth of demand for the products and services we are going to offer in future and the general economic and business conditions throughout the world. A softening of demand for our products and services for any reason will harm our operating results. Terrorist attacks, armed hostilities and wars in the past created, and may in the future create economic and business uncertainty that may also adversely affect our results of operations.

Our revenue and operating results may also fluctuate due to other factors, including:

- our ability of the design, developing, manufacturing and sales of smaller, cheaper, and safer advanced portable clean energy solutions, including nuclear reactors.
- our ability to develop a domestic HALEU fuel processing facility to supply the next generation of advanced nuclear reactors with fuel.
- our ability to produce a regulatorily licensed, high-capacity HALEU transportation system, capable of moving commercial quantities of a variety of HALEU fuels.
- our ability to provide nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally.
- assumptions relating to the size of the market for our nuclear reactors.
- unanticipated regulations of nuclear energy that add barriers to our business and have a negative effect on our operations.
- our estimates of expenses, future revenue, capital requirements and our needs for, or ability to obtain, additional financing.
- new product and service introductions by our competitors.
- technical difficulties or interruptions in our service.
- general economic conditions in our geographic markets.
- additional investment in our service or operations.
- regulatory compliance costs.

As a result of these and other factors, we expect that our operating results may fluctuate significantly on a quarterly basis. We believe that period-to-period comparisons of our operating results may not be meaningful, and you should not rely upon them as an indication of future performance.

Federal budget delays, federal debt ceiling limitations, or reductions in government spending could adversely impact government spending for the products and services we provide.

Federal government spending reductions could adversely impact U.S. government programs related to our products or services. While we believe many of our programs do not conflict with the U.S. government's strategic priorities, government spending on these programs can be subject to negative publicity, political factors and public scrutiny. The risk of future budget delays or reductions is uncertain, and it is possible that spending cuts may be applied to U.S. government programs across the board, regardless of how programs align with those priorities. There are many variables in how budget reductions could be implemented that will determine its specific impact; however, reductions in federal government spending could adversely impact programs in which we provide products or services. In addition, these cuts could adversely affect the viability of the suppliers and subcontractors under our programs.

The cost of electricity generated from nuclear sources may not be cost competitive with other electricity generation sources in some markets, which could materially and adversely affect our business.

Some electricity markets experience very low power prices due to a combination of subsidized renewables and low-cost fuel sources, and we may not be able to compete in these markets unless the benefits of the carbon-free, reliable and/or resilient energy generation are sufficiently valued in the market. Given the relatively lower electricity prices in the United States when compared to many international markets, the risk may be greater with respect to business in the United States.

The market for SMRs generating nuclear power is not yet established and may not achieve the growth potential we expect or may grow more slowly than expected.

The market for SMRs has not yet been established. Our estimates for the total addressable market are based on a number of internal and third-party estimates, including our potential contracted revenue, the number of potential customers, assumed prices and production costs, our ability to leverage our current logistical and operational processes, and general market conditions. However, our assumptions and the data underlying our estimates may not be correct and the conditions supporting our assumptions or estimates may change at any time, thereby reducing the predictive accuracy of these underlying factors. As a result, our estimates of the annual total addressable market for our services, as well as the expected growth rate for the total addressable market for our services, may prove to be incorrect.

All of our officers are presently engaged by us on an independent contractor basis, and they each have management, advisory or directorship positions with other companies and may allocate their time to other businesses, which may pose certain risks in fulfilling their obligations with us.

All of our officers are presently engaged by us as independent contractors due to the fact that they each have management, advisory or directorship positions with other companies and may allocate their time to other businesses. Mr. James Walker, our Chief Executive Officer, currently allocates at least ten hours per week to support Ares Strategic Mining Inc. (or Ares), a Canadian-based company listed on the Canadian Stock Exchange under (Ticker: ARS) engaged in junior natural resource mining, where he is responsible for the construction of plants, purchases of land, operations, marketing, financing, safety regulation compliance, and shareholder relations. He is also concurrently serving on the board of directors of several small-cap publicly traded companies and a consultant to LIST. Mr. Jay Jiang Yu, our founder, President, Secretary and Treasurer, and Chairman of the Board, has concurrently served on the board and management team of several companies and currently allocates at least 15 hours per week to his roles at other companies. Mr. Yu also concurrently serve as president and chairman of the board of LIST. Jaisun Garcha, our Chief Financial Officer, is currently, and will continue to, work full time with us, and is currently also working as the part time chief financial officer and a director of LIST.

Our executive officers are not employees of our company, instead, they serve as independent contractors and can be terminated by either party at any time. They may pursue any other activities and engagements during their terms of agreements with us. The exiting external commitments and any future commitments of our officers to other companies may potentially divert their significant time and attention away from the strategic and operational needs of our company. Their divided focus could lead to delays in decision-making, hinder effective communication within our organization, give rise to potential conflicts of interest, and introduce a divergence in priorities, consequently impacting the overall efficacy of leadership. Additionally, the potential for conflicting interests arising from commitments to multiple entities may pose challenges in aligning those officers' priorities with the long-term goals and interests of our company, thereby introducing an element of uncertainty and potential disruption to our operations. It is essential to acknowledge and address these complexities to ensure that our officers can effectively balance their responsibilities and fulfill their commitments to our company while maintaining transparency and integrity in their various roles. Failure to do so may adversely affect our business, financial conditions, and results of operations.

We may be unable to manage our future growth effectively, which could make it difficult to execute our business strategy.

If our operations grow as planned, we may need to expand our sales and marketing, research and development, supply and manufacturing functions, and there is no guarantee that we will be able to scale our business as planned. If we are not able to achieve and maintain cost-competitiveness in the United States or elsewhere, our business could be materially and adversely affected.

We and our target customers operate in a politically sensitive environment, and the public perception of nuclear energy can affect our target customers and us.

Nuclear energy is closely tied to government policies and regulations due to its potential risks and benefits. Governments often play a central role in the approval, regulation, and funding of nuclear projects. Changes in political leadership or shifts in public sentiment can lead to shifts in nuclear energy policies, which can affect the viability and profitability of nuclear businesses. The regulatory framework for nuclear energy is stringent and subject to public scrutiny. Regulatory decisions can influence the cost, timeline, and feasibility of nuclear projects. Public concerns and political pressure can lead to tighter regulations or stricter enforcement of existing ones. Government policies and incentives, often influenced by public opinion and political considerations, can directly impact the growth and competitiveness of nuclear energy. Favorable policies such as subsidies, tax credits, or incentives for clean energy can attract more customers to the nuclear energy sector.

In addition, public perception of nuclear energy can range from positive to highly skeptical or negative, often influenced by historical events, accidents, and media coverage. Negative public sentiment can lead to protests, legal challenges, and public resistance to new nuclear projects, potentially delaying or preventing their development. Nuclear facilities often need to engage with local communities where they operate. Building and maintaining trust with these communities is crucial for obtaining social acceptance. Public opposition, fueled by concerns about safety or environmental impact, can hinder a company's ability to establish a presence in a particular location. Public perception of nuclear safety and viability can also influence the willingness of investors and financial institutions to fund nuclear projects. Negative public sentiment can increase financing costs and make it more difficult to secure the necessary capital. However, public preferences for energy sources can influence the demand for nuclear energy. A positive perception of nuclear power as a clean and reliable energy source can boost its market appeal. Conversely, public concerns about nuclear safety and waste disposal can lead to decreased demand, impacting a nuclear company's customer base. Additionally, public perception of a country's nuclear industry can affect its ability to export nuclear technology, reactors, and fuel assemblies to international customers. International perceptions of safety and reliability play a role in export decisions.

As a result, the risks associated with nuclear energy materials and the public perception of those risks can affect our business. Opposition by third parties can delay or prevent the construction of new nuclear power plants and can limit the operation of nuclear reactors. Adverse public reaction to developments in the use of nuclear power could directly affect our customers and indirectly affect our business. In the past, adverse public reaction, increased regulatory scrutiny and litigation have contributed to extended construction periods for new nuclear reactors, sometimes delaying construction schedules by decades or more or even shutting down operations. In addition, anti-nuclear groups in Germany successfully lobbied for the adoption of the Nuclear Exit Law in 2002, which led to the shutdown of all German nuclear power plants as of April 15, 2023. Adverse public reaction could also lead to increased regulation or limitations on the activities of our customers, more onerous operating requirements or other conditions that could have a material adverse impact on our target customers and our business.

Accidents involving nuclear power facilities, including but not limited to events like the Three Mile Island, Chernobyl and Fukushima Daiichi nuclear accidents, or terrorist acts or other high-profile events involving radioactive materials could materially and adversely affect our target customers and the markets in which we operate and increase regulatory requirements and costs that could materially and adversely affect our business.

Our future prospects are dependent upon a certain level of public support for nuclear power. Nuclear power faces strong opposition from certain competitive energy sources, individuals and organizations. The accident that occurred at the Fukushima nuclear power plant in Japan in 2011 increased public opposition to nuclear power in some countries, resulting in a slowdown in, or, in some cases, a complete halt to new construction of nuclear power plants, an early shut down of existing power plants or a dampening of the favorable regulatory climate needed to introduce new nuclear technologies, all of which could negatively impact our business and prospects. As a result of the Fukushima accident, some countries that were considering launching new domestic nuclear power programs delayed or cancelled the preparatory activities they were planning to undertake as part of such programs. If accidents similar to the Fukushima disaster or other events, such as terrorist attacks involving nuclear facilities, occur, public opposition to nuclear power may increase, regulatory requirements and costs could become more onerous, which could materially and adversely affect our business and operations.

Risks Related to Our Intellectual Property

If we fail to develop, gain approval for, protect or enforce our intellectual property or proprietary rights, our business and operating results could be harmed.

We currently own the rights to the significant majority of our intellectual property, including one trademark pending registration. We received an exclusive license for a high capacity HALEU fuel transportation basket design in April 2024, which will form the basis of a complete transportation system to move a range of fuel types. The license grants us, as the licensee, exclusive rights for use and development of the technology. In addition, the licensor is not permitted to license the technology to any other parties within the specified scope. We may enter into other license agreements in future for our business development. There is no assurance that we, as the licensee, will be able to obtain or renew, if at all or in a timely manner, any of the license agreements upon its expiration. Failure to obtain or renew, or early termination of, any such agreement may materially and adversely affect our business, financial conditions and results of operations.

We regard the protection of our trade secrets, trademarks, licenses, trade dress, patents and copyrights (if any, in future), domain names and other intellectual property or proprietary rights as critical to our success. We strive to protect our intellectual property rights by relying on federal, state and common law rights, as well as contractual restrictions. We seek to protect our confidential proprietary information, in part, by entering into consulting agreements, and/or services or employment agreements that contain non-disclosure and non-use provisions with our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology. However, we cannot be certain that we have executed such agreements with all parties who may have helped to develop our intellectual property or who had access to our proprietary information, nor can we be certain that our agreements will not be breached. Any party with whom we have executed such an agreement could potentially breach that agreement and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. We cannot guarantee that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Detecting the disclosure or misappropriation of a trade secret and enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, time-consuming and could result in substantial costs and the outcome of such a claim is unpredictable. Further, the laws of certain foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property or proprietary rights both in the United States and abroad. If we are unable to prevent the disclosure of our trade secrets to third parties, or if our competitors independently develop any of our trade secrets, we may not be able to establish or maintain a competitive advantage in our market, which could harm our business.

We currently have no registered patents related to our technology, but we have two patent applications with The United States Patent and Trademark Office (USPTO), pending approval. We believe developing technology more comprehensively before patenting it provides our company with certain potential strategic advantages. We are balancing the advantages of comprehensive development with the risk of potential delays in securing patent protection and continue to consult qualified intellectual property counsel so we can make informed decisions regarding the timing of other patent filings and the overall protection strategy. Patent laws, and scope of coverage afforded by them, have recently been subject to significant changes, such as the change to “first-to-file” from “first-to-invent” resulting from the Leahy-Smith America Invents Act. This change in the determination of inventorship may result in inventors and companies having to file patent applications more frequently to preserve rights in their inventions, which may favor larger competitors that have the resources to file more patent applications. Another change to the patent laws may incentivize third parties to challenge any issued patent in the USPTO, as opposed to having to bring such an action in U.S. federal court. Any invalidation of a patent claim could have a significant impact on our ability to protect the innovations contained within our products and could harm our business.

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions to maintain patent applications and issued patents. We may fail to take the necessary actions and to pay the applicable fees to obtain or maintain our patents in future. Non-compliance with these requirements can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to use our technologies and enter the market earlier than would otherwise have been the case.

We pursue the registration of our domain names, trademarks and service marks in the United States. We may seek to protect our trademarks, patents and domain names in an increasing number of jurisdictions in future, a process that is expensive and time-consuming and may not be successful or which we may not pursue in every location.

Litigation may be necessary to enforce our intellectual property or proprietary rights, protect our trade secrets or determine the validity and scope of proprietary rights claimed by others. Any litigation of this nature, regardless of outcome or merit, could result in substantial costs, adverse publicity or diversion of management and technical resources, any of which could adversely affect our business and operating results. If we fail to maintain, protect and enhance our intellectual property or proprietary rights, our business may be harmed.

We rely on our unpatented proprietary technology, trade secrets, designs, experiences, workflows, data, processes, software and know-how.

We rely on proprietary information (such as trade secrets, know-how and confidential information) to protect intellectual property that may not be patentable or subject to copyright, trademark, trade dress or service mark protection, or that we believe is best protected by means that do not require public disclosure. We generally seek to protect this proprietary information by entering into consulting agreements, and/or services or employment agreements that contain non-disclosure and non-use provisions with our employees, consultants, contractors and third parties. However, we may fail to enter into the necessary agreements, and even if entered into, these agreements may be breached or may otherwise fail to prevent disclosure, third-party infringement or misappropriation of our proprietary information, may be limited as to their term and may not provide an adequate remedy in the event of unauthorized disclosure or use of proprietary information. We have limited control over the protection of trade secrets used by our current or future partners and suppliers and could lose future trade secret protection if any unauthorized disclosure of such information occurs. In addition, our proprietary information may otherwise become known or be independently developed by our competitors or other third parties. To the extent that our employees, consultants, contractors, advisors and other third parties use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain protection for our proprietary information could adversely affect our competitive business position. Furthermore, laws regarding trade secret rights in certain markets where we operate may afford little or no protection to its trade secrets.

We also rely on physical and electronic security measures to protect our proprietary information, but we cannot provide assurance that these security measures will not be breached or provide adequate protection for our property. There is a risk that third parties may obtain and improperly utilize our proprietary information to our competitive disadvantage. We may not be able to detect or prevent the unauthorized use of such information or take appropriate and timely steps to enforce our intellectual property rights.

We may be accused of infringing intellectual property rights of third parties and content restrictions of relevant laws, which may materially and adversely affect our business, financial condition, and results of operations.

Third parties may claim that the technology used in the operation of our business infringes upon their intellectual property rights. Although we have not in the past faced any litigation involving direct claims of infringement by us, the possibility of intellectual property claims against us increases as we continue to grow. Such claims, whether having merit, may result in our expenditure of significant financial and management resources, injunctions against us or payment of damages. We may need to obtain licenses from third parties who allege that we have infringed their rights, but such licenses may not be available on terms acceptable to us or at all. These risks have been amplified by the increase in third parties whose sole or primary business is to assert such claims.

The outcome of any claims, investigations and proceedings is inherently uncertain, and in any event defending against these claims could be both costly and time-consuming and could significantly divert the efforts and resources of our management and other personnel. An adverse determination in any such litigation or proceedings could cause us to pay damages, as well as legal and other costs, limit our ability to conduct business or require us to change the manner in which we operate.

Risks Related to Regulation and Compliance

Our business is subject to a wide variety of extensive and evolving government laws and regulations. Changes in and/or failure to comply with such laws and regulations could have a material adverse effect on our business.

We are subject to new or changing international, federal, state, and local regulations, including laws relating to the design, development, manufacturing, marketing, servicing, or sales of our nuclear-fuel related products. Such laws and regulations may require us to pause sales and modify our products, which could result in a material adverse effect on our ability to generate revenues (or any future revenues) and our financial condition generally. Such laws and regulations can also give rise to liability such as fines and penalties, property damage, bodily injury, and cleanup costs. Failure to comply with such regulations could lead to the withdrawal or recall of our products from the market, delay our projected revenues, increase cost, or make our business unviable if we are unable to modify our products to comply. Capital and operating expenses needed to comply with laws and regulations can be significant, and violations may result in substantial fines and penalties, third-party damages, suspension of production or a cessation of our operations. Any failure to comply with such laws or regulations could lead to withdrawal or recall of our products from the market.

Regulatory risk factors associated with our business also include our ability to obtain additional applicable approvals, licenses or certifications from regulatory agencies, if required, and to maintain current approvals, licenses or certifications. Any regulatory delays, delays imposed as a result of regulatory inspections and changing regulatory requirements, may impede our planned actions from being implemented or completed, many of which may be out of our control. Any natural disasters, changes in governmental regulations or in the status of our regulatory approvals or applications or other events that force us to cancel or reschedule our product development and production, could have an adverse impact on our business and financial condition.

We are subject to U.S. and foreign anti-corruption and anti-money laundering laws and regulations. We can face criminal liability and other serious consequences for violations, which can harm our business.

We are subject to the U.S. Foreign Corrupt Practices Act, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the Money Laundering Control Act 18 U.S.C. §§ 1956 and 1957, and other anti-bribery and anti-money laundering laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors and other collaborators from authorizing, promising, offering or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector, and require that we keep accurate books and records and maintain internal accounting controls designed to prevent any such actions. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities.

As we intend to conduct international cross-border business and expand our operations abroad, we may engage business partners and third-party intermediaries to market our products and to obtain necessary permits, licenses and other regulatory approvals overseas. In addition, we or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners and agents, even if we do not explicitly authorize such activities. We cannot assure you that all of our employees and agents will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible. As we intend to expand our international business, our risks under these laws may increase.

Detecting, investigating and resolving actual or alleged violations of anti-corruption laws can require a significant diversion of time, resources and attention from our management. In addition, non-compliance with anti-corruption or anti-bribery laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, enforcement actions, fines, damages, other civil or criminal penalties, injunctions, suspension or debarment from contracting with certain persons, reputational harm, adverse media coverage and other collateral consequences. If any subpoenas are received or investigations are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal proceeding, our business, operating results and financial condition could be materially harmed.

If we fail to comply with the laws and regulations relating to the collection of sales tax and payment of income taxes in the various states in which we do business, we could be exposed to unexpected costs, expenses, penalties and fees as a result of our non-compliance, which could harm our business.

By engaging in business activities in the United States, we become subject to various state laws and regulations, including requirements to collect sales tax from our sales within those states, and the payment of income taxes on revenue generated from activities in those states. A successful assertion by one or more states that we were required to collect sales or other taxes or to pay income taxes where we did not could result in substantial tax liabilities, fees and expenses, including substantial interest and penalty charges, which could harm our business.

General Risk Factors Associated with Our Company

We are highly dependent on our senior management team and other highly skilled personnel. If we are unable to attract, retain and maintain highly qualified personnel, including our senior management team, we may not be able to implement our business strategy and our business and results of operations would be harmed.

Our business and prospectus are highly dependent on the continued services of our senior management team, particularly our Chief Executive Officer James Walker, our President, Secretary, Treasurer, and Chairman of the Board Jay Jiang Yu, our Chief Financial Officer Jaisun Garcha, and our Chief Policy Officer Winston Khun Hunn Chow. Our senior management team has extensive experience in the energy and finance industries, and we believe that their depth of experience is instrumental to our continued success. See “*Management*” for further details. The loss of any one or more members of our senior management team, for any reason, including resignation or retirement, could impair our ability to execute our business strategy and have a material adverse effect on our business and financial condition if we are unable to successfully attract and retain qualified and highly skilled replacement personnel.

In addition, our ability to execute our plans and grow our company will depend in large part on our ability to attract, motivate, develop, retain and maintain a sufficient number of other highly skilled personnel, including engineers, nuclear energy professionals, finance, marketing and sales personnel. Maintaining a diverse team of skilled personnel who can collectively address the technical, regulatory, financial, and operational aspects of our business, including but not limited to, nuclear engineers and scientists, regulatory and licensing experts, safety and security experts, quality control and assurance managers, environmental and waste management experts, and financial and legal professionals, is also essential to our business. Our goal is to build a well-rounded and experienced team with expertise in these areas to ensure the development, operation, and commercialization of our business, while ensuring safety, regulatory compliance, and long-term viability.

However, if we are unable to attract, retain, and maintain our senior management team and other highly skilled personnel, we may not be able to implement our business strategy, and our business, financial condition and results of operations may be adversely and materially affected. If any of our senior management team members were to terminate his or her employment with us, there can be no assurance that we would be able to find suitable replacements in a timely manner, at acceptable cost or at all. The loss of services of senior management team members or the inability to identify, hire, train and retain other qualified and managerial personnel in the future may materially and adversely affect our business, financial condition, results of operations and prospects.

Mr. Jay Jiang Yu, our President, Secretary, Treasurer, and Chairman of the Board, has a significant influence over our company due to his ownership of a material percentage of our outstanding common stock. Also, his interests may not always be aligned with the interests of our other stockholders, which may lead to conflicts of interest that harm our company.

As of the date of this prospectus, Mr. Jay Jiang Yu, our President and Chairman, beneficially owns an aggregate of approximately 36.02% shares of our common stock and is expected to own approximately [_____] % shares of our common stock upon the completion of this offering assuming no exercise of the over-allotment option for this offering. Due to his ownership of a material percentage of our outstanding common stock, Mr. Yu could have significant influence in determining the outcome of any corporate transaction or other matter submitted to the stockholders for approval, including mergers, consolidations, the appointment of directors and other significant corporate actions. Without the consent of Mr. Yu, we may be prevented from entering into transactions that could be beneficial to us or our other stockholders. Moreover, our interests and the interests of Mr. Yu may not always be aligned, which could create conflicts of interest of Mr. Yu and may not be resolved in favor of all of our stockholders or may otherwise harm our company. For more information regarding Mr. Yu's ownership of our company, see "Principal Stockholders".

We have undertaken and may continue pursue strategic acquisitions to accelerate our growth. These acquisitions may not be successful. We may not be able to successfully integrate our previous and future acquisitions or generate sufficient revenues from future acquisitions, which could cause our business to suffer.

If we buy a company, a division of a company or assets that we feel are complementary to our business, there can be no assurance that we will be able to profitably manage such business or successfully integrate such business or assets without substantial costs, delays or other operational or financial problems. There can be no assurance that the businesses or assets we acquire in the future will achieve anticipated revenues and earnings. Additionally:

- the key personnel of the acquired business may decide not to work for us;
- changes in management at an acquired business may impair its relationships with employees and customers;
- we may be unable to maintain uniform standards, controls, procedures and policies among acquired businesses;
- we may be unable to successfully implement infrastructure, logistics and system integration;
- we may be held liable for legal claims (including environmental claims) arising out of activities of the acquired businesses prior to our acquisitions, some of which we may not have discovered during our due diligence, and we may not have indemnification claims available to us or we may not be able to realize on any indemnification claims with respect to those legal claims;
- we will assume risks associated with deficiencies in the internal control of acquired businesses;
- we may not be able to realize the cost savings or other financial benefits we anticipated; and
- our ongoing business may be disrupted or receive insufficient management attention.

We face these and similar risks in connection with our June 2024 acquisition of the ALIP technology. We may not be able to successfully integrate the ALIP technology into our microreactor designs, which could lead to a loss of our investment in this technology. Moreover, we anticipate, pending the successful completion of the SBIR III program for the ALIP technology (which we are funding), that we will seek to separately commercialize the ALIP technology as a means of generating revenues. We are thus faced with the risks that the SBIR Phase III may not be completed on a timely basis or at all, and further that we may be unable to commercially sell or license the technology (or products derived from the technology) to third parties.

Also, future acquisitions may require us to obtain additional equity or debt financing, which may not be available on attractive terms. Moreover, to the extent an acquisition transaction financed by non-equity consideration results in additional goodwill, it will reduce our tangible net worth, which might have an adverse effect on our credit and bonding capacity.

Failure to establish and maintain effective internal control in accordance with Section 404 of the Sarbanes-Oxley Act could have a material adverse effect on our business and stock price.

Prior to the completion of our initial public offering in May 2024, we were a private company with limited accounting personnel to adequately execute our accounting processes and limited supervisory resources with which to address our internal control over financial reporting. As a private company, we did not design or maintain an effective control environment as required of public companies under the rules of the SEC implementing Section 404 of the Sarbanes-Oxley Act and therefore are not required to make a formal assessment of the effectiveness of our internal control over financial reporting for that purpose. Specifically, we lack a sufficient number of professionals with an appropriate level of accounting knowledge, training and experience to appropriately analyze, record and disclose accounting matters timely and accurately while maintaining appropriate segregation of duties.

Upon becoming a publicly traded company, we became required to comply with the SEC's rules implementing Sections 302 and 404 of the Sarbanes-Oxley Act, which require management to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of controls over financial reporting. Though we are required to disclose changes made in our internal controls and procedures on a quarterly basis, we are not required to make our first annual assessment of our internal control over financial reporting pursuant to Section 404 until the year following our first annual report required to be filed with the SEC.

Proper system of internal control over financial accounting and disclosure controls and procedures are critical to the operation of a public company. We may be unable to effectively establish such system, especially in light of the fact that we expect to operate as a publicly reporting company. This would leave us without the ability to reliably assimilate and compile financial information about our company and significantly impair our ability to prevent error and detect fraud, all of which would have a negative impact on our company from many perspectives.

Moreover, we do not expect that disclosure control or internal control over financial reporting, even if established, will prevent all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in the control system, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Failure of our control system to prevent error or fraud could materially adversely impact us.

Our ability to effectively manage our anticipated growth and expansion of our operations will also require us to enhance our operational, financial and management controls and infrastructure, human resources policies and reporting system. These enhancements and improvements will require significant capital expenditures and allocation of valuable management and employee resources.

We expect to experience significant growth in the scope and nature of our operations. Our ability to manage our operations and future growth will require us to continue to improve our operational, financial and management controls, compliance programs and reporting system. We may not be able to implement improvements in an efficient or timely manner and may discover deficiencies in existing controls, programs, systems and procedures, which could have an adverse effect on our business, reputation and financial results. Additionally, rapid growth in our business may place a strain on our human and capital resources. Furthermore, we expect to continue to conduct our business internationally and anticipate increased business operations in the United States, Asia, and Europe. Asia and Europe are obvious destinations to launch manufacturing operations given the high demand for clean technologies, developed technical workforce, and strong manufacturing bases with nuclear experience. We will also be targeting developing countries that could benefit from the introduction of mobile, remote, power sources able to unlock a lot of economic resources. These diversified, global operations place increased demands on our limited resources and require us to substantially expand the capabilities of our administrative and operational resources and to attract, train, manage and retain qualified management, technical, experts, engineering, sales and other personnel, the failure of which may adversely affect our business, financial condition and results of operations.

We will incur significantly increased costs as a result of, and devote substantial management time to operating as, a public company.

As a public company, we will incur significant legal, accounting, and other expenses that we did not incur as a private company. For example, we will be subject to the reporting requirements of the Exchange Act and will be required to comply with the applicable requirements of the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act, as well as rules and regulations subsequently implemented by the SEC, including the establishment and maintenance of effective disclosure and financial controls, changes in corporate governance practices and required filing of annual, quarterly and current reports with respect to our business and operating results. These requirements will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. In addition, our management and other personnel will need to divert attention from operational and other business matters to devote substantial time to these public company requirements. We will also need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge and will need to establish an internal audit function. We also expect that operating as a public company will make it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. This could also make it more difficult for us to attract and retain qualified people to serve on our board of directors, our board committees or as executive officers. In addition, after we no longer qualify as an “emerging growth company,” as defined under the JOBS Act we expect to incur additional management time and cost to comply with the more stringent reporting requirements applicable to companies that are deemed accelerated filers or large accelerated filers, including complying with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act. We are just beginning the process of compiling the system and processing documentation needed to comply with such requirements. We may not be able to complete our evaluation, testing and any required remediation in a timely fashion. In that regard, we currently do not have an internal audit function, and we will need to hire or contract additional accounting and financial staff with appropriate public company experience and technical accounting knowledge.

We cannot predict or estimate the amount of additional costs we may incur as a result of becoming a public company or the timing of such costs.

We are an “emerging growth company,” and we cannot be certain if the reduced reporting and disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act, and we may take advantage of certain exemptions from reporting requirements that are applicable to other public companies that are not “emerging growth companies,” including the auditor attestation requirements of Section 404, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. Pursuant to Section 107 of the JOBS Act, as an emerging growth company, we have elected to use the extended transition period for complying with new or revised accounting standards until those standards would otherwise apply to private companies. As a result, our financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make our common stock less attractive to investors. In addition, if we cease to be an emerging growth company, we will no longer be able to use the extended transition period for complying with new or revised accounting standards.

We will remain an emerging growth company until the earliest of: (1) the last day of the fiscal year following the fifth anniversary of our listing; (2) the last day of the first fiscal year in which our annual gross revenues exceed \$1.235 billion; (3) the date on which we have, during the previous rolling three-year period, issued more than \$1 billion in non-convertible debt securities; and (4) the date on which we are deemed to be a “large accelerated filer” under the rules of the SEC.

We cannot predict if investors will find our common stock less attractive if we choose to rely on these exemptions. For example, if we do not adopt a new or revised accounting standard, our future results of operations may not be comparable to the results of operations of certain other companies in our industry that adopted such standards. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile.

If our estimates or judgments relating to our critical accounting policies prove to be incorrect, our results of operations could be adversely affected.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in our financial statements and accompanying notes appearing elsewhere in this prospectus. We base our estimates on short duration historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in the section titled “*Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates.*” The results of these estimates form the basis for making judgments about the carrying values of assets, liabilities, and equity, and the amount of revenue and expenses. Significant estimates and judgments involve: legal contingencies; valuation of our common stock and equity awards; and income taxes. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

Our current insurance coverage may not be adequate, and we may not be able to obtain insurance at acceptable rates, or at all.

We currently have director & officer liability insurance for our officers and certain directors. We do not carry any key-man life insurance, business liability and other professional liability insurance. Neither have we purchased any property insurance or business interruption insurance. Even if we purchase these kinds of insurance, the insurance may not fully protect us from the financial impact of defending against product liability or professional liability claims that may occur in future. As we are still at the development stage and we have not produced any products yet, we have determined that our current insurance coverage is sufficient for our business operations in the U.S. However, the local government may take an opposite position against us and we may need to purchase additional insurance to operate our business. If we fail to obtain the insurance as required by the local government, or if we were to incur substantial losses or liabilities due to fire, explosions, floods, other natural disasters or accidents or business interruption, our business and results of operations could be materially and adversely affected.

Our business is subject to the risks of earthquakes, fire, floods and other natural catastrophic events, global pandemics, and interruptions by man-made problems, such as network security breaches, computer viruses or terrorism. Material disruptions of our business or information system resulting from these events could adversely affect our operating results.

We are vulnerable to damage from catastrophic events, such as natural disasters, power loss, and similar unforeseen events beyond our control. The global pandemics or fear of spread of contagious diseases, such as COVID-19, Ebola virus disease (EVD), Middle East respiratory syndrome (MERS), severe acute respiratory syndrome (SARS), H1N1 flu, H7N9 flu, and avian flu, as well the catastrophic events could disrupt our business operations, reduce or restrict our supply of products and services, incur significant costs to protect our employees and facilities, or result in regional or global economic distress, which may materially and adversely affect our business, financial condition, and results of operations. Actual or threatened war, terrorist activities, political unrest, civil strife, and other geopolitical uncertainty could have a similar adverse effect on our business, financial condition, and results of operations. Any one or more of these events may adversely affect our operation results, or even for a prolonged period of time, which could materially and adversely affect our business, financial condition, and results of operations.

We cannot assure you that we are adequately protected from the effects of earthquakes, fire, floods, typhoons, earthquakes, global pandemics, power loss, telecommunications failures, break-ins, war, riots, network security breaches, computer viruses terrorist attacks, or similar events. Any of the foregoing events may give rise to interruptions, damage to our property, delays in production, breakdowns, system failures, technology platform failures, or internet failures, which could cause the loss or corruption of data or malfunctions of our internet system as well as adversely affect our business, financial condition, and results of operations.

If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, damaged critical infrastructure, or otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place are unlikely to provide adequate protection in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business.

Risks Related to Our Securities and this Offering

The trading market for our common stock is very new, and consistently robust and liquid trading market may not develop or be sustained over the long term.

We only recently conducted our initial public offering in May 2024, and so the trading market for our common stock is very new and unestablished. If a consistently robust and liquid trading market for our common stock does not develop, you may not be able to sell your shares quickly or at the market price. Our ability to raise capital to continue to fund operations by selling our securities and our ability to acquire other companies or technologies by using our securities as consideration may also be impaired.

The trading price of our common stock has been and may continue to be volatile, and you could lose all or part of your investment.

Since our initial public offering, the market for our common stock has been volatile, including significant increases and decreases in the price of our stock. The trading price of our common stock is likely to continue to be volatile and could continue to be subject to fluctuations in response to various factors, some of which are beyond our control. These fluctuations could cause you to lose all or part of your investment in our common stock as you might be unable to sell your shares at or above the price you paid in this offering. Factors that could cause fluctuations in the trading price of our common stock include the following:

- price and volume fluctuations in the overall stock market from time to time;
- volatility in the trading prices and trading volumes of transportation stocks;
- changes in operating performance and stock market valuations of other transportation companies generally, or those in our industry in particular;
- sales of shares of our common stock by us or our stockholders;
- failure of securities analysts to maintain coverage of us, changes in financial estimates by securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- the financial projections we may provide to the public, any changes in those projections, or our failure to meet those projections;
- announcements by us or our competitors of new products, features, or services;
- the public's reaction to our press releases, other public announcements and filings with the SEC;
- rumors and market speculation involving us or other companies in our industry;
- actual or anticipated changes in our results of operations or fluctuations in our results of operations;
- actual or anticipated developments in our business, our competitors' businesses or the competitive landscape generally;
- litigation involving us, our industry, or both, or investigations by regulators into our operations or those of our competitors;
- developments or disputes concerning our intellectual property or other proprietary rights;
- announced or completed acquisitions of businesses, products, services or technologies by us or our competitors;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- changes in accounting standards, policies, guidelines, interpretations or principles;
- any significant change in our management; and
- general economic conditions and slow or negative growth of our markets.

Notwithstanding the foregoing potential causes of volatility, you are cautioned that specific causes volatility are never perfectly clear. Moreover, our relatively small public float may amplify the impact the actions taken by a few stockholders have on the price of our common stock, which may cause the price of our common stock to deviate, potentially significantly, from a price that better reflects the underlying performance of our business.

Also, in recent years, the stock markets generally have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of listed companies. Broad market and industry factors may significantly affect the market price of our common stock, regardless of our actual operating performance. These fluctuations may be even more pronounced in the trading market for our common stock shortly following this offering. Volatility in our common stock could lead to the loss of some or all of your investment.

In addition, in the past, following periods of volatility in the overall market and in the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. This litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

There is no public market for the Warrants being offered in this offering, so an investment in the Warrants should be considered illiquid.

There is no established trading market for the Warrants being offered in this offering and we do not expect a market to develop. In addition, we do not intend and are not obligated to apply to list the Warrants on any national securities exchange or other nationally recognized trading system, including The Nasdaq Capital Market. Without an active trading market, the liquidity of the Warrants will be very limited.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. If only a limited number of securities or industry analysts commence coverage of our company, the trading price for our stock could be negatively impacted. If one or more of the analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price and trading volume to decline.

Future sales of our common stock or securities convertible into our common stock may depress our stock price.

Sales of a substantial number of shares of our common stock or securities convertible into our common stock (such as the Warrants issued in this offering) in the public market after the completion of this offering, or the perception that these sales could occur, could adversely affect the market price of our common stock and could materially impair our ability to raise capital through equity offerings in the future.

The common stock sold in this offering will be freely tradable without restriction or further registration under the Securities Act, and shares held by our existing stockholders may also be sold in the public market in the future subject to the restrictions in Rule 144 under the Securities Act and the applicable lock-up agreements and leak-out agreements. Following the consummation of this offering, there will be [] shares of common stock outstanding immediately after this offering assuming full exercise of the over-allotment option for this offering, and [] shares of common stock assuming no exercise of the over-allotment option. No lock-up agreements will be required in connection with this offering. Notwithstanding the foregoing, in connection with our initial public offering, we and each of our directors and officers named in the section “*Management*,” and our existing stockholders holding five percent (5%) or more of our common stock prior to this offering have agreed not to sell shares of common stock for a period of six (6) months from the date of the closing of our initial public offering without the prior written consent of the representative of the underwriters, subject to customary exceptions. In addition, each existing stockholder of our company who holds less than five percent (5%) of our common stock prior to our initial public offering is subject to leak-out agreement restricting sales of certain percentages of their common stock during a period ranging from 30 days to 150 days following the closing of our initial public offering. The representative of the underwriters may release these securities from lock-up restrictions at any time, subject to applicable regulations of the Financial Industry Regulatory Authority, Inc. (or FINRA). We cannot predict what effect, if any, market sales of securities held by our significant stockholders or any other stockholders or the availability of these securities for future sale will have on the market price of our common stock. See “*Underwriting*” and “*Shares Eligible for Future Sale*” for a more detailed description of the restrictions on selling our securities after this offering.

Our failure to meet the continued listing requirements of Nasdaq could result in a delisting of our common stock.

We cannot assure you that our securities will continue to be listed on Nasdaq even if our securities are listed on Nasdaq. Following this offering, in order to maintain our listing on Nasdaq, we will be required to comply with certain Nasdaq continuing listing rules, including those regarding minimum stockholders' equity, minimum share price, minimum market value of publicly held shares, corporate governance and various additional requirements. If we are unable to satisfy Nasdaq criteria for maintaining our listing, our securities could be subject to delisting. Such a delisting would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a delisting, we can provide no assurance that any action taken by us to restore compliance with continuing listing requirements would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the Nasdaq minimum bid price requirement or prevent future non-compliance with Nasdaq's listing requirements.

Our management will have broad discretion in how we use the net proceeds of this offering and might not use them effectively.

Our management will have considerable discretion over the use of proceeds from this offering. We currently intend to use the net proceeds from this offering for (i) research and development of our products and technologies, including the microreactors, nuclear fuel facilities, and nuclear fuel transportation design optimization, test work and scoping studies; (ii) marketing, promotion and business development activities; and (iii) regulatory compliance, intellectual property protection, hiring additional employees, retaining additional contractors and building out our facility in Oak Ridge, Tennessee. You will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used in a manner which you may consider most appropriate. Our management might spend a portion or all of the net proceeds from this offering in ways that our stockholders do not desire or that do not necessarily improve our operating results or enhance the value of our common stock. The failure of our management to apply these proceeds effectively could, among other things, result in unfavorable returns and uncertainty about our prospects, each of which could cause the price of our common stock to decline.

You will experience immediate and substantial dilution as a result of this offering and may experience additional dilution in the future.

You will incur immediate and substantial dilution as a result of this offering. After giving effect to the sale by us of [_____] Units in this offering at an assumed public offering price of \$[_____] per Unit, and after deducting underwriting discounts and estimated offering expenses payable by us, investors in this offering can expect an immediate dilution of \$[_____] per share at the assumed public offering price. Additionally, to the extent that outstanding warrants, or options we will grant to our officers, directors and employees, are ultimately exercised, you will sustain future dilution. We may also acquire new businesses or finance strategic alliances by issuing equity, which may result in additional dilution to our stockholders. Following the completion of this offering, our board of directors has the authority, within any limitations prescribed by relevant laws and our charter documents, to issue all or any part of our authorized but unissued shares of common stock, including shares issuable upon the exercise of options, or shares of our authorized but unissued preferred stock. Issuances of common stock or voting preferred stock would reduce your influence over matters on which our stockholders vote and, in the case of issuances of preferred stock, would likely result in your interest in us being subject to the prior rights of holders of that preferred stock. See the section entitled "Dilution."

An investment in our company may involve tax implications, and you are encouraged to consult your own advisors as neither we nor any related party is offering any tax assurances or guidance regarding our company or your investment.

An investment in our company generally involves complex federal, state and local income tax considerations. Neither the Internal Revenue Service nor any State or local taxing authority has reviewed the transactions described herein and may take different positions than the ones contemplated by management. You are strongly urged to consult your own tax and other advisors prior to investing, as neither we nor any of our officers, directors or related parties is offering you tax or similar advice, nor are any such persons making any representations and warrants regarding such matters.

Unanticipated changes in effective tax rates or adverse outcomes resulting from examination of our income or other tax returns could adversely affect our financial condition and results of operations.

We will be subject to income taxes in the United States, and our domestic tax liabilities will be subject to the allocation of expenses in differing jurisdictions. Our future effective tax rates could be subject to volatility or adversely affected by a number of factors, including:

- changes in the valuation of our deferred tax assets and liabilities;
- expected timing and amount of the release of any tax valuation allowances;
- tax effects of stock-based compensation;
- costs related to intercompany restructurings; or
- changes in tax laws, regulations or interpretations thereof.

In addition, we may be subject to audits of our income, sales and other transaction taxes by federal, state and local authorities. Outcomes from these audits could have an adverse effect on our financial condition and results of operations.

Anti-takeover provisions in Nevada law could discourage, delay or prevent a change in control of our company and may affect the trading price of our common stock.

Some of the provisions of Nevada law may have the effect of delaying, deferring or discouraging another person from acquiring control of our company or removing our incumbent officers and directors. These provisions are expected to discourage certain types of coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection against an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging such proposals.

We have never paid dividends on our capital stock, and we do not anticipate to pay dividends for the foreseeable future.

We have never declared or paid any cash dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future. The payment of dividends, if any, in the future is within the discretion of our board of directors and will depend on our earnings, capital requirements and financial condition and other relevant facts. We currently intend to retain all future earnings, if any, to finance the development and growth of our business. Accordingly, you must rely on the sale of your common stock after price appreciation, which may never occur, as the only way to realize any future gain on your investment.

Our bylaws designate certain courts as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, a state or federal court located in the State of Nevada shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of our company, (ii) any action asserting a claim for breach of a fiduciary duty owed by any director, officer or other employee of our company to us or our stockholders, (iii) any actions asserting a claim arising pursuant to any provision of the NRS, our Articles of Incorporation or our amended and restated bylaws, in each case as amended, or (iv) any action asserting a claim governed by the internal affairs doctrine, in each such case subject to such court having personal jurisdiction over the indispensable parties named as defendants therein (the "Nevada Forum Provision"). This, however, shall not apply to claims or causes of action brought to enforce a duty or liability created by the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, or any other claim for which the federal courts have exclusive jurisdiction. Our bylaws further provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act of 1933, as amended (the "Federal Forum Provision"). In addition, our bylaws provide that any person or entity purchasing or otherwise acquiring any interest in shares of our common stock is deemed to have notice of and consented to the Nevada Forum Provision and the Federal Forum Provision.

Section 27 of the Securities Exchange Act of 1934, as amended, creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, the Nevada Forum Provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. We note, however, that there is uncertainty as to whether a court would enforce this provision and that investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

We recognize that the Nevada Forum Provision and the Federal Forum Provision in our bylaws may impose additional litigation costs on stockholders in pursuing any such claims, particularly if the stockholders do not reside in or near the State of Nevada. Additionally, the Nevada Forum Provision and the Federal Forum Provision may limit our stockholders' ability to bring a claim in a forum that they find favorable for disputes with us or our directors, officers or employees, which may discourage such lawsuits against us and our directors, officers and employees even though an action, if successful, might benefit our stockholders. If the Federal Forum Provision is found to be unenforceable, we may incur additional costs associated with resolving such matters. The Federal Forum Provision may also impose additional litigation costs on stockholders who assert that the provision is not enforceable or invalid. The competent courts of the State of Nevada and the United States District Court may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than our stockholders.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The information in this prospectus contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements contained in this prospectus other than statements of historical fact, including statements regarding our future operating results and financial position, our business strategy and plans, market growth, and our objectives for future operations, are forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

You can identify some of these forward-looking statements by words or phrases such as “may,” “will,” “could,” “would,” “expect,” “anticipate,” “aim,” “estimate,” “intend,” “plan,” “believe,” “is/are likely to,” “potential,” “project,” “target,” “continue” or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words. The forward-looking statements in this prospectus are only predictions and are based largely on our current expectations and projections about future events and financial trends that we reasonably believe may affect our business, financial condition, and results of operations. Although we believe the expectations reflected in any of our forward-looking statements are reasonable, actual results could differ materially from those projected or assumed in any of our forward-looking statements. Our future financial condition and results of operations, as well as any forward-looking statements, are subject to change and inherent risks and uncertainties.

These forward-looking statements present our estimates and assumptions only as of the date of this prospectus and are subject to many significant known and unknown risks, uncertainties, and assumptions. Accordingly, you are cautioned not to place undue reliance on forward-looking statements, which speak only as of the dates on which they are made. Important factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, those summarized below:

- Our ability to design, develop, manufacture and sell our proposed micro nuclear reactors and related technologies we have or may in the future acquire.
- Our ability to develop a domestic HALEU fuel processing facility to supply the next generation of advanced nuclear reactors.
- Our ability to produce a regulatorily licensed, high-capacity HALEU transportation package, capable of moving commercial quantities of HALEU fuel.
- Our ability to provide nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally.
- Factors (including technological and governmental matters) that could cause our anticipated timing for completion of developing, regulatory licensing and commercialization of our products and technologies to be incorrect.
- Our ability to source, retain, and expand our technical and business staff to meet the demands of our expanding and diversifying business.
- Our ability to raise the substantial amount of additional funds that will be necessary for our business to succeed, which funds may not be available on acceptable terms or available at all.
- Assumptions relating to the size of the market for our micro nuclear reactors.
- Unanticipated regulations of nuclear energy that add barriers to our business and have a negative effect on our operations.
- Our estimates of expenses, future revenue, capital requirements and our needs for, or ability to obtain, additional financing.
- Our status of an early-stage pre-revenue company with a business model and marketing strategy still being developed and largely untested.
- Our ability to avoid a significant disruption in our information technology system, including security breaches, or our ability to implement new system and software successfully.
- Our ability to obtain and maintain intellectual property protection for our products.
- The other risks identified in this prospectus including, without limitation, those under “*Risk Factors*,” “*Management’s Discussion and Analysis of Financial Condition and Results of Operations*,” and “*Business*” as such factors may be updated from time to time in our other filings with the SEC.

The foregoing does not represent an exhaustive list of matters that may be covered by the forward-looking statements contained herein or risk factors that we are faced with. Forward-looking statements necessarily involve risks and uncertainties, and our actual results could differ materially from those anticipated in the forward-looking statements due to a number of factors, including those set forth above under “*Risk Factors*” and elsewhere in this prospectus. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained above and throughout this prospectus. Prior to investing in our common stock, you should read this prospectus and the documents we have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we currently expect. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether because of any new information, future events, changed circumstances or otherwise.

USE OF PROCEEDS

We estimate that we will receive net proceeds from this offering of approximately \$[] million, after deducting estimated offering expenses payable by us, and based upon an assumed public offering price of \$[] per Unit (excluding any exercise of the over-allotment option for this offering).

We intend to use the net proceeds of this offering as follows:

- approximately \$[] million, or []% of the net proceeds from this offering for the research and development of our products and technology, including microreactor and nuclear fuel transportation design optimization, fuel facility investigations and development, test work and scoping studies, and our work with LIST;
- approximately \$[] million, or []% of the net proceeds from this offering for marketing and promotion, and business development activities; and
- approximately \$[] million, or []% of the net proceeds from this offering for working capital and other general corporate purposes, including regulatory compliance, intellectual property protection, hiring additional employees, retaining additional contractors and building out our facility in Oak Ridge, Tennessee.

We may change the amount of net proceeds to be used specifically for any of the foregoing purposes. The amounts and timing of our actual expenditures will depend upon numerous factors. We may also use a portion of the net proceeds to acquire, license and invest in complementary products, technologies, or additional businesses; however, we currently have no agreements or commitments with respect to any such transaction.

The foregoing represents our current intentions based upon our present plans and business conditions to allocate and use the net proceeds of this offering. However, the nature, amounts and timing of our actual expenditures may vary significantly depending on numerous factors. As a result, our management has and will retain broad discretion over the allocation of the net proceeds from this offering. We may find it necessary or advisable to use the net proceeds from this offering for other purposes, and we will have broad discretion in the application of net proceeds from this offering. If an unforeseen event occurs or business conditions change, we may use the proceeds of this offering differently than as described in this prospectus. Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments, and U.S. government securities.

Moreover, given our limited operating history, early stage of business and a new and unproven technology model, it is difficult to evaluate our business prospects and actual expenditures in the future. Further, our business plan will be very costly, far more costly than the net proceeds we will receive from this offering. To develop and implement our business as currently planned, we will need to raise substantial amounts of additional capital and we intend to raise such additional capital through public or private offerings of equity or equity-linked securities, traditional loans, commercial collaborations such as licenses or joint ventures and, if available or desirable, government funding, including grants. No assurances can be given that we will be able to raise additional capital when needed, and our inability to raise additional capital could lead to the failure of our company.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future. The payment of dividends, if any, in the future is within the discretion of our board of directors and will depend on our earnings, capital requirements and financial condition and other relevant facts. We currently intend to retain all future earnings, if any, to finance the development and growth of our business.

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Market Information

Our common stock began trading on Nasdaq under the symbol “NNE” on May 8, 2024. The Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. The shares of common stock and the Warrants underlying the Units are immediately separable and will be issued separately in this offering. We do not intend to apply for listing of the Warrants on any national securities exchange or other trading market, and we do not believe any such market will develop. Therefore, the liquidity of the Warrants will be limited and should be considered illiquid.

Holders of Record

As of October 2, 2024, the closing price per share of our common stock were \$17.58 as reported on The Nasdaq Capital Market, and we had approximately 123 stockholders of record. In addition, we believe that a significant number of beneficial owners of our common stock hold their shares in street name.

CAPITALIZATION

The following table sets forth our cash and equivalents and capitalization as of June 30, 2024:

- on an actual basis;
- on a pro forma basis to give effect to (i) our July 2024 firm commitment offering (the “Follow-on Offering”) with issuance of 900,000 units, consisting of 900,000 shares of common stock and 900,000 warrants to purchase up to 450,000 shares of common stock (the “Follow-on Warrants”) which took place on July 15, 2024 and the underwriter’s exercise of the full option (“Follow-on Over-allotment Option”) to purchase an additional 135,000 units, consisting of 135,000 shares of common stock (the “Follow-on Over-allotment Shares”) and 135,000 warrants to purchase 67,500 shares of common stock (the “Follow-on Over-allotment Warrants”) which took place on July 16, 2024, less underwriting discounts and other expenses, (ii) the exercise of 127,550 Follow-on Warrants to purchase 63,775 common stock at an exercise price of \$20.00 per share, (iii) the exercise of 593,000 stock options to purchase 593,000 common stock at a weighted average exercise price of \$1.76, (iv) the issuance of 20,000 shares of common stock pursuant to consulting agreements, (v) the purchase of a 14,000 sq. ft., 2-story building on 1.64 acres in Oak Ridge, Tennessee, (vi) an equity investment of \$2,000,000 into LIST; and
- on a pro forma as adjusted basis to give effect to: (i) our issuance and sale of [] Units in this offering at the assumed public offering price of \$[] per Unit and (ii) the deduction of approximately \$[] of underwriting discounts, \$[] of estimated offering expenses and \$[] of estimated non-accountable expense allowance payable by us.

The information set forth in the table below is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering as determined at pricing. You should read this table together with “*Management’s Discussion and Analysis of Financial Condition and Results of Operations*” and our audited financial statements and related notes and unaudited interim condensed financial statements and related notes thereto included elsewhere in this prospectus.

	As of June 30, 2024		
	Actual	Pro Forma	Pro Forma As Adjusted
Cash and cash equivalents	\$ 13,789,532	\$ 31,043,032	\$ []
Total liabilities	3,424,402	3,424,402	[]
Stockholders’ Equity:			
Preferred stock, 25,000,000 shares authorized, \$0.0001 par value, no shares issued or outstanding, actual, pro forma or pro forma as adjusted	—	—	—
Common stock, \$0.0001 par value, 275,000,000 shares authorized, 29,003,888, [30,715,663], [] shares issued and outstanding, actual, pro forma and pro forma, as adjusted, respectively	2,900	3,071	[]
Additional paid-in capital	27,942,461	49,073,590	[]
Accumulated deficit	(14,942,045)	(15,109,845)	(15,109,845)
Total stockholders’ equity	13,003,316	33,966,816	[]
Total capitalization	\$ 16,427,718	\$ 37,391,218	\$ []

The number of shares of our common stock to be outstanding upon completion of this offering will be [] shares assuming no exercise of the over-allotment for this offering, which is based on [] shares of our common stock outstanding as of the date of this prospectus, and excludes, as of the date of this prospectus:

- [] shares of common stock issuable upon exercise of the Warrants;
- [] shares of common stock issuable upon the exercise of the Representative’s Warrant at an exercise price of 125% of estimated offering price ;
- 63,000 shares of common stock issuable upon the exercise of a warrant issued to the representative of the underwriters in our July 2024 offering at an exercise price per share of \$25.00;
- 179,375 shares of common stock issuable upon the exercise of a warrant issued to the representative of the underwriters in our May 2024 initial public offering at an exercise price per share of \$5.00;
- 453,725 shares of common stock issuable upon exercise of outstanding common stock purchase warrants issued to investors in our July 2024 offering with an exercise price per share of \$20.00;
- 3,819,883 shares of our common stock reserved under our 2023 Stock Option Plan #1, with a fixed exercise price of \$1.50 per share;
- 2,015,226 shares of our common stock reserved under our 2023 Stock Option Plan #2, with a fixed exercise price of \$3.00 per share; and
- 385,000 shares of our common stock underlying options which are not governed by either our 2023 Stock Option Plan #1 or our Stock Option Plan #2, with a fixed exercise price of \$3.00 per share.

DILUTION

If you purchase the Units in this offering, your interest will be diluted immediately to the extent of the difference between the assumed public offering price of \$[] per Unit and the pro forma as adjusted net tangible book value per share of our common stock immediately upon the consummation of this offering. Net tangible book value per share of common stock is determined by dividing our total tangible assets less total liabilities by the number of outstanding shares of our common stock. As of June 30, 2024, we had a historical net tangible book value of \$12,237,893, or \$0.42 per share of common stock. Our historical net tangible book value per share represented total tangible assets less total liabilities, divided by 29,003,888 shares of our common stock outstanding as of June 30, 2024.

Our pro forma net tangible book value as of June 30, 2024 was \$29,491,393, or \$0.96 per share of our common stock based on 30,715,663 shares of our common stock outstanding as of October 2, 2024. Pro forma net tangible book value represents the amount of our historical total tangible assets less our total liabilities, after giving effect to (i) our July 2024 firm commitment offering (the “Follow-on Offering”) with issuance of 900,000 units, consisting of 900,000 shares of common stock and 900,000 warrants to purchase up to 450,000 shares of common stock (the “Follow-on Warrants”) which took place on July 15, 2024 and the underwriter’s exercise of the full option (“Follow-on Over-allotment Option”) to purchase an additional 135,000 units, consisting of 135,000 shares of common stock (the “Follow-on Over-allotment Shares”) and 135,000 warrants to purchase 67,500 shares of common stock (the “Follow-on Over-allotment Warrants”) which took place on July 16, 2024, less underwriting discounts and other expenses, (ii) the exercise of 127,550 Follow-on Warrants to purchase 63,775 common stock at an exercise price of \$20.00 per share, (iii) the exercise of 593,000 stock options to purchase 593,000 common stock at a weighted average exercise price of \$1.76, (iv) the issuance of 20,000 shares of common stock pursuant to consulting agreements, (v) the purchase of a 14,000 sq. ft., 2-story building on 1.64 acres in Oak Ridge Tennessee, (vi) an equity investment of \$2,000,000 into LIST.

After giving further effect to our sale of [] Units in this offering at an assumed public offering price of \$[] per Unit, and after deducting underwriters’ discounts and estimated offering expenses, upon the completion of this offering, our pro forma as adjusted net tangible book value as of June 30, 2024 would have been \$[] million, or \$[] per share of common stock. This represents an immediate increase in net tangible book value of \$[] per share of common stock to existing stockholders and an immediate dilution in net tangible book value of \$[] per share to new investors of shares in this offering. We determine dilution by subtracting the as pro forma adjusted net tangible book value per share after this offering from the amount of cash that a new investor paid for a share of common stock in this offering.

The following table illustrates this dilution on a per share of common stock basis assuming the representative of underwriters does not exercise its option to purchase additional shares of common stock and/or the Warrants:

	Offering Without Over-Allotment	Offering With Over-Allotment
Public offering price per Unit	\$ []	\$ []
Historical net tangible book value (deficit) per share as of June 30, 2024	\$ 0.42	\$ 0.42
Increase in historical net tangible book value (deficit) per share	\$ 0.54	\$ 0.54
Pro forma net tangible book value (deficit) per share, as of June 30, 2024, before giving effect to this offering	\$ 0.96	\$ 0.96
Increase in pro forma net tangible book value (deficit) per share attributable to new investors in this offering	\$	\$
Pro forma as adjusted net tangible book value per share after giving effect to the offering	\$	\$
Dilution per share to new investors in the offering	\$	\$

If the over-allotment option is exercised in full to purchase [] shares of common stock in this offering at the assumed public offering price of \$[] per Unit, the pro forma as adjusted net tangible book value per share after this offering would be \$[] per share of common stock, the increase in the pro forma as adjusted net tangible book value per share would be \$[] per share of common stock and the dilution to new investors purchasing securities in this offering would be \$[] per share of common stock.

The following charts illustrate our pro forma proportionate ownership, upon completion of this offering by present stockholders and investors in this offering, compared to the relative amounts paid by each. The charts reflect payment by present stockholders as of the date the consideration was received and by investors in this offering at the assumed public offering price. The charts further assume no changes in net tangible book value other than those resulting from the offering.

	Units Purchased		Total Consideration		Average Price
	Number	Percent (%)	Amount (\$)	Percent (%)	Per Unit (\$)
Existing stockholders		%		%	\$
New investors		%		%	\$
Total		%		%	\$

The table above assumes no exercise of the over-allotment option to purchase [] shares of common stock and/or additional Warrants to purchase up to [] shares of common stock in this offering. If the over-allotment option to purchase additional shares is exercised in full, the number of shares of our common stock held by existing stockholders would be reduced to []% of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by new investors participating in the offering would be increased to []% of the total number of shares outstanding after this offering.

The number of shares of our common stock to be outstanding upon completion of this offering will be [] shares assuming no exercise of the over-allotment option for this offering, which is based on [] shares of our common stock outstanding as of the date of this prospectus, and excludes, as of the date of this prospectus:

- [] shares of common stock issuable upon exercise of the Warrants;
- [] shares of common stock issuable upon the exercise of the Representative's Warrant at an exercise price of 125% of estimated offering price;
- 63,000 shares of common stock issuable upon the exercise of a warrant issued to the representative of the underwriters in our July 2024 offering at an exercise price per share of \$25.00;
- 179,375 shares of common stock issuable upon the exercise of a warrant issued to the representative of the underwriters in our May 2024 initial public offering at an exercise price per share of \$5.00;
- 453,725 shares of common stock issuable upon exercise of outstanding common stock purchase warrants issued to investors in our July 2024 offering with an exercise price per share of \$20.00;
- 3,819,883 shares of our common stock reserved under our 2023 Stock Option Plan #1, with a fixed exercise price of \$1.50 per share;
- 2,015,226 shares of our common stock reserved under our 2023 Stock Option Plan #2, with a fixed exercise price of \$3.00 per share; and
- 385,000 shares of our common stock underlying options which are not governed by either our 2023 Stock Option Plan #1 or our Stock Option Plan #2, with a fixed exercise price of \$3.00 per share.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the section titled "Summary of Consolidated Financial Information" and our audited financial statements and related notes, each included elsewhere in this prospectus. Data as of and for the year ended September 30, 2023 and for the period from February 8, 2022 (inception) to September 30, 2022 has been derived from our audited consolidated financial statements appearing at the end of this prospectus. Data as of and for the nine months ended June 30, 2024 and 2023 has been derived from our unaudited consolidated financial statements appearing at the end of this prospectus. This discussion and other parts of this prospectus contain forward-looking statements, such as those relating to our plans, objectives, expectations, intentions, and beliefs, which involve risks, uncertainties and assumptions. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the sections titled "Cautionary Note Regarding Forward-Looking Statements" and "Risk Factors" included elsewhere in this prospectus.

Overview

We are an early-stage nuclear energy company developing smaller, cheaper, and safer advanced portable clean energy solutions, utilizing proprietary reactor designs, intellectual property and research methods, to develop technology and products that work towards a sustainable future. Led by a world class scientific and management team, we envision a business with comprehensive engagement within almost every sector of the nuclear power industry, from sourcing raw materials, to fuel processing, and finally the deployment of our cutting edge microreactors. Our dedication extends further, to also develop into areas such as fuel transportation and nuclear service support and consulting services.

Currently, we are in the pre-revenue stage and are principally focused on four business lines as part of our development strategy, including our micro nuclear reactor business, our nuclear fuel processing business, our nuclear fuel transportation business, and our nuclear consultation services business.

Our mission is to become a commercially focused, diversified and vertically integrated technology-driven nuclear energy company that will capture market share in the very large and growing nuclear energy sector. To implement our plans, since our founding in 2022, our management has secured certain connections within key U.S. government agencies, including the DOE, the Idaho National Laboratory ("INL") and Oak Ridge National Laboratory ("ORNL"), each of which are a part of the DOE's national nuclear laboratory system. Our company also maintains important collaborations with leading researchers from the Cambridge Nuclear Energy Centre and The University of California, Berkeley.

In light of approximately \$30 million in net proceeds we generated from our May 2024 initial public offering and our July 2024 underwritten follow-on offering, over the next twelve months, we will continue to progress our development of two advanced nuclear microreactors, ZEUS and ODIN, acquire land and begin design work for fuel processing facilities, and further develop our high capacity HALEU fuel transportation basket design (to which we have an exclusive patent license) to accommodate other fuel forms, with estimated expenditures to be approximately \$9 million. This allocation comprises approximately \$4 million dedicated to the research and development of products and technology, with a specific focus on the refinement of microreactor technology and fuel processing. The remaining \$5 million is earmarked for miscellaneous costs essential to propelling the progress of our microreactors, encompassing the support of current personnel engaged in executive, finance, accounting, and other administrative functions.

We estimate that our microreactor demonstration work and prototype will be conducted and built between 2024 and 2027, and our microreactor licensing application will be made and processed between 2026 and 2031. We anticipate that our microreactors will be launched around 2031, unless the Advance Act succeeds to reduce the licensing time. Notwithstanding the foregoing, there is no assurance that we can meet successfully above-mentioned timelines. We also plan on providing nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally. If we are unable to acquire such a business by the end of 2024, we will then focus on building our own internal nuclear consultation business in coordination with certain outside academic institutions, which we anticipate would require approximately an additional \$1 million over the next twelve months to recruit additional staff and build corresponding infrastructure to be capable of providing these services.

Notwithstanding the foregoing, the outlined expenditures and the anticipated timelines for execution of our plans discussed above and throughout this Management's Discussion and Analysis of Financial Condition and Results of Operations are estimations only. These are inherently subject to change due to certain factors, including adjustments in the microreactor development plan and uncertainties associated with the governmental licensing approval process. Given that these elements may exceed our initial expectations or lie beyond our control, we cannot guarantee the accuracy of the actual expenditures and timelines.

As of the date of this prospectus, we have not generated any revenues. We have incurred accumulated net losses of \$14,942,045 since inception through June 30, 2024.

Factors and Trends Affecting Our Business and Results of Operations

Our Ability to Develop Our Microreactors

In 2022, we began designing our two next-generation advanced nuclear microreactors, ZEUS and ODIN. ZEUS, is a solid core battery reactor, and ODIN, is a low-pressure salt coolant reactor. We aim to complete the detailed design for these reactors in under a two-year timeframe, progress through demonstration and physical test work, and initiate the licensing, certification, and development processes required to build a licensed prototype. Our goal is to commercially launch one of these microreactors in the early 2030s. The success of this endeavor will be dependent on our ability to effectively utilize our relationship with the national laboratories and DOE to advance our microreactor designs through demonstration work and take advantage of the large capabilities offered by the existing national nuclear sites. We have conducted and completed a design audit on the ODIN reactor to provide assistance with design considerations. Additionally, the design audit for the ZEUS reactor was conducted and completed by INL in February 2024. The report was finalized and issued by INL, summarizing their findings for Nano to facilitate the development of the reactor. The technical reactor audit provides an external and neutral perspective to assist the advancement of the concepts and to validate the microreactors' direction and technology.

Design and Construction of Fuel Processing Facility

We have identified a land package that is suitable for the design, construction and commissioning of our own commercial nuclear High-Assay Low-Enriched Uranium ("HALEU") fuel processing facility to supply fuel to our own reactors currently under development, to the U.S. nuclear industry, the U.S. national laboratories, and to supply the DOE's nuclear fuel needs if necessary. We hope to site our fuel processing facility near a national nuclear laboratory around 2028. We anticipate procuring unfabricated HALEU from a domestic U.S. company and we have signed a memorandum of understanding with Centrus Energy Corp. (NYSE American: LEU) ("Centrus") to begin HALEU fuel sourcing discussions.

Development of Fuel Transportation Business

We intend to produce a regulatorily licensed, high-capacity HALEU transportation system, capable of moving commercial quantities of HALEU fuel around North America. We hope to have our fuel transportation business in operation by 2028. We received an exclusive license for a high capacity HALEU fuel transportation basket design in April 2024, which will form the basis of a complete transportation system to move a range of fuel types. This license grants us, as the licensee, exclusive rights for use and development of the technology. In addition, the licensor is not permitted to license the technology to any other parties within the specified scope. This technology enables us to transport fuel enriched by Centrus (the only company licensed to enrich to 19.75% U235 in the U.S), deconvert HALEU fuel, and fabricate HALEU fuel. We are seeking to form the first transportation company capable of supplying all emerging SMR and microreactor companies with the fuel they require at their manufacturing facilities to construct their reactors. We also expect to service the national nuclear laboratories and DOE programs which require HALEU by providing the fuel for their programs. Mobile reactors requiring HALEU for remote military bases are also anticipated, with potential military contacts. Our fuel transportation business will build on the work already completed and authorized by the INL and ORNL to create a high-capacity HALEU transportation package, with 18 inner canisters, combined with a basket design and a borated aluminum flux trap. We have also received private funding and support from the former executives of the largest shipping company in the world. These executives are aware of our transportation plans and have agreed to assist us in developing a HALEU transportation company to create the first vertically integrated HALEU commercial quantity delivery service in North America.

We have identified an opportunity for more immediate revenue for our company by acquiring more expertise to advance our businesses and deploying those personnel as part of a consulting and services business. We have already identified several nuclear business services and consultancy providers, which have been assessed as potentially suitable for acquisition by our company. We have concentrated on identifying small teams with expert personnel, with good portfolios of work and existing contracts, and good expansion potential, which would provide us with immediate revenue post-acquisition. We believe we are in a competitively advantageous position to expand these acquired businesses with the highly qualified teams it has built over the previous years. This expansion potential can be further complimented by the education programs we are assembling with the Cambridge Nuclear Energy Centre, part of the University of Cambridge, which will involve the sponsorship of MSc and PhD Nuclear programs to produce the next generation of qualified nuclear energy personnel. Part of our education sponsorship programs will involve providing work to the qualifying individuals after they have completed their programs, allowing for further expansion of the nuclear services we are able to offer clients. In furtherance of this effort, in early August 2024 we announced that we have joined the University of Cambridge Nuclear Industry Club to further our collaboration with Cambridge and our efforts to foster and recruit the next generation of nuclear researchers and engineers. With an expanded team we plan to retain with a portion of the proceeds from our 2024 public offerings, we will market our expertise and deploy consultants to both government and private industry nuclear projects. Consultants will be hired out for either hourly rates, or for contractual periods and weekly or monthly rates depending on the project type and scope. The acquisitions and their subsequent expansions will also provide in-house expertise, at greatly reduced costs, which we can utilize for our own research and development, streamlining our company while expanding our technical and human capital capacity.

By the end of 2024, we expect to start providing nuclear service support and consultation services for the nuclear energy industry, both domestically and internationally. This timeline is based on our plan to acquire a nuclear business services and consultancy provider. We have had preliminary discussions with some potential targets but are not presently a party to any definitive understandings or agreements. If we are unable to acquire such a business by the end of 2024, we will then focus on building our own internal nuclear consultation business in coordination with certain outside academic institutions, which we anticipate would require approximately \$1 million over twelve months to recruit additional staff and build corresponding infrastructure to be capable of providing these services. No assurances can be given that we will be able to successfully establish and grow our own consultation business, and our failure to do so would adversely affect our nearer term revenue prospects.

Regulatory Approvals

The regulatory licensing process for our microreactor prototypes is expected to be completed by 2030 or 2031, with manufacturing facilities being constructed during the licensing phase so we are ready to deploy microreactors across the country upon licensing approval. Initial NRC contact will involve early communication from us of the estimated company timelines, so that the regulator can secure the required number of personnel to successfully examine the microreactors. Our ability to successfully license and certify our microreactors will subsequently be dependent on working through the licensing process with the NRC and satisfying their examinations that the reactor is safe to deploy to customers, provided the agreed protocols are adhered to. Our ability to successfully design and construct our own commercial nuclear HALEU fuel processing facility will be dependent on obtaining the necessary regulatory approvals from the NRC to permit the commercial deployment of the microreactors. The U.S. Nuclear Regulatory Commission (“NRC”) inspects the site construction at new fuel cycle facilities and only approves the facility’s capability to possess nuclear material after ensuring that the facility’s safety controls are robust and able to safely handle these materials. Fuel cycle facilities must comply with the regulatory requirements established by the NRC. The facility will need to acquire an NRC license containing site-specific requirements that the facility is required to comply with. Each license is unique and is specific to the nuclear material and hazards present at the fuel cycle facility. To obtain a license will involve a lot of communication between the NRC and our company. NRC safety oversight includes three important components: NRC inspection, the routine assessment of each licensee’s performance, and enforcement in the case that the regulatory requirements are not met. Our company has identified the potential site and will work with the NRC through the process established under the National Environmental Policy Act of 1970, which will begin when a federal agency develops a proposal to take a major federal action. We have engaged with the DOE and contacted the NRC to advance our fuel processing facility construction intentions. We began scoping studies and cost estimation work for our fuel processing facility in late 2023, with site identification and design team building beginning in 2024, coinciding with engaging experienced licensing and regulatory experts to plan the licensing strategy for developing the facilities. Initial site preparation and construction work is estimated to begin in 2025, with completion of construction and commissioning of a facility occurring nearer 2030.

Technology Acquisitions and Collaborations

During 2024, we have made announcements regarding our acquisition of a complementary nuclear pump technology (the ALIP technology) as well as non-binding memoranda of understanding with third party collaborators to explore the use of our microreactors in remote artificial intelligence datacenters and the use of artificial intelligence in modernizing the nuclear regulatory and licensing process. We expect that a material aspect of our business will involve continuing to develop, identify or seek to collaborate on, or acquire novel and beneficial technology for our company. Our inability to growth our company through such acquisition or collaborations could have a material adverse effect on our business.

Results of Operations

We are an early-stage company, and our historical results may not be indicative of our future results. Accordingly, the drivers of our future financial results, as well as the components of such results, may not be comparable to our historical or future results of operations.

Comparison of the Nine Months Ended June 30, 2024, and the Nine Months Ended June 30, 2023

Revenue

We have not generated any revenue from our inception through June 30, 2024.

Expenses

Research and Development Expense

Our R&D expenses represent costs incurred for designing and engineering products, including the costs of developing design tools. All research and development costs related to product development are expensed as incurred.

R&D expenses increased by \$1,646,617, or 139%, to \$2,830,367 for the nine months ended June 30, 2024, compared to \$1,183,750 for the comparative period ended June 30, 2023, primarily due to our acquisition of the ALIP technology which was expensed during the nine months ended June 30, 2024 compared to the nine months ended June 30, 2023. R&D expenses primarily reflect the internal and external personnel costs corresponding to the design and analysis of our microreactors as well as the costs to acquire technology and other assets from third parties. During the nine months ended June 30, 2024 and 2023, \$0 and \$420,563, respectively, of our R&D expenses corresponded to equity-based compensation.

General and Administrative Expense

Our G&A expenses consist of compensation costs for personnel in executive, finance, accounting, and other administrative functions. G&A expenses also include legal fees, professional fees paid for accounting, auditing, consulting services, advertising costs, and insurance costs.

G&A expenses increased by \$831,280, or 22%, to \$4,553,512 for the nine months ended June 30, 2024, compared to \$3,722,232 for the comparative period ended June 30, 2023, primarily due to additional office and staff costs to support our R&D activities during the nine months ended June 30, 2024 compared to the nine months ended June 30, 2023. During the nine months ended June 30, 2024, G&A expenses primarily consisted of \$1.7 million in personnel costs. During the period ended June 30, 2023, G&A primarily consisted of \$2.4 million in personnel costs. During the nine months ended June 30, 2024 and 2023, \$152,457 and \$1,693,451, respectively, of our G&A expenses corresponded to equity-based compensation.

Revaluation of contingent consideration

Revaluation of contingent consideration corresponds to equity based contingent consideration corresponding to the ALIP technology we acquired which is revalued at the end of each financial quarter based on the closing stock price of our common shares.

The revaluation of contingent consideration was \$385,500 for the nine months ended June 30, 2024, compared to \$nil for the comparative period ended June 30, 2023, as a result of our acquisition of the ALIP technology on June 21, 2024.

Other Income

During the nine months ended June 30, 2024 and 2023, the company earned interest income of \$109,559 and \$1,753, respectively, on its cash held at a financial institution.

Comparison of the Year Ended September 30, 2023, and the Period from February 8, 2022 (Inception) through September 30, 2022

Revenue

We have not generated any revenue from our inception through September 30, 2023.

Expenses

Research and Development Expense

Our R&D expenses represent costs incurred for designing and engineering products, including the costs of developing design tools. All research and development costs related to product development are expensed as incurred.

R&D expenses increased by \$1,393,696, or 993%, to \$1,534,000 for the year ended September 30, 2023, compared to \$140,304 for the comparative period ended September 30, 2022, primarily due to the fact that our company began operations on February 8, 2022, and had limited R&D activity during its initial eight-month period from February 8, 2022, to September 30, 2022. R&D expenses primarily reflect the internal and external personnel costs corresponding to the design and analysis of our microreactors. During the years ended September 30, 2023 and September 30, 2022, \$0.42 million and \$0.07 million, respectively, of our R&D expenses corresponded to equity-based compensation.

General and Administrative Expense

Our G&A expenses consist of compensation costs for personnel in executive, finance, accounting, and other administrative functions. G&A expenses also include legal fees, professional fees paid for accounting, auditing, consulting services, advertising costs, and insurance costs. As a new public company, we expect we will incur higher G&A expenses for public company costs such as compliance with the regulations of the SEC and Nasdaq.

G&A expenses increased by \$3,829,875, or 417%, to \$4,749,395 for the year ended September 30, 2023, compared to \$919,520 for the comparative period ended September 30, 2022, primarily due to the fact that our company began operations on February 8, 2022, and had limited activity during its initial eight-month period from February 8, 2022, to September 30, 2022. During the year ended September 30, 2023, G&A expenses primarily consisted of \$3.1 million in personnel costs, of which \$2 million corresponded to equity-based compensation. During the period ended September 30, 2022, G&A primarily consisted of \$0.5 million in personnel costs, of which \$0.3 million corresponded to equity-based compensation.

Other Income

During the year ended September 30, 2023, the company earned interest income of \$32,994 on its cash held at a financial institution. During the period from inception on February 8, 2022, to September 30, 2022, our company was awarded a grant for 200 hours of subject matter expert support at INL as part of the NRIC Resource Team program which amounted to \$28,000. All amounts related to this grant had been earned as of September 30, 2022.

Conversion of Certain Mezzanine Equity to Stockholders Equity

During the quarter ended March 31, 2024, we amended a subscription agreement with an investor to terminate the investor's right to redeem 2,000,000 shares of common stock, which resulted in a reclassification of such shares from mezzanine equity to stockholders' equity.

Liquidity and Capital Resources

We believe that our existing cash will fund our current operating and R&D plans through at least the next twelve months from the date of this prospectus. Although we have negative operating cash outflows of \$5,953,795 for the nine months ended June 30, 2024, and \$2,691,775 for the nine months ended June 30, 2023, we had approximately \$13.8 million in cash as of June 30, 2024 (compared to approximately \$7.0 million as of September 30, 2023) and working capital of approximately \$12.5 million as of June 30, 2024 (compared to approximately \$6.9 million as of September 30, 2023). In addition, we received net proceeds of approximately \$18.6 million from our Follow-on Offering and Follow-on Over-allotment Option in July 2024.

However, the future development of our business towards ultimate commercialization of our products will require significant amounts of cash resources. Since we do not anticipate generating meaningful revenues for several years, we intend to finance our future cash requirements for capital expenditures, R&D and business development activities and general working capital through public or private equity or debt financings, third-party (including government) funding, or any combination of these approaches. If we raise additional funds through further issuances of equity or equity-linked instruments, our existing stockholders could suffer significant dilution. Moreover, no assurances can be given that we will be able to raise required funding on favorable terms, if at all, and our inability to raise additional funding when needed could have a material adverse effect on our company and results of operations and could cause our business to fail.

Going Concern

As part of issuing our condensed consolidated financial statements, we evaluated whether there were any conditions and events that raise substantial doubt about our ability to continue as a going concern over the twelve months after the date the condensed consolidated financial statements are issued. Since inception, we have incurred significant operating losses, and have an accumulated deficit of approximately \$14.9 million and negative operating cash flow during fiscal 2024 and fiscal 2023. Management expects that operating losses and negative cash flows may increase from the 2023 levels because of additional costs and expenses related to our R&D activities. Our continued solvency is dependent upon our ability to obtain additional working capital to complete our reactor development, to successfully market our reactors and to achieve commerciality for our reactors.

To date, we have not generated any revenue. We do not expect to generate any revenue unless and until we are able to commercialize our reactors. We will require additional capital to develop our reactors and to fund operations for the foreseeable future. We expect our costs to increase in connection with advancement of our reactors toward commercialization. While we believe that our existing cash may be sufficient to support the development of our reactors in the near-term, certain costs are not reasonably estimable at this time and we may require additional funding.

Management is of the opinion that sufficient working capital is available to meet our company's liabilities and commitments as they come due for the next twelve months after the date the condensed consolidated financial statements are issued to conform to the going concern uncertainty period. In order to achieve our company's long-term strategy, our company expects to raise additional capital or secure other sources of financing to support its growth.

Summary Statement of Cash Flows for the Nine Months Ended June 30, 2024, and the Nine Months Ended June 30, 2023

The following table sets forth the primary sources and uses of cash for the periods presented below:

	For the Nine Months Ended June 30, 2024	For the Nine Months Ended June 30, 2023
Net cash used in operating activities	\$ (5,953,795)	\$ (2,691,775)
Net cash provided by financing activities	12,790,532	8,690,369
Net increase in cash	\$ 6,836,737	\$ 5,998,594

Cash Flows used in Operating Activities

Net cash used by operating activities for the nine months ended June 30, 2024 was \$5,953,795, which consisted of our net loss of \$7,659,820, net of non-cash items of \$992,850, and net of changes in working capital accounts. Net cash used by operating activities for nine months ended June 30, 2023 was \$2,691,775, which consisted of our net loss of \$4,904,229, net of non-cash items of \$2,114,014, and net of changes in working capital accounts. Our cash used in operating activities increased by \$3,262,020 during the nine months ended June 30, 2024, due to an increase in net loss and changes in working capital accounts. The significant increase in cash used in operating activities during the nine months ended June 30, 2024, when compared to the nine months ended June 30, 2023, was primarily due to increased R&D activities and additional office and staff costs to support our R&D activities during the nine months ended June 30, 2024 compared to the nine months ended June 30, 2023.

Cash Flows provided by Financing Activities

Net cash provided by financing activities for the nine months ended June 30, 2024 was \$12,790,532, which consisted of \$14,253,937 in cash received from the issuance of shares of common stock less \$1,408,405 in offering costs and less a \$55,000 payment of deferred offering costs. Net cash provided by financing activities for the nine months ended June 30, 2023 was \$8,690,369, which consisted of \$8,765,369 in cash received from the issuance of shares of common stock less a \$75,000 payment of deferred offering costs.

Commitments

We are a party to one short-term operating lease for office space under a cancelable operating lease that terminates at the end of August 2024 and one long-term operating lease for our corporate headquarters. We have one lease commitment corresponding to our corporate headquarters as of June 30, 2024. We did not have any lease commitments as of September 30, 2023. Our corporate headquarters is located at 10 Times Square, 30th Floor, New York, New York 10018, covering approximately 7,800 square feet. We lease this space for \$33,605 per month whereby the monthly lease rent will increase by 2.5% on an annual basis. The lease has a term ending on July 31, 2031.

Off-Balance Sheet Arrangements

As of June 30, 2024, and September 30, 2023, we have not engaged in any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Summary Statement of Cash Flows for the Year Ended September 30, 2023, and the Period from February 8, 2022 (Inception) through September 30, 2022

The following table sets forth the primary sources and uses of cash for the periods presented below:

	For the Year Ended September 30, 2023	For the Period from February 8, 2022 (Inception) through September 30, 2022
Net cash used in operating activities	\$ (3,867,573)	\$ (621,501)
Net cash provided by financing activities	8,690,369	2,751,500
Net increase in cash	4,822,796	2,129,999

Cash Flows used in Operating Activities

Net cash used by operating activities for the year ended September 30, 2023 was \$3,867,573, which consisted of our net loss of \$6,250,401, net of non-cash items of \$2,384,003, and net of changes in working capital accounts. Net cash used by operating activities for the period from February 8, 2022 (inception) through September 30, 2022 was \$621,501, which consisted of our net loss of \$1,031,824, net of non-cash items of \$390,000, and net of changes in working capital accounts. Our cash used in operating activities increased by \$3,246,072 during the year ended September 30, 2023, due to an increase in net loss. The significant increase in cash used in operating activities during the year ended September 30, 2023, when compared to the period ended September 30, 2022, is primarily due to the fact that our company began operations on February 8, 2022, and had limited activity during its initial eight-month period from February 8, 2022, to September 30, 2022.

Cash Flows provided by Financing Activities

Net cash provided by financing activities for the year ended September 30, 2023 was \$8,690,369, which consisted of cash received from the issuance of shares of common stock less deferred offering costs paid. Net cash provided by financing activities for the period from February 8, 2022 (inception) to September 30, 2022 was \$2,751,500, which consisted of cash received from the issuance of shares of common stock.

Commitments

We are a party to an operating lease for office space under a cancelable operating lease. We do not have any lease commitments as of September 30, 2023, and September 30, 2022.

Off-Balance Sheet Arrangements

As of September 30, 2023, and September 30, 2022, we have not engaged in any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Critical Accounting Policies and Estimates

Our consolidated financial statements have been prepared in accordance with U.S. GAAP. Preparation of the consolidated financial statements requires our management to make a number of judgments, estimates and assumptions relating to the reported amount of expenses, assets and liabilities and the disclosure of contingent assets and liabilities. We consider an accounting judgment, estimate or assumption to be critical when (1) the estimate or assumption is complex in nature or requires a high degree of judgment and (2) the use of different judgments, estimates and assumptions could have a material impact on our consolidated financial statements. Our significant accounting policies are described in our consolidated financial statements included elsewhere in this prospectus. Additional information about our critical accounting policies follows:

Equity-Based Compensation

Equity-based compensation is measured using a fair value-based method for all equity-based awards. The cost of awarded equity instruments is recognized based on each instrument's grant-date fair value over the period during which the award vests. Equity-based compensation is recorded within general and administrative expense and research and development expense in the condensed consolidated interim statements of operations.

Emerging Growth Company ("EGC") Accounting Election

Section 102(b)(1) of the JOBS Act exempts EGCs from being required to comply with new or revised financial accounting standards until private companies are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect not to take advantage of the extended transition period and comply with the requirements that apply to non-EGCs. Following the IPO, we expect to be an EGC at least through the end of 2024 and will have the benefit of the extended transition period. We intend to take advantage of the benefits of this extended transition period.

Recent Accounting Pronouncements

Our condensed consolidated financial statements included elsewhere in this prospectus contain more information about recently adopted accounting pronouncements and recently issued accounting pronouncements not yet adopted, including the timing of their adoption, and our assessment, to the extent we have made one yet, of their potential impact on us.

BUSINESS

Overview

We are an early-stage nuclear energy company developing smaller, cheaper, and safer advanced portable clean energy solutions utilizing proprietary reactor designs, intellectual property and research methods, to contribute towards a sustainable future. Led by a world class scientific and management team, our business plan involves a comprehensive engagement across every sector of the nuclear power industry, traversing the path from sourcing raw materials through to developing cutting edge advanced nuclear microreactors. Our dedication extends further, encompassing both commercial nuclear fuel transportation and consulting services.

Currently, we are in the pre-revenue stage and are principally focused on four business lines as part of our development strategy:

- **Micro Nuclear Reactor Business.** We are developing the next-generation advanced nuclear microreactors, in particular **ZEUS**, a solid core battery reactor, and **ODIN**, a low-pressure salt coolant reactor. With these products, we are advancing the development of the next generation of portable, on-demand capable, advanced nuclear microreactors. Through a collaboration of our world-renowned nuclear scientists and engineers, the national laboratories, and government support, we believe our reactors will have the potential to impact to the global energy landscape. Our goal is to commercially launch one of these products by 2030-2031

Both our **ZEUS** and **ODIN** microreactors have moved from the design stages to physical test work stages, with initial rig construction currently underway, to ensure model accuracy, and material and dimension optimization. We have conducted and completed external design audits on both the Zeus and ODIN reactors designs to provide external validation and assistance our designs. The design audits for the reactors were conducted and completed by the Idaho National Laboratory (INL). We are currently identifying sites for its test bed reactor site for the purpose of conducting testing experiments using nuclear material for both microreactors. We have communicated with the U.S. Nuclear Regulatory Commission (or NRC) and DOE, informing them of the status of our microreactor designs and the estimated internal timelines for our microreactor developments, with an understanding that definite timelines will be provided once available, to allow the NRC to arrange the necessary personnel to oversee the microreactor licensing process. We have increased the size of the technical teams to expedite the development of the reactor systems, as well as recruited former NRC personnel to oversee our regulatory licensing processes, and to engage directly with the NRC to facilitate the commercialization planning.

In addition, in August 2024, which purchased a 14,000 sq. ft., 2-story building in Oak Ridge, Tennessee for \$1.71 million to house our Nuclear Technology Headquarters. We expect to grow the number of personnel working at the facility over the next year and expect to ultimately employ up to 30 personnel at the facility.

- **Fuel Processing Business.** Through our subsidiary, HALEU Energy Fuel Inc., and in coordination with DOE, we are seeking to develop a domestic High-Assay Low-Enriched Uranium (HALEU) fuel supply chain to supply the fuel – not only for our own reactors – but to the broader advanced nuclear reactor industry in general. We have identified the site we intend to construct the facilities and have begun to build the team to design and develop these facilities.

We have also made a strategic investment in and entered into a collaboration with a laser-based uranium enrichment technology company, LIST (which is a related party), to support the development of their technology. Through this investment and related collaboration, we aim to assist in advancing LIST's technologies to secure a reliable low enriched uranium fuel supply at a reduced cost to us for our future operations and the broader nuclear energy industry. Through collaboration with LIST, we anticipate that we will build supportive facilities around LIST's enrichment facility, including such facilities as deconversion and fuel fabrication. Please see "*Investment in the Only U.S. Origin and Patented Laser Uranium Enrichment Company*" for further information

- **Fuel Transportation Business.** Our transportation business will build on existing work completed at INL, Oak Ridge National Laboratory (or ORNL) and Pacific Northwest National Laboratory (PNNL), the world's premier U.S.-backed nuclear research facilities. We received an exclusive license for a high capacity HALEU fuel transportation basket design in April 2024, which will form the basis of a complete fuel transportation system able to move a variety of different fuel forms. This license grants us, as the licensee, exclusive rights for use and development of the technology. In addition, the licensor is not permitted to license the technology to any other parties within the specified scope. We believe this technology is the most advanced concept in the United States for moving HALEU in commercial quantities. We are currently conducting work to modify the design to accommodate a variety of different fuel forms, so we are positioned to move fuel for both of our reactors and also so we are able to provide transportation services to any nuclear company looking to move commercial quantities of fuel. We intend to license, our high-capacity HALEU transportation system to move commercial quantities of HALEU fuel in various forms around North America and internationally. If developed and commercialized, we believe this product will serve as the basis for a domestic HALEU transportation company capable of providing commercial quantities of HALEU fuel. We hope to put our fuel transportation business into operation by 2026. We have also brought on two former UPS executives, one of which works for our fuel transportation subsidiary, with the other sitting on our Executive Advisory Board, to assist in growing the transportation business around our technology.
- **Nuclear Consultation Services.** We also plan on providing nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally. This includes, in coordination with the Cambridge Nuclear Energy Centre, the development of education resources. This business opportunity represents our most near-term revenue generating opportunity as we hope to begin providing these services in 2024. By the end of 2024, we expect to start providing nuclear service support and consultation services for the nuclear energy industry, both domestically and internationally. In addition to these rendered services, our company is examining strategic acquisitions to expand our business and consultancy services and as of the date of this prospectus, we have not identified, or engaged in any material discussions with any potential target for such acquisitions. We have had preliminary discussions with several potential acquisition targets but have not progressed to definitive understandings or agreements. In combination with our intention to acquire existing revenue generating consultancy businesses, we are focusing on building our own internal nuclear consultation business in coordination with certain outside academic institutions, which we anticipate would require approximately \$1 million over the next twelve months to recruit additional staff and build corresponding infrastructure to be capable of providing these services.

Our mission is to become a commercially focused, diversified and vertically integrated nuclear energy company that will capture market share in the very large and growing nuclear energy sector. To implement our plans, since our founding in 2022, our management has had constant communications with key U.S. government agencies, including the DOE, the INL and ORNL, which are a part of the DOE's national nuclear laboratory system. Our company also maintains important collaborations with leading researchers from the Cambridge Nuclear Energy Centre and The University of California, Berkeley.

As a result of our receipt of the net proceeds of this offering, over the next twelve months, we will continue to progress our development of advanced nuclear microreactors, ZEUS and ODIN, and our vertically integrated fuel manufacturing business, with estimated expenditures to be approximately \$8 million. This allocation comprises approximately \$6 million dedicated to the research and development of nuclear energy related products and technologies, with a specific focus on the refinement of our microreactors and our HALEU fuel manufacturing processes. The remaining \$2 million is earmarked for miscellaneous costs essential to propelling the progress of our microreactors, encompassing the support of current personnel engaged in executive, finance, accounting, and other administrative functions. We estimate that our microreactor demonstration work will be conducted between 2024 and 2026, our microreactor licensing application will be processed between 2026 and 2031, and our microreactors will be launched between 2030 and 2031. We also plan on providing nuclear service support and consultation services for the expanding and resurgent nuclear energy industry, both domestically and internationally. If we are unable to acquire such a business by the end of 2024, we will focus on building our own internal nuclear consultation business in coordination with certain outside academic institutions, which we anticipate would require approximately an additional \$2 million over the next twelve months to recruit additional staff and build corresponding infrastructure to be capable of providing these services. Notwithstanding the foregoing, the outlined expenditures and the timelines are estimations only. These are inherently subject to change due to certain factors, including adjustments in the microreactor development plan and uncertainties associated with the licensing approval process. Given that these elements may exceed our initial expectations or lie beyond our control, we cannot guarantee the accuracy of the actual expenditures and timelines.

As of the date of this prospectus, we have not generated any revenue. We have incurred accumulated net losses of \$14,942,045 since inception through June 30, 2024.

The U.S. Nuclear Energy Market

According to the FACT SHEET: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies published by the White House in 2021, the United States has taken numerous steps in recent years to reduce its dependence on carbon-emitting energy sources. The U.S. had previously set a goal to reach a 100% carbon pollution-free electricity system by 2035, and President Biden set a target of a 50 to 52% reduction from 2005 levels in economy-wide net greenhouse gas pollution by 2030, underlining the Biden administration's desire for new energy solutions which are at the core of our business plans. Additionally, the "net zero world" initiative signals the U.S.'s proactive stance in working with countries to lead a global transition to net zero emissions by 2050.

According to an article titled "NEI Survey Shows Even More Interest in Nuclear After Major Policy Actions" released on NEI.org in 2023, in the face of these evolving energy needs, the utility companies that are members of the Nuclear Energy Institute (NEI) are targeting a role for more than 90 gigawatts of nuclear power in support of their decarbonization goals. According to an article titled "U.S. nuclear electricity generation continues to decline as more reactors retire" released on the website of U.S. Energy Information Administration (EIA) in 2022, while the share of U.S. electricity generated by nuclear energy across all sectors in 2021 was similar to its average share of 19% in the previous decade, its average annual capacity factor remained fixed at 92.7% that same year. By comparison, solar photovoltaics' annual capacity factor was 24.6% in the same year, while coal's capacity reached just 49.3%. Further, fuel costs for nuclear verses fossil steam in 2022 were recorded to be just \$0.61 per kilowatt hour verses \$2.46 per kilowatt hour respectively.

According to an article titled "The Power Interview: Making the U.S. Nuclear Industry Great Again" by Aaron Larson, an unrelated third party, released on powermag.com in September 2023, the market size of the U.S. nuclear power industry has actually declined 1.2% per year on average between 2017 and 2022 due to retiring power plants and a lack of plans to fill the void left behind. In 2012, there were 104 operating nuclear reactors in the United States, but by the end of 2021 there were only 93 operating commercial nuclear reactors at 55 nuclear power plants in 28 states. According to the NRC, as of November 2021, there were 23 shut down commercial nuclear power reactors at 19 sites in various stages of decommissioning. Nevertheless, the market size, measured by revenue, grew 4.9% in 2022 to reach a valuation of \$38.1 billion. Furthermore, the U.S. nuclear energy market has been projected to grow at a compounded annual growth rate (CAGR) value of 4.8% from 2022 to 2027, driven largely by the increasing pressure on the American government to reduce its carbon emissions and the increasing amount of electricity being generated from clean energy sources.

Additionally, technological advancements such as SMRs and light water reactors, among others, are expected to further enhance the demand for nuclear energy. For instance, according to a report titled "Small Modular Reactor Market worth \$6.8 billion by 2030" released on the MarketsandMarkets.com in 2023, the global SMR market was expected to grow from an estimated of \$5.8 billion in 2023 to \$6.8 billion by 2030, at a CAGR of 2.3% during the forecast period. More specifically, according to an article titled "North America Modular Nuclear Power Market Size" released on finance.yahoo.com in 2023, the North American modular nuclear power market segment was valued at \$2.2 billion in 2023 and expected to grow at a CAGR of 3.2% from 2023 to 2028, due to growing demand for supply power for small and medium grid systems, increased interest in compact and less complex electricity generation units, cutting-edge technology in the industry, and robust government support.

According to a 2023 published McKinsey Report titled “What will it take for nuclear power to meet the climate challenge?”, up to 800 gigawatts of new nuclear power could be necessary to meet net-zero targets. In estimating the nuclear power needed to support the energy transition, we used techno-economic grid modelling to project the overall power mix by 2050. Our scenario—based on “Further Acceleration” estimates from a report titled “Global Energy Perspective 2022” released by McKinsey in 2022 for global energy mix, as well as anticipated supply and demand for power—accounts for potential constraints on scale-up in renewables, such as scarcity of land, raw materials, and transmission limitations. Although our scenario does not rely on a full analysis of grid models and energy-transition scenarios, it does estimate roughly how much additional dispatchable, low-carbon generation will be needed to meet net-zero targets. Modelling reveals that the energy transition could require an additional 400 to 800 gigawatts of new nuclear energy—which could represent up to 10 to 20 percent of future global electricity demand—to meet the need for dispatchable power (that is, not wind and solar) by 2050. 800 gigawatts of net additional nuclear capacity would triple the current nuclear capacity of 413 gigawatts and would require approximately 1,000 gigawatts to be generated by new nuclear facilities, as between 100 gigawatts to 250 gigawatts of current capacity will need to also be replaced. This represents a very large market for our proposed microreactors to participate in, with even a small amount of market share capture leading to significant revenue generating opportunities for our company.

An analysis titled “Climate Change Targets: The Role of Nuclear Energy” issued by the Nuclear Energy Agency (NEA) in 2021 found that meeting the average of the International Panel on Climate Change pathways consistent with limiting global warming by 1.5° Celsius by 2050 will require tripling global installed nuclear capacity to reach 1,160 gigawatts by 2050. This can be achieved through a combination of long-term operation of existing nuclear reactors, large-scale so-called “Generation III” nuclear new builds and SMRs for both power and non-power applications. SMRs such as our proposed microreactors will have an essential and increasingly important role to play in addressing the nuclear capacity gap and supporting decarbonization targets. The NEA estimates that by 2050 SMRs could reach 375 gigawatts of installed capacity, contributing to more than 50% of this capacity gap. One of the key features of SMRs is that they target applications of nuclear energy to support the decarbonization of sectors which are difficult to address, particularly in the cement, chemicals, and iron and steel industries that do not require (or cannot support) gigawatt-scale nuclear power generation and/or where variable renewables face limitations.

As indicated in an article titled “Meeting Climate Change Targets: The Role of Nuclear Energy” released by the Nuclear Energy Agency (NEA) in 2022, nuclear energy is already the largest source of non-carbon emitting electricity generation in the 37 Organization for Economic Cooperation and Development countries and is responsible for displacing over 1.6 gigatons of carbon dioxide emissions annually. NEA has estimated that since 1971, nuclear energy has displaced over 66 gigatons of carbon dioxide. The resurgence of nuclear power as a means of achieving net zero emissions by 2050 entails a dramatic increase in investment over the coming decades into new nuclear power plants and the extension of the lifetime of old plants to increase this displacement. Annual global investment in nuclear in this scenario surges to over \$100 billion in the first half of the 2030s – over three times the current average investment in the industry of \$30 billion per year throughout the 2010s.

Our Vision, Market Opportunity and Key Government Support

We believe our achievements to date and our business plans are positioning our company to be a leading participant in the U.S. nuclear industry through simultaneously rebuilding and introducing national capabilities to drive the resurgent nuclear energy industry. We further believe that our timing and approach into the industry have been optimal, with insight into national capability deficiencies and an understanding of the difficulties faced by other commercial nuclear energy, particularly microreactor, companies. Almost all microreactor companies have advanced using funds acquired from government grants or awards. Even with private funding, they have been stifled by lack of investor interest because of the long return timelines and high risks.

Despite the early stage of our company, we believe we are competitively differentiated in many ways.

- **No Government Funding.** Most SMR and microreactor companies are reliant on government grants and financing to progress their concepts. Consequently, their progress can cease once government funding is not available. Currently, we do not rely on government funding to sustain our business operations. While we will seek available government funding opportunities in future, the absence of government support does not impede our progress in advancing our research, business, or technological developments. Our leadership team possesses extensive experience in successfully securing funding from both private and public sources. Additionally, our investor base includes capital from industry professionals who recognize the immense potential of our company. Notwithstanding the foregoing, our limited operating history and early stage of business makes an evaluation of our business and prospects very difficult, we have a new and unproven technology model and may need to raise additional capital to implement our business plans.
- **Industry Investors.** Our investor base includes a large component of capital raised from nuclear industry professionals who have reviewed our plans, concepts, and technologies, and found our company to have enormous potential. The high proportion of investment from experts in the industry has been an endorsement that has provided investors without a nuclear background with the confidence to invest.

- **Technical Insight.** On the technical front, we have benefited from insight into the problems which affected earlier movers within the nuclear technology space. Large SMR companies have raised billions of dollars for development but have been stalled by the lag in developing or acquiring the fuel necessary to advance their reactors. This led to our investigations into de-risking our own fuel supply by pursuing development and investment into our own fuel processing facility, as well as using more conventional fuel with greater operational history. We believe we have identified certain problems affecting the industry and we are taking early action to surmount potential roadblocks. Our new and unproven technology model will necessitate a significant infusion of additional capital for successful deployment, even following this offering. This imperative business requirement has influenced our strategic decision to diversify our operations, with the aim of establishing nearer term revenue streams which we are seeking to initiate prior to the anticipated commercial launch of microreactor technology.
- **Government Contacts.** We have secured important high placed government contacts, several of whom sit on our Executive Advisory Board, including former military and government veterans. This was complemented by bringing in experts involved in every major part of the nuclear industry, from regulation to laboratories, to technical teams. We believe we will benefit from those government contacts as our company will be afforded access to highly skilled personnel possessing advanced expertise in the energy and nuclear sectors. We expect these individuals to provide support and services to us, thereby facilitating the progression of our ambitions and projects. Furthermore, given the nuclear industry has been comprehensively intertwined with government agencies, the value of access to government and regulatory personnel cannot be overstated. These contacts provide guidance and insights to us, informing us of both conventional and unconventional challenges that warrant our consideration. Such guidance is an invaluable resource, fortifying our endeavors to systematically mitigate risks associated with our business operations.
- **World Class Team.** Our technical team is world class, with simple and realizable reactor concepts that do not require exotic fuels and who are aware of all the difficulties faced by almost every other reactor company who has chosen alternative designs. Our team has a deep knowledge of applicable regulatory requirements surrounding safety, transportation, and decommissioning, and our designs have incorporated all these considerations from the outset.

The SMR market has a high barrier to entry because of the expertise required, and the larger investment necessary to progress reactor designs to prototype, and then through licensing. This high barrier to entry has acted in our favor, giving us open opportunities. To date, we are not aware of any commercial microreactor prototypes, microreactor companies with applicable governmental licenses, microreactor or SMR companies in the revenue generating stage, HALEU fuel processing facilities, or commercial transportation system for HALEU. These huge national capability gaps have been left in a large market, caused predominantly by this high barrier to entry. These capability gaps are also exacerbated by nuclear companies being unwilling to branch into areas outside their focused business, such as SMR companies expanding into fuel and transport, or enrichment companies expanding into fuel processing. We are seeking to address all of these gaps in the industry.

Moreover, government investment has not compensated for the lack of private investment going into the commercial nuclear sector. Previous strategies to purchase military grade nuclear materials to down blend to required fuel enrichment level for certain programs have allowed these capability gaps to persist. This creates industry opportunities for development. We have begun and expect to continue to bring private investment to these undeveloped areas and quickly establish ourselves as a necessary component in the national infrastructure system, while providing us with advantages to develop business and revenue sources to de-risk our microreactor development.

We strongly support objectives of DOE and the International Atomic Energy Agency (IAEA) for the peaceful use of nuclear energy, and we intend for our technology to form part of the U.S. foreign policy to advance the peaceful use of nuclear energy, science and technology, and drive new resources to projects and activities in developing countries with the greatest need. A key part of our business plan will seek to become a nuclear technology organization that can grow the U.S. global energy market engagement and concurrently support global market opportunities.

We believe that our microreactors can address various environmental and energy challenges through their innovative design and capacities, including their versatile and easily deployable nature in remote locations. We plan to target business development activities for our microreactors in several sectors, including data centers, artificial intelligence computer and quantum computing; crypto mining; military applications; disaster relief; transportation (including shipping); mining projects; water desalination and green hydrogen plants; and space exploration. As a result, we intend to support a broad set of clean energy applications.

We also support the long-term strategy of the United States' Government to reach net zero carbon emissions by no later than 2050, but these goals will require actions spanning every sector of the economy. We plan to utilize our advanced nuclear reactor technologies and our fuel processing plans through our subsidiary HALEU Energy to support the next generation of nuclear professionals. These investments are critical to immediately accelerate our emissions reductions domestically and internationally.

In addition, we believe that the U.S. government is increasingly showing strong support for nuclear energy through various initiatives aimed at advancing nuclear technology, all of which further our business plans and opportunities. This support has taken various forms, as detailed below. Aside from the support for existing nuclear capabilities, all of these initiatives have the potential directly or indirectly benefit and support our company.

- **Advanced Reactor Development.** The DOE has been actively supporting the development of advanced nuclear reactor technologies. Through programs like the Advanced Reactor Demonstration Program (ARDP) and the Advanced Reactor Concepts (ARC) program, the U.S. government is providing funding to accelerate the commercialization of next-generation nuclear reactors like our proposed microreactors that are safer, more efficient, and produce less waste.
- **Nuclear Energy Innovation and Modernization Act (NEIMA).** Signed into law in January 2019, this federal legislation aims to streamline the regulatory process for advanced nuclear reactors, making it easier for companies to develop and deploy new nuclear technologies in the United States.
- **Loan Guarantees.** The U.S. government has provided loan guarantees to support the construction of new nuclear power plants. These guarantees help reduce the financial risk associated with building nuclear facilities and encourage private investment in nuclear energy projects.
- **Nuclear Energy Research and Development Funding.** The DOE's Office of Nuclear Energy (ONE) provides funding for research and development projects related to nuclear energy. This includes research on advanced reactor technologies, nuclear fuel cycle options, and innovations in nuclear waste management. While we have not yet taken advantage of government funding, we plan to seek such funding in the future should an appropriate opportunity arise.
- **Public-Private Partnerships.** The U.S. government has encouraged collaboration between the public and private sectors to advance nuclear technology. Initiatives like the Gateway for Accelerated Innovation in Nuclear (GAIN) help connect industry partners with national laboratories and expertise to accelerate the development and deployment of advanced nuclear technologies. Our collaboration with INL is an example of this trend.
- **Support for Existing Nuclear Fleet.** The U.S. government recognizes the importance of maintaining the existing fleet of nuclear power plants, which provide a significant portion of the nation's carbon-free electricity. Various measures have been proposed and implemented to ensure the economic viability of these plants and prevent premature closures.
- **Nuclear Energy Export Initiatives.** The U.S. government has been working to promote the export of American nuclear technology and expertise to other countries. This supports global efforts to decarbonize energy systems and strengthen international partnerships in the nuclear energy sector.
- **Department of Energy Non-Defense Programs for Nuclear Energy and Fossil Energy and Carbon Management.** In the federal government's fiscal 2023 budget, \$1.7 billion was allocated for Office of Nuclear Energy, (NE), and \$62 billion was allocated to the DOE over a five-year period to deliver a more equitable clean energy future. A further \$892 million was allocated to support research and carbon development for carbon management technologies.

Our Micro Nuclear Reactor Business

A key pillar of our business plan is to provide readily replaceable mobile reactors which we can provide to customers, along with operative personnel, to power projects, residential and commercial enterprises, and major development projects. Our vision is to be a commercial and domestic energy supply leader within the U.S. nuclear industry, and to advance U.S. domestic and foreign policy and national security priorities. The mobile, lower-cost and ultra-safe solid core model of our micro-reactor vision will provide a clean energy option that supports initiatives for sustained international engagement and promotes enhanced and more efficient cooperation and assistance in the application of peaceful uses of nuclear energy, science, and technology. We will also drive resources to projects and activities in developing countries of greatest need by supplying energy to areas removed from the grid.

Our initial energy assessment included the consideration of other energy sources, such as wind and solar. SMRs were initially examined, but it became apparent that the market with far larger potential was in more deployable energy systems which could service remote locations more readily; the only candidate that could satisfy this market was microreactors because of their high-capacity factors. The market has exceedingly large potential, with tens of thousands of mining operations running on diesel fuel, which could financially benefit from a steady source of clean and portable energy over a 20-year period. We identified a large potential customer base for deployable mobile reactors, for remote industrial and manufacturing projects, current and previously uneconomic mining sites, oil, and gas projects, military bases, remote towns and communities, islands or emergency sites (post-earthquake, tsunami, hurricane etc.) to re-establish electrical power during the absence of electric grid availability. Additionally, tens of thousands of mine sites which are not currently economically viable could suddenly be made viable with inexpensive, clean energy, creating the potential to free up huge deposits of mineral wealth. This possibility can be applied most notably to Africa where mineral wealth exists but is often inaccessible due to the power demands of modern mining operations. Similarly, all remote industrial projects could potentially benefit from our microreactors. Wherever diesel generators are deployed, our microreactors could provide a power source with fewer inherent logistical challenges, as they do not require daily refueling like diesel generators.

Other large markets identified included remote habitation and island communities. We believe based on market research that over a hundred remote settlements in Canada run exclusively on diesel. This observation was complimented by the observation that countries with numerous islands, such as Thailand, Indonesia, Japan, South Korea, the United States, Sweden, Philippines and others also have large numbers of inhabited islands sustained predominantly by diesel fuel. Catering to this market would open tens of thousands of sales opportunities to our company.

We believe, based on our market research, that if countries are also serious about electrifying their transportation infrastructure, only microreactors would be able to service charging stations for electric vehicles throughout a country. Wind and solar can only be sited where they can generate sufficient output energy, and batteries cannot be shipped to charging stations daily, especially outside of cities, or between urban developments. Microreactors could make it possible to eliminate the need for fossil fueled vehicles, which no other energy form can currently claim.

We also believe the shipping industry is a major area of potential growth for our company. The U.S. Navy has already demonstrated decades of successfully powering large ocean-going ships with nuclear fuel without incident, or any carbon emissions. Oil tankers, shipping container vessels and other large ships all use bunker fuel, which is incredibly polluting and bad for the environment. Global focus will eventually shift to substituting this fuel as soon as a candidate is identified. We believe we will have that replacement technology in our nuclear microreactors. During 2024 and 2025, we also plan to explore potential commercial collaborations with companies in mining and technology industries as they may look to power their operations using advanced nuclear solutions.

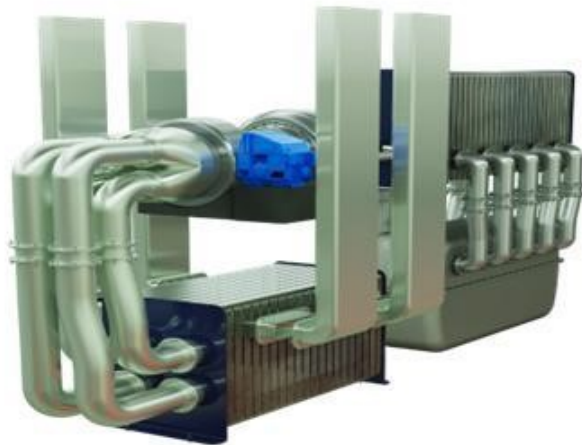
Having identified our key markets, we are focusing on developing deployable mobile reactors, to create a highly mobile, flexible, ultra-safe, renewable, sustainable microreactor. At scale, production of these microreactors will enable lower costs and further commercialization, making widespread microreactor adoption possible at cost parity with other renewables and conventional sources of energy. We intend for the reactor to benefit remote settings where services such as water desalination and power for medical facilities would greatly improve the lives of communities removed from national grids. Clean small energy sources can be coupled to water desalination or hydrogen production and integrated to other renewable sources such as solar power, addressing the most pressing needs for human living (water and energy) without carbon dioxide emissions. Multiple units located on one site allow for simple load following without complicated core geometry and core controls. Additionally, a sealed system without the need for refueling or access to the core enables simple yet effective environmental control.

We are developing two advanced portable nuclear micro reactors in technical design and development. The first, “ZEUS”, is a Solid Core Battery Reactor, designed by world-class engineers trained at the University of California—Berkeley, has a fully solid core and utilizes already licensed fuels, enriched up to 20%, where heat is removed solely by thermal conduction. This requires the deployment of high conductivity, high melting materials, and careful materials design. The reactor will use already licensed fuel, so no new fuel developments are necessary. Reactivity will be controlled with control rods outside of the central core. The generated heat will be conducted from the fuel to the outside of the core via thermal conduction through a thermally conductive material, allowing for the elimination of coolant, creating a far safer reactor than historically developed. Heat will be removed from the outside of the core by recirculated air, which delivers the heat to the gas turbine to produce electricity. The gas turbine will be affixed to the reactor to reduce piping and minimize the size of the plant. The benefit of not incorporating a primary liquid loop reduces the manufacturing costs, and enhances simplicity for modelling, testing, optimizing, and constructing. The secondary loop outside the monolith will be inert gas allowing to reach high temperatures and direct heating of a gas turbine which will be compact and small. Without coolant, typical reactor pumps and piping can be removed from the design, allowing for further compactness, with the aim being to construct a full core and electricity generating gas turbine within a container meeting International Organization for Standardization specifications. The smaller power core will also mean less neutrons are absorbed by the non-fissionable materials, allowing for longer operational life despite the small core. On March 27, 2024, we filed an application for a U.S. Provisional Patent – “ZEUS”.



ZEUS Prototype

Our second reactor in development, “ODIN”, will be a Low-Pressure Coolant Reactor, which uses relatively simple uranium and zirconium HALEU hydride. The zirconium hydride densely packs hydrogen and so provides substantial moderation. Low pressure “solar” salt (sodium-potassium nitrate eutectic) coolant will be used to minimize the stress on structural components and improve the reliability and service life. The design will take advantage of the natural convection of the coolant for heat transfer to the power conversion cycle at full power, as well as for decay heat removal during reactor shutdown, operating transients, and off-normal conditions. A nitrogen or open-air Brayton cycle will be used for power conversion due to its simplicity, flexibility, and its wide use within the conventional power industry. Reactivity control system design will have high reliability and robustness through minimizing the number of moving parts.



ODIN Prototype

The aim of our small reactor projects is to advance the development of microreactors with innovative passive cooling mechanisms that do not require the use of a forced flow liquid coolant in the core, avoiding all the associated safety risks and materials challenges. The project aims to complete the design and concept evaluation for these reactors in under a two-year timeframe, progress through demonstration and physical test work, and initiate the licensing, certification, and development processes required to build a licensed prototype. We intend to develop a customer base and funding avenue to ensure the reactor concept finds its path towards commercial deployment in coming years. Both reactors will be designed for safe operation, ease of use, simple maintenance, and functionality. The reactors aim to reduce construction as well as operation and maintenance costs due to in-factory manufacturing and servicing. It is intended to simplify the use and reactor operation to reduce personnel costs.

In 2022, we were awarded subject matter expert (SME) support at INL as part of the National Reactor Innovation Centre (NRIC) Resource Team program. NRIC is a national DOE program led by INL, allowing collaborators to harness the world-class capabilities of the U.S. National Laboratory System. NRIC accelerates the demonstration and deployment of advanced nuclear energy through its mission to inspire stakeholders and the public, empower innovators, and deliver successful outcomes. They are charged with and committed to demonstrating advanced reactors by the end of 2025. The NRIC Resource Team lent substantial manpower and equipment to support the validation and proving the feasibility of our reactor concepts. Battelle Energy Alliance, LLC (BEA) manages INL for the DOE's Office of Nuclear Energy. INL is the U.S.'s center for nuclear energy research and development and performs research in each of DOE's strategic goal areas: energy, national security, science and the environment. We have an existing collaboration with INL through BEA (Strategic Partnership Project Agreement No. 23SP817), which we will be looking to develop further as we advance our microreactor designs through demonstration work, taking advantage of the large capabilities offered by the INL nuclear site. INL in combination with BEA, will be conducting design audits on both of our reactors.

The design and development of our safe, rapidly built, and deployable microreactors, in cooperation with U.S. industry, and engagement with the NRC to address licensing matters early in the design stage, will accelerate the adoption speed of SMRs and microreactors in the military, industrial and, eventually, commercial, and residential sectors. The NRC was created as an independent agency by Congress in 1974 to ensure the safe use of radioactive materials for beneficial civilian purposes while protecting people and the environment. The path to widespread adoption of nuclear energy as a transformative source of the U.S. and global energy portfolio is challenged by public opinion. Rapid widespread adoption of our reactor technology with NRC approvals and other government support will provide a large set of success stories and pilot projects that build public scientific awareness of sustainability characteristics of fission reactors.

Successful licensing and certification of one of our reactors will enable and accelerate certification and licensing processes for innovative and lower-cost designs in the future. A small portable power source (nuclear power bank) will enable deployment to areas after natural disasters to support first responders, water purification efforts, hydrogen production, or initial construction to regain control of these situations. The possibility of multiple nuclear reactors as part of future emergency response resources is also contemplated.

We will develop a radioactive waste strategy alongside the scoping and design work for ZEUS and ODIN which will meet all the appropriate regulatory and environmental requirements for this type of nuclear reactor. Project investigations are currently in early stages, and further development will involve the DOE and the NRC, particularly with respect to compliance with the federal National Environmental Policy Act of 1970 (NEPA) and other applicable laws and regulations, to competently plan for, and manage, all spent nuclear fuel and radioactive waste generated by the facility developed at our proposed facility described further below.

A strategy to manage the long-term disposition of nuclear waste streams will be managed in combination with the DOE's Office of Spent Fuel and Waste Disposition (SFWD). SFWD covers different aspects of the long-term disposition of waste streams, through its Spent Fuel and Waste Science and Technology (SFWST) and the Office Integrated of Waste Management (IWM) departments. SFWD conducts research and development to support the development of disposition-path-neutral waste management systems and options in the context of the current inventory of spent nuclear fuel and high-level waste.

Both microreactors went through design audits by external institutions in 2023, which provided external input and assistance to advance the concepts and provide validation of the design direction and technology utilized so far. The ODIN microreactor has already completed its design audit at INL, where the design was interrogated by 10 engineers and scientists. The design and concept were extremely well received and further guidance was provided to assist our technical team to steer the reactor from its current state through to a licensed product ready for deployment. The external design audit for the ZEUS reactor was completed in February 2024, with the more advanced design receiving commendations for its innovative design and simplicity. Both reactors are expected to begin demonstration and physical test work in 2024, with demonstration work expected to be completed in 2026 providing us with working prototypes. The regulatory licensing process for the prototypes is expected to complete by 2030 or 2031, with manufacturing facilities being constructed during the licensing phase so we are ready to deploy microreactors across the country upon licensing approval.

Our HALEU Fuel Processing Business

In 2023, we established a subsidiary, HALEU Energy Fuel Inc., to concentrate specifically on creating a domestic fuel processing facility of High-Assay Low-Enriched Uranium (HALEU) to supply the next generation of advanced nuclear reactors. In February 2023, we were selected as an official founding member of the DOE's new HALEU Consortium to develop the U.S.' domestic capability for the manufacture of HALEU and its processing. Our commercial and strategic aim for HALEU Energy Fuel is to construct facilities capable of delivering the HALEU fuel processing capability able to fabricate a variety of different fuel forms, with an intended customer base to include other SMR companies, the U.S.' nuclear laboratories' HALEU needs, and the DOE. Our proposed processing activity aligns exactly with the DOE's HALEU fuel mission to return nuclear fuel manufacturing capabilities to the United States.

We intend to design, construct and commission a commercial nuclear fuel processing facility to supply fabricated fuel to the next generation of advanced nuclear reactor companies, our own reactors currently under development, the U.S. nuclear industry, the U.S. national laboratories, and the DOE's nuclear fuel needs as necessary. The facility's intended capability is to fabricate a variety of different fuel forms as required by U.S. industry and its customer base, using received fuel from market recognized fuel enrichment sources. Our proposed fuel processing facility is intended to form part of an integrated system with LIST, an enrichment company with which we have an investment and related collaboration agreement. Please see "*Investment in the Only U.S. Origin and Patented Laser Uranium Enrichment Company*" for further information.

Our vision harmonizes with that of the DOE, while supporting and engaging U.S. interagency nuclear and development goals, such as those of International Security and Nonproliferation (DOS), the Bureau of International Security and Nonproliferation (ISN), the SMR-related climate action goals of the United States Trade and Development Authority (USTDA), and the U.S. International Development Finance Corporation (DFC). This vision also aligns with nuclear-related U.S. treaty imperatives related to the IAEA.

We have an existing relationship with INL and ORNL (Strategic Partnership Project Agreement No. 23SP817), which we will be looking to develop further with our proposed new facility. Building on our existing INL relationship, and partnering on the manning of the facility, would provide both INL and the U.S. generally a more competent, efficient, and effectively operational facility.

INL already has existing capabilities to characterize the fuel On-Site at the INL Materials and Fuels Complex (MFC) Hot Fuel Examination Facility (HFEF). A principal benefit of our proposed facility would mean that we would not be required to construct similar facilities, saving significant investment in infrastructure, time, cost, and equipment.

The technology being proposed has been realized and developed many times, in many parts of the world. It is a proven technological process, with little uncertainty that such a capability will not be achievable. The starting point for uranium dioxide manufacture is uranium hexafluoride since enrichment processes require gaseous uranium hexafluoride and rely on the very slight difference in molecular weight between uranium 235 and uranium 238. After a series of reactions with different gases, uranium dioxide is left in the form of a fine powder. The powder is sintered (i.e., a process in which the particles of a powder are welded together by pressure and heating to a temperature below its melting point) at about 1700° Celsius to make the fuel pellets. The cylinder-shaped pellets are placed in hollow rods made of a zirconium stainless steel alloy. We anticipate procuring raw HALEU from an established domestic U.S. company and we have signed a memorandum of understanding with this company to begin HALEU fuel sourcing discussions.

Four different methods for the conversion of uranium hexafluoride (called UF₆) to ceramic grade uranium dioxide powder have been developed to an industrial scale. Two of them, the ADU (Ammonium Diuranate) and AUC (Ammonium Uranyl Carbonate) processes, are based upon precipitation of uranium compounds from aqueous (or water-based) solutions. The other two follow a dry route in which UF₆ is decomposed and reduced by steam and hydrogen in either fluidized beds or rotating kilns. The wet processes are the most often used industrially.

AUC is important as a component in the conversion process of UF₆ to uranium dioxide. The ammonium uranyl carbonate is combined with steam and hydrogen at 500–600 °C to yield uranium dioxide. In another process aqueous uranyl nitrate, known as uranyl nitrate liquor (UNL) is treated with ammonium bicarbonate to form ammonium uranyl carbonate as a solid precipitate. This is separated from the solution, dried with methanol and then calcinated with hydrogen directly to uranium dioxide to obtain a powder capable of being sintered. The ex-AUC uranium dioxide powder is free flowing, relatively coarse (10 μ) and porous with specific surface area in the range of 5m²/g and suitable for direct palletization, avoiding the granulation step. Conversion to uranium dioxide is often performed as the first stage of nuclear fuel processing .

The NRC inspects the site construction at new fuel cycle facilities and only approves the facility's capability to possess nuclear material after ensuring that the facility's safety controls are robust and able to safely handle these materials. Fuel cycle facilities must comply with the regulatory requirements established by the NRC. The regulations contain the basic safety standards that our fuel facility will need to meet. The facility will need to acquire an NRC license containing site-specific requirements that the facility is required to comply with. Each license is unique and is specific to the nuclear material and hazards present at the fuel cycle facility. To obtain a license will involve a lot of communication between the NRC and our company. NRC safety oversight includes three important components; NRC inspection, the routine assessment of each licensee's performance, and enforcement in the case that the regulatory requirements were not met.

The NRC will support the regulation of the fuel processing facility by offering guidance documents and generic communication when necessary. These methods of communication support the regulatory process and are not regulations within themselves that require compliance. The NRC makes a continuing effort, in conjunction with interested stakeholders, to enhance and develop regulations and guidance in an efficient and effective way. Stakeholders will be able to track the NRC progress for the licensing at periodic Fuel Facility Stakeholders Meetings.

Our company has identified the potential site and will work with the NRC through the NEPA process, which will begin when a federal agency develops a proposal to take a major federal action. The proposed project would benefit both our company and the United States. We believe a fuel processing facility could be beneficially complimented by the collaboration with an enrichment company, which we have identified and entered into a partnership agreement with.

We have engaged with the DOE and contacted the NRC to advance our fuel processing facility construction intentions. We were included in the DOE's HALEU consortium, as we have been identified as one of the companies able to assist the U.S. meet its technological and capability nuclear fuel challenges.

Spent nuclear fuel will not be generated by this project. There will be a radioactive waste strategy to address the scrap from the manufacturing process. The waste would consist of uranium-bearing scrap materials, for which there exists commercial disposal facilities.

During the first quarter of 2025, we plan to acquire land for the first CAT II non-TRISO HALEU integrated fuel processing facility in the U.S., and to commence the design work on our fuel processing facility in the first half of 2025, coinciding with engaging the relevant licensing and regulatory bodies to facilitate the facility commissioning. Initial site preparation is scheduled to begin in 2025, with completion of construction occurring in 2028.

Our HALEU Fuel Transportation Business

As we have developed our business, capability deficiencies in the U.S. nuclear industry that would affect the future operation of all SMR and microreactor companies became apparent, such as there exists no method of transporting commercial quantities of HALEU across North America. Our proactive approach to mitigate future impediments to our operations culminated in locating research and technology developed by INL, PNNL and ORNL, that had not been advanced because of budget constraints. We entered into the BEA License for a high capacity HALEU fuel transportation basket design on April 3, 2024, which will form the basis of a complete transportation system.

The BEA License grants us, as the licensee, exclusive rights for use and development of the technology. In addition, the licensor is not permitted to license the technology to any other parties within the specified scope. Pursuant to the BEA License, we received an exclusive, royalty-bearing license for a U.S. patent that can be used worldwide related to devices and systems used for HALEU transportation. As part of the BEA License, we agreed to pay BEA royalties on net worldwide sales and any sublicense worldwide sales related to the use of this patent as well as certain licensing payments. We also agreed to meet specific performance milestones related to HALEU fuel transportation within the first 48 months of the agreement's effective date. Under the BEA License, we are obligated to reimburse BEA for all costs incurred in the preparation, filing, prosecuting, and maintenance of the licensed patent. The BEA License has an indefinite term and will automatically terminate upon the expiration, abandonment, or other termination of the licensed patent covered by the BEA License. The BEA License may also be terminated immediately by BEA in the event of our default of any material obligations, and we may terminate the agreement at any time if we provide at least three months' written notice to BEA. The BEA License contains customary representations, warranties, and indemnifications of the parties.

We are seeking to form the first transportation company able to supply all emerging SMR and microreactor companies with the fuel they require at their manufacturing facilities to construct their reactors. We also expect to service the national nuclear laboratories and DOE programs which require HALEU by providing the fuel for their programs. Mobile reactors requiring HALEU for remote military bases are also anticipated, with potential military contacts. During 2024, we plan to acquire land for our HALEU transportation base of operations.

Our fuel transportation business will build on the work already completed by the INL and ORNL to create a high-capacity HALEU transportation package, with 18 inner canisters, combined with a basket design and a borated aluminum flux trap. We are receiving support from two former executives of the largest shipping company in the world who are assisting us in developing a North American transportation company using our licensed or developed technology to deliver (subject to applicable government licensing and certification) nuclear fuel for a wide customer base, including SMR and microreactor companies, national laboratories, military, and DOE programs.

Our Business Services and Consulting Business

The current upsurge in interest in nuclear energy, combined with the increased investment from both private and governmental sources within the nuclear space, as well as the global push for zero carbon technologies, has created a demand for nuclear energy expertise which exceeds supply. The shortage of suitably nuclear-qualified persons has resulted in institutions purchasing nuclear support services and consultancy practices, profiting from the surge in demand and the commensurate increase in costs created by this demand. Nuclear personnel are being headhunted and salaries are increasing as demand outpaces supply. The increased demand in personnel and nuclear related business activity will create increased demand for personnel involved in the licensing and regulator aspects of the industry, exacerbating the difficulty of acquiring the necessary personnel to develop nuclear related businesses. This trend will likely increase, as the next generation of nuclear reactors are progressing towards more mature development stages, requiring greater numbers of experienced personnel, and because nuclear personnel take a long time to educate, qualify, and acquire practical experience.

We have identified this trend as an opportunity for more immediate revenue for our company, and to acquire more expertise to advance our business. We have concentrated on identifying small teams with expert personnel, with good portfolios of work and existing contracts, and good expansion potential, which would provide us with immediate revenue post-acquisition. By the end of 2024, we expect to start providing nuclear service support and consultation services for the nuclear energy industry, both domestically and internationally. This timeline is based on our plan to acquire a nuclear business services and consultancy provider. We have had preliminary discussions with several potential acquisition targets but have not progressed to definitive understandings or agreements. In combination with our intention to acquire existing revenue generating consultancy businesses, we are focusing on building our own internal nuclear consultation business in coordination with certain outside academic institutions, which we anticipate would require approximately \$1 million over the next twelve months to recruit additional staff and build corresponding infrastructure to be capable of providing these services. No assurances can be given that we will be able to successfully establish and grow our own consultation business, and our failure to do so would adversely affect our nearer term revenue prospects. Moreover, the outlined expenditures and the timelines are estimations only. These are inherently subject to change due to certain factors, including adjustments in the microreactor development plan and uncertainties associated with the licensing approval process. Given that these elements may exceed our initial expectations or lie beyond our control, we cannot guarantee the accuracy of the actual expenditures and timelines.

We believe we are in a competitively advantageous position to expand these acquired businesses with the highly qualified teams it has built over the previous years. This expansion potential can be further complimented by the education programs we are assembling with the Cambridge Nuclear Energy Centre, part of the University of Cambridge, which will involve the sponsorship of MSc and PhD Nuclear programs to produce the next generation of qualified nuclear energy personnel. Part of our education sponsorship programs will involve providing work to the qualifying individuals after they have completed their programs, allowing for further expansion of the nuclear services we are able to offer clients.

We also see potential for our business services and consultancy business to grow internationally through the new drive by the United States to promote clean energy partnerships abroad and build capacity for the secure and safe deployment of advanced nuclear reactor technologies under the U.S. Foundational Infrastructure for Responsible Use of Small Modular Reactor Technology (FIRST) Program.

The FIRST program will work with experts from government, academia, industry, and national laboratories to explore options to advance the global goal of net zero carbon emissions by 2065 through deployment of SMRs under the highest standards of safety, security, and nonproliferation. These international partnerships will help countries with no nuclear personnel and infrastructure take advantage of the unique benefits of SMRs that provide round the clock reliable power, complement other clean energy sources, use a small land footprint, and incorporate advanced safety features. Cooperation under FIRST will also deepen strategic ties, support clean energy innovation, and advance technical collaboration between the United States and other countries. These government promoted efforts to expand the utilization of nuclear power across the globe will coincide with an even further increase in demand for nuclear services, labor, and expertise. We believe we are the only microreactor and SMR company that is currently entering into the provision of nuclear services and putting in place measures to train and educate individuals to expand these expected acquisitions and businesses. We believe we have the potential to be the first SMR and microreactor company to generate revenue, which will help minimizing the risk of encountering financial constraints which may limit our business development plans. With an expanded team we plan to retain with a portion of the proceeds from this offering, we will market our expertise and deploy consultants to both government and private industry nuclear projects. Consultants will be hired out for either hourly rates, or for contractual periods and weekly or monthly rates depending on the project type and scope.

There are currently no known microreactors companies in the revenue generating stage or near revenue, placing an increased risk on investors involved in those companies. Our goal is to help mitigate investment risk by providing the first opportunity for public investors to be involved with a microreactor company able to help sustain its own research and development costs, without reliance on continuous financings to make advancements. The acquisitions and their subsequent expansions will also provide in-house expertise, at greatly reduced costs, which we can utilize for our own research and development, streamlining our company while expanding our technical and human capital capacity.

Cambridge Nuclear Energy Centre Collaboration

In accordance with observed market trends and the surging global demand for nuclear personnel, combined with a shortage of suitably nuclear qualified individuals, we have partnered with Cambridge Nuclear Energy Centre, part of the University of Cambridge, to develop a series of nuclear teaching programs to educate the next generation of qualified nuclear individuals capable of facilitating the growing demand and interest in nuclear energy.

Together with the Chair of Cambridge Nuclear Energy Centre, we will design and provide Master's and Doctorate programs in Nuclear Energy science, physics and engineering related disciplines, to graduate competent engineers and physicists ready for practical deployment to industry, academia, and research and development destinations. The courses will be designed to provide the candidates with practical learning which can be usefully applied to the current nuclear environment and state of industry.

Our strategy includes the employment of graduating personnel upon completion of their programs, to provide further value to our reactor programs, our fuel processing business, and our business services practice. The programs will serve to provide our company with a stream of individuals competent in nuclear science and engineering, at a time when personnel are increasingly difficult to source; mitigating against potential insufficient staffing caused by the labor demand. Concurrently, we expect to be able to provide our graduates with global and dynamic work opportunities which rival and exceed any other company involved within the nuclear energy space, assisting to retain and attract the best personnel.

Our Competitive Strengths

We believe we have the following competitive strengths relating to our various business lines:

Microreactor Business

The nuclear industry and market have a high barrier to entry given the expertise required, and the large investment necessary to progress reactor designs to prototype, and then through licensing. This high barrier to entry has acted in our favor, leaving huge opportunities within the nuclear industry for expansion and new business. We believe, based on our market research, that there are no microreactor prototypes, there is one licensed SMR; there are no microreactor or SMR companies in revenue; there is one SMR and one other microreactor company listed; there are no HALEU fuel processing facilities; there is no transportation system for HALEU; and there is no deconversion facility for HALEU.

These capability gaps are compounded because nuclear companies are largely reluctant to branch into areas outside their focused business objectives, like an SMR company expanding into fuel and transport, or enrichment companies expanding into fuel processing. Unlike these other companies, we are seeking to become a vertically integrated company in the nuclear power sector with multiple streams of revenue, a diversified business to hedge against market changes, and greater control over industries supporting microreactor development, such as fuel and transportation. Our diversified business model will make us highly differentiated from other reactor companies.

We have also benefited from observing the impediments faced by reactor companies that began operations earlier than Nano. Issues with sourcing fuel have delayed development for some companies for several reasons. In response we selected more well-used fuel forms, with larger databases from more operating history, and selected to build our own fuel processing facility, to secure our own fuel supply and create additional business and revenue opportunities.

Microreactors have typically begun their inception as academic concepts, without consideration of the final market, or a competent strategy to finance the microreactor from concept through to being a licensed product ready for distribution. We began our company with a different approach, electing to design a reactor to cater for the largest perceived market. This strategy concurrently provides assurance that our company's business once operational will be commercially successful, but also that more potential collaborative industry partners who could also assist the development of our microreactor. We also enjoy a competitive advantage over other groups in the microreactor space by having a board of directors and management team with extensive market and financing experience. Academically commenced projects often rely largely on government grants and awards to progress. Whether we receive government grants or not, we can progress our research, development, and engineering, through our own financing channels. This fund-raising advantage has given us the ability to quickly expand, as further opportunities are not dictated by grant application success.

Though our reactor designs were selected for specific markets, the type of reactor we are developing brings great advantages to our business. We are focusing on the 1-1.5 megawatt electric (or Mwe) power outputs, currently no advanced reactor design has reached prototype stage within this commercial space. The more developed concepts and reactor companies are almost all catering to different markets, namely civil nuclear power for large cities and towns. The microreactor space by comparison is relatively undeveloped, with no organizations demonstrably ahead in development.

We believe we have an expertise advantage over other companies developing microreactors, as we can recruit the best scientists, engineers and professionals in the world from any country or institution, without being constrained by the available personnel located within certain academic and professional institutions. We had the fortune to connect with professors and scientists from around the world, with the opportunity to work freely on entirely funded projects, with few constraints, drawing from their specializations and expert areas. The technical personnel involved in the current design of our reactors have been involved with the design and development of dozens of different reactors. The Head of the Zeus Technical team, Massimiliano Fratoni, is a professor in the Department of Nuclear Engineering at the University of California - Berkeley and was a scientist at the Lawrence Livermore National Laboratory and a faculty position at The Pennsylvania State University. He has worked on molten salt reactors, liquid-metal-cooled fast reactors, fluoride-cooled high-temperature reactors, reduced-moderation boiling water reactors, small or micro modular reactors. He has over 40 publications in the nuclear field, with the majority being in advanced reactor designs.

The Odin team leads, Ian Farnan and Eugene Schwageraus, have worked on almost every type of reactor, including Thorium based fuel in combination with advanced cladding material, and possess exceptional expertise with reactors used in combination with salts. They have also modelled nuclear systems to assist with national policy making. Mr. Farnan is Chair of the Cambridge Centre for Nuclear Energy, Cambridge Director of the Imperial Cambridge Open (ICO) EPSRC CDT in Nuclear Energy and a founding member of the inter-departmental Cambridge MPhil in Nuclear Energy. He currently leads several EPSRC funded Research consortia in these areas. He has held visiting professor positions at Stanford University, the Australian Nuclear Science and Technology Organization and the European Commission Joint Research Centre, Karlsruhe. Eugene is a Professor in Nuclear Energy Systems Engineering at Cambridge University Engineering Department, and is the Course Director for the MPhil in Nuclear Energy, and was the Head of Nuclear Engineering Department, Ben-Gurion University of the Negev in Israel, and was a Professor in the Department of Nuclear Science and Engineering at Massachusetts Institute of Technology. We also introduced two highly regarded researchers Anuj Dubey, Ph.D. and Congjin Ding, Ph.D., led by Mr. Farnan, to our Odin team to advance our 'ODIN' microreactor development. Dr. Dubey is a post-doctoral researcher working with the nuclear engineering group at the University of Cambridge. His current research is aimed at developing computational tools for core neutronic and thermal hydraulic analyses of advanced reactor designs. Dr. Dubey leads the Cambridge University contribution to the ongoing European Sodium Fast Reactor (ESFR-SIMPLE) project. Dr. Ding is a Research Associate in the Nuclear Energy group in the University of Cambridge's Department of Engineering. Her research is on gas-cooled fast reactor designs, with a focus on neutronic analysis, thermal hydraulic modeling, CFD simulation, and computational methods development. Our Odin team also have two recently recruited leading engineers, Major Daniel Lamb, MPhil, and Rui Guo, Ph.D., to continue the development of our innovative advanced nuclear technologies. Major Lamb is a nuclear engineer and an expert in nuclear safeguards and counter-proliferation. He serves as a Major in the US Air Force Reserves, where he leads a group of 176 military and civilian engineers with a budget of \$22 million and service contracts worth \$26 million servicing utilities and infrastructure worth \$2.8 billion supporting US and NATO operations. He has led multi-national engineering teams in the U.S. Air Force as a qualified Civil Engineer and Explosive Ordnance Disposal (EOD) Officer, supporting operations across Europe and Afghanistan under NATO. Dr. Rui Guo specializes in nuclear materials in the waste and fuel cycle area and has extensive experience in novel experimental characterization and simulation methods for studying nuclear materials. His current research focuses on developing reliable and robust coolant and fuel cycle systems that meet the technical requirements of novel reactor designs, including the our 'ODIN' microreactor.

We also recently appointed distinguished nuclear regulatory expert David Tiktinsky as our Head of Nuclear Regulatory Licensing and prominent nuclear reactor licensing expert Eric R. Oesterle as our Head of Microreactor Regulatory Licensing. Mr. Tiktinsky joins us after having served for nearly forty years at the U.S. Nuclear Regulatory Commission (NRC). His extensive governmental experience at the heart of the U.S. nuclear regulatory regime spans various roles, primarily focusing on licensing and regulatory activities for nuclear fuel cycle facilities and medical isotope production. Mr. Tiktinsky is expected to add significant value to us by assisting us in navigating the U.S. nuclear regulatory process in the coming years for our nuclear fuel processing, transportation products and services in development. Mr. Oesterle has over 38 years of licensing, regulatory, project management, engineering, industrial and construction experience in both the public and private sectors, including at the Nuclear Regulatory Commission (NRC), Westinghouse, Bechtel, and OnSite Engineering. His 15-year NRC career included several supervisory roles as Branch Chief for Operating Reactor Licensing, Reactor Safety Systems, License Renewal and Subsequent License Renewal and development of application guidance for new reactors as well as risk-informed, performance-based and technology inclusive application guidance for advanced non-light water reactors, small modular reactors, and microreactors. Mr. Tiktinsky brings extensive overall knowledge of nuclear regulatory licensing and will focus on the licensing requirements for the nuclear fuel processing and fuel transportation aspects of our business plans. Working in parallel with Mr. Tiktinsky, Mr. Oesterle is expected to focus his efforts primarily on the regulatory licensing process for 'ZEUS' and 'ODIN', our next generation microreactors in development.

In addition, as described below under "Intellectual Property", we recently acquired a nuclear reactor cooling technology that we believe will give our microreactor designs a competitive advantage.

Fuel Processing Business

We believe, based on our market research, that no company is currently developing a non-TRISO CAT II facility to fabricate HALEU fuel for SMRs and microreactors. Several companies have invested in establishing their own facilities to manufacture TRISO fuel for their reactors, such as Terrapower and X-Energy, though these facilities were not established to sell fuel commercially. The decision of some companies to pursue TRISO development was in response to previous government investment which supported TRISO fuel development, and necessity, as the more compact designs generate higher temperatures than conventional reactors, requiring fuel which can operate efficiently at higher temperatures. Currently, TRISO development has also stalled due to technical challenges, due partly to no operational history from which to draw data, combined with other technical challenges and current lack of funding. Developing fuel for SMRs and microreactors has become one of the main obstacles and causes of delay for companies expanding into these markets.

We responded to the difficulties observed at other reactor development companies and acted to mitigate against the obstacles afflicting other developers. Firstly, we opted for more conventional fuel forms and avoided TRISO fuel. Secondly, we observed that there was no CAT II facility to fabricate HALEU fuel in conventional forms, precipitating the decision to enter the market to secure our own fuel supply, and to build a commercial business able to supply to a potentially large market.

A CAT III facility allows for the processing and handling of U235 up to 10% U235 enrichment, there are currently three groups in the U.S. authorized to operate a CAT I facility. A CAT II facility allows for the processing and handling of U235 up to 20% U235 enrichment. We believe, based on our market research, that we are progressing towards being the only CAT II facility operator in the country, giving our business an enormous competitive advantage for both reactor development and establishing multiple sources of future revenue to de-risk our company. Currently, we believe, based on our market research, that no SMR or microreactor has any sales revenue, inhibiting the ability for any reactor company to progress, we are building a different and more robust business model.

We have further sought to de-risk our fuel business and establish a competitive advantage, by building our fuel processing facility near a Nuclear National Laboratory with the intention that the operations of both organizations will mutually benefit. The National Laboratory requires fabricated fuel for its programs, and we can benefit from the expertise and capabilities. The partnership enables a less complicated operation to be established, as existing fuel capabilities can be drawn upon.

Fuel Transportation Business

As we developed our business and analyzed the market to anticipate future obstacles which would affect our success, we observed that no transportation company existed which could transport and deliver commercial quantities of HALEU fuel across North America. This national capability gap was identified as a major risk to future operations. In response, we realized this capability gap was another opportunity to enter a new market within the nuclear industry, which would have the benefit of both increased revenue for our company and would provide extra security for our future operations.

We identified a transportation concept which investigated a high capacity HALEU fuel transportation basket design, which has been developed by INL, ORNL and PNNL, and funded by the DOE. The technology was developed around a licensed third-party cask technology to create a full HALEU transportation package, which provided the most advanced solution we identified to address the technological challenge of moving commercial quantities of HALEU fuel around North America. The development of this concept had not been continued by the DOE due to lack of funding. On April 3, 2024, we entered into the BEA License with Battelle Energy Alliance, LLC, the manager of INL (BEA), and have been working with the groups capable of aiding us in the development of the concept into a governmentally certificated and licensed product proficient in the transportation of enriched fuels.

Pursuant to the BEA License, we received an exclusive, royalty-bearing license from BEA for a U.S. patent that can be used worldwide related to devices and systems used for HALEU transportation. The BEA License grants us, as the licensee, exclusive rights for the use of this patent and the licensor is not permitted to license the patent to any other parties within the specified scope. As part of the BEA License, we agreed to pay BEA royalties on net worldwide sales and any sublicense worldwide sales related to the use of this patent as well as certain licensing payments. We also agreed to meet specific performance milestones related to HALEU fuel transportation within the first 48 months of the agreement's effective date. Under the BEA License, we are obligated to reimburse BEA for all costs incurred in the preparation, filing, prosecuting, and maintenance of the licensed patent. The BEA License has an indefinite term and will automatically terminate upon the expiration, abandonment, or other termination of the licensed patent covered by the BEA License. The BEA License may also be terminated immediately by BEA in the event of our default of any material obligations, and we may terminate the BEA License at any time if we provide at least three months' written notice to BEA. The BEA License contains customary representations, warranties, and indemnifications of the parties.

To provide our company further advantage in this space, we recruited two former executives of the world's largest shipping company as our consultants who are assisting us in developing a North American transportation company using our licensed or developed technology to deliver (subject to applicable government licensing and certification) fuel for a wide customer base, including SMR and microreactor companies, national laboratories, military, and DOE programs.

Our Challenges

We are a young company seeking to develop and launch an integrated nuclear energy business. Our efforts face and will continue to face many significant challenges, as our business involves complex nuclear technology, regulatory hurdles, and shifting market dynamics. These challenges include, but are not limited to, the following:

- Obtaining the necessary permits and licenses for nuclear reactors, facilities and transportation capabilities is time-consuming and expensive. Microreactors must meet stringent safety and environmental standards, and gaining regulatory approval can be a lengthy endeavor. Additionally, ensuring the safety of a microreactor throughout its lifecycle is paramount. Developing, implementing, and maintaining robust safety systems and protocols are critical challenges. Implementing robust security measures to protect against theft, sabotage, or unauthorized access is also critical for both regulatory compliance and public safety.
- Building and operating a microreactor is very capital-intensive. Securing the necessary significant funding and managing costs, including but not limited to operational and maintenance costs, are ongoing challenges for our business.
- The political and regulatory landscape can change, impacting the stability and viability of nuclear projects. International agreements and geopolitical factors can also affect nuclear technology access and export.

Competition

Our competitors (nearly all of which are significantly larger and have more cash resources than we do) are other power generation systems which provide energy within the 1Mwe-1.5Mwe range. This competition includes fossil fuel power generating units, renewables, long duration storage and other nuclear reactors, including other microreactors. However, as described above in “Competitive Strengths”, we believe we are positioned better than our competition to emerge as a leading supplier of carbon-free round the clock energy generation.

Traditional Energy Sources

According to World Energy Statistics, approximately 87% of global energy generation capacity in 2022 was natural gas, coal, oil and large-scale nuclear. These technologies are highly reliable, cost-effective, dispatchable and land use efficient. However, with the exception of traditional large-scale nuclear, these resources are carbon-intensive, and we expect them to largely be replaced with carbon-free energy over time. Traditional large-scale nuclear power plants, while carbon-free, require significant upfront capital expenditures, have a history of extensive construction times, complex safety systems and do not have business cases apart from utility-scale generation. We believe our carbon-free microreactor technology possesses all the positive attributes of traditional baseload energy and addresses many of the flaws of traditional nuclear power plants, such as large upfront capital costs.

Renewables

According to World Energy Statistics, approximately 13% of global energy generation capacity in 2022 was wind, solar, hydroelectric, and other renewable power generation sources. Although these sources generate carbon-free power, wind and solar are highly intermittent and non-dispatchable, and hydroelectric is seasonal and subject to curtailment. Additionally, since renewables are weather-dependent, they are too unreliable to support certain end-use cases, including mission-critical applications or industrial applications that require extensive on-site, always-available power. Due to their innovative design SMRs and microreactors, such as the VOYGR plant design by NuScale Energy Corporation (NYSE:SMR) (NuScale), can operate as baseload generation, load-follow renewables and/or support key industrial applications.

Other Advanced Nuclear Reactors

There are several reactor technologies that are in various stages of development, such as high temperature gas-cooled reactors, fast reactors, molten salt reactors, fusion technologies, and others, and commercial SMRs are currently operating in China and Russia. These technologies, like ours, are designed to be clean, safe, and highly reliable. However, these technologies have not received regulatory approval in the United States, and many of the technologies do not have the fuel supply infrastructure necessary to succeed. Currently, we believe, based on our market research, that there are no microreactor prototypes, and no other SMR company other than NuScale – which caters to a different market than our planned market, has applied for approval.

Intellectual Property

BEA License

On April 3, 2024, we entered into a BEA License with Battelle Energy Alliance, LLC, the manager of the INL (BEA), and have been working with the groups capable of aiding us in the development of the concept into a governmentally certificated and licensed product proficient in the transportation of enriched fuels.

Pursuant to the BEA License, we received an exclusive, royalty-bearing license from BEA for a U.S. patent that can be used worldwide related to devices and systems used for HALEU transportation. The BEA License grants us, as the licensee, exclusive rights for the use of this patent and the licensor is not permitted to license the patent to any other parties within the specified scope. As part of the BEA License, we agreed to pay BEA royalties on net worldwide sales and any sublicense worldwide sales related to the use of this patent as well as certain licensing payments. We also agreed to meet specific performance milestones related to HALEU fuel transportation within the first 48 months of the agreement's effective date. Under the BEA License, we are obligated to reimburse BEA for all costs incurred in the preparation, filing, prosecuting, and maintenance of the licensed patent. The BEA License has an indefinite term and will automatically terminate upon the expiration, abandonment, or other termination of the licensed patent covered by the BEA License.

The BEA License may also be terminated immediately by BEA in the event of our default on any material obligations, and we may terminate the BEA License at any time if we provide at least three months' written notice to BEA. The BEA License contains customary representations, warranties, and indemnifications of the parties.

Acquisition of ALIP Technology

On June 21, 2024, we closed an acquisition of a novel annular linear induction pump (ALIP) intellectual property used in small nuclear reactor cooling from noted physicist, research engineer and project manager Carlos O. Maidana, PhD. of Maidana Research.

In connection with the transaction, Dr. Maidana has agreed to collaborate with us as a consultant on further development of the ALIP technology with a view towards achieving SBIR Phase III Award status. These efforts will build on previous DOE grants for the technology aggregating over \$1.37 million in prior phases. Pursuant to a consulting agreement between us and Dr. Maidana, we will provide funding (estimated to be approximately \$350,000) and other resources necessary for the Phase III project, and Dr. Maidana will be the Principal Investigator on this project.

The SBIR program is a federal initiative designed to support small businesses in conducting research and development with strong potential for commercialization. By funding these projects, the SBIR program aims to stimulate technological innovation and facilitate the transition of research into viable products and services. SBIR Phase I focuses on feasibility and technical merit, Phase II involves further development and prototype creation, and Phase III centers on commercialization, requiring external funding to bring the innovation to market.

The ALIP technology, which is based on electromagnetic (rather than moving) pumps, is a key-enabling technology to our ODIN microreactor in development. Following the previously announced completion of INL's review of the ODIN microreactor design in February 2024, our engineers have diligently worked to identify relevant technologies to further optimize and simplify ODIN's design. The acquired ALIP technology, to be refined during the SBIR Phase III program, is an example of this strategy in action.

Moreover, we believe there is significant potential for this technology to be separately commercialized within a year as a component for all salt-based coolant reactors. There are numerous advanced reactor designs which utilize salt-based coolants in fission and fusion energy industries, as well as in the advanced materials, space exploration, marine propulsion, and high-temperature and industrial process sectors.

The SBIR Phase III project acquired by us integrates several previous SBIR efforts, specifically:

- **Grant Number DE-SC0019835:** Development of a Small Electromagnetic Pump for Molten Salt.
- **Grant Number DE-SC0022805:** Software for Multiphysics Analysis and Design of Annular Linear Induction Pumps.
- **Grant Number DE-SC0013992:** Computational Tools for the Design of Liquid Metal Thermomagnetic Systems.

As part of this transaction, Dr. Maidana assigned to us all intellectual property rights associated with the ALIP product, his work on the foregoing grants and the proposal for the SBIR Phase III program.

In consideration for the acquisition, we (i) issued 50,000 shares of common stock to Dr. Maidana and (ii) paid Dr. Maidana cash consideration of \$50,000. Additionally, we agreed to deliver to Dr. Madana an additional (x) 50,000 shares of common stock and (y) cash consideration of \$50,000, contingent upon the successful completion of SBIR Phase III project prior to June 21, 2025, without additional expense to, or funding requirement by, us.

ZEUS Provisional Patent

On March 27, 2024, we filed an application for a U.S. Provisional patent – “ZEUS” to protect certain key design considerations. In July 2024, we filed another application for a U.S. Provisional Patent to secure our newly acquired annular linear induction pump technology (ALIP). As of the date of this prospectus, these two patent applications remain under review by the USPTO. Other than that, for competitive reasons, to date we have not filed for any other U.S. or international patents related to our technology and have opted to maintain such technology as a trade secret. This includes our ODIN microreactor and other technologies. However, we have been in consultation with legal counsel to discuss patenting aspects of our developed technology. In addition, we are implementing a strategy to further the research and progress our microreactor technology to a more finalized form. We believe that developing technology more comprehensively before patenting offers several advantages that can enhance the overall value and protection of the patent. Such advantages include stronger patent claims, reduced risk of invalidity, potential increased market value, minimized prior art, strategic timing, cost savings, better understanding of applications, and trade secrets protection. We plan to file utility or design patents for ZEUS and ODIN microreactors before March 27, 2025.

Overall, we believe developing technology more comprehensively before patenting it provides our company with certain potential strategic advantages. However, we will balance the advantages of comprehensive development with the risk of potential delays in securing patent protection. We

will continue to consult qualified intellectual property counsel so we can make informed decisions regarding the timing of patent filings and the overall protection strategy.

As of the date of this prospectus, we have one trademark application “Smaller, Cheaper and Safer” on class 11, pending approval from the United States Patent and Trademark office, and one domain name.

Insurance

We currently have director & officer liability insurance for our officers and certain directors. We do not carry any key-man life insurance, business liability and other professional liability insurance. Neither have we purchased any property insurance or business interruption insurance. Even if we purchase these kinds of insurance, the insurance may not fully protect us from the financial impact of defending against product liability or professional liability claims that may occur in future. As we are still at the development stage and we have not produced any products yet, we have determined that our current insurance coverage is sufficient for our business operations in the U.S.

Research and Development

As of the date of this prospectus, our team has spent approximately 2.5 years on research and development and invested over an aggregate of approximately \$3.7 million on research and development related to ZEUS and ODIN from our inception to June 30, 2024 to develop this technology. Prior to forming our company in 2022, our technical teams were involved in microreactor research and development which has helped accelerate the development of our microreactors. Our current research and development efforts are centered on optimizing reactor dimensions, material compositions, simplifying mechanical systems, and lowering the lifecycle cost of our microreactors. Our team is also involved in developing new innovative technologies that will represent future business endeavors, such as fuel processing and fuel transportation.

Our research and development team has nearly 150 years of collective experience related to nuclear energy and reactor design, involving scientists and engineers from the University of Berkeley, California, and the University of Cambridge.

On February 14, 2023, we entered into a Strategic Partnership Project (SPP) agreement with INL for an Expert Review Panel of our ZEUS microreactor design. The SPP agreement is managed by BEA for the DOE. Over a 6-month period, INL will review our ZEUS-related technical information related to reactor design, siting, fuel, and decommissioning strategy and will organize a Panel Review Workshop to discuss numerous areas of the design. This review panel will provide recommendations on the current design as well as outline a path forward for further design and collaboration between us and INL.

In addition, we have been awarded 200 hours of subject matter expert (SME) support at INL as part of the National Reactor Innovation Center (NRIC) Resource Team program. NRIC accelerates the demonstration and deployment of advanced nuclear energy through its mission to inspire stakeholders and the public, empower innovators, and deliver successful outcomes. They are charged with and committed to demonstrating advanced reactors by the end of 2025. The work carried out focused on delivering a thermal-hydraulics model to study the temperature in our ZEUS reactor core as well as the thermal efficiency of the system, a Monte-Carlo model to study criticality and reactivity coefficients in the reactor core during depletion, and an optimized version of the reactor core including thermal-hydraulics and neutronics.

In the future, we expect our research and development expenses to increase significantly as we continue to accelerate the development of our products, services and technologies.

Human Capital Resources

As of the date of this prospectus, we had no full time employees and had 37 independent contractors with an aggregate of 51 advanced degrees, including 24 master’s degrees in engineering and science, 13 PhDs and 2 JDs (Juris Doctors - Doctors of Law). We have utilized independent contractor relationships from our inception to date, but we intend to enter into formal employment agreements with our senior executive officers after the consummation of this offering .

The following table provides a breakdown of our staff by function as of the date of this prospectus.

Function	Number of Staff	% of Total
Management	5	13.51%
Research and Development ⁽¹⁾	12	32.43%
Business Operation ⁽¹⁾	16	43.24%
Administration	4	10.81%
Total	37	100%

(1) There was an increase of headcounts for a total of five staff, or approximately 71% of the total research and development personnel in the research and development department in 2024 compared to the same period in 2023. The above-mentioned increases were due to the recruitment of new staff for our research and development.

(2) There was an increase of headcounts for a total of three staff, or approximately 23% of the business operation personnel in the business operation department in 2024 compared to the same period in 2023. The above-mentioned increases were due to the recruitment of new staff for our business operations.

Our workforce mainly operates on a remote basis. We have a seasoned leadership team with nearly 150 years of cumulative experience in the nuclear industry. Our management team places significant focus and attention on matters concerning our human capital assets, particularly on the specific industry and technical knowledge that are required to implement our nuclear energy-focused business plan. Accordingly, we regularly review staff development and succession plans for each of our functions to identify and develop our pipeline of talent.

We believe we offer our staff competitive compensation packages and an environment that encourages self-development and, as a result, have generally been able to attract and retain qualified personnel and maintain a stable core management team. Our staff are not represented by a labor organization or covered by a collective bargaining agreement. We believe that we maintain a good working relationship with our staff and to date, we have not experienced any labor disputes.

Description of Properties

Our corporate headquarters is located at 10 Times Square, 30th Floor, New York, New York 10018, covering approximately 7,800 square feet. We lease this space for \$33,605 per month whereby the monthly lease rent will increase by 2.5% on an annual basis. The lease is effective on April 1, 2024 and has a term ending on July 31, 2031.

In August 2024, we purchased a 1.64-acre land package in the historic Heritage Center Industrial Park in Oak Ridge, Tennessee for \$1.71 million. The purchase includes a 14,000 sq. ft., 2-story building to house our Nuclear Technology Headquarters. Situated in a world-class location for innovative nuclear technology research and development, this facility will serve as the central hub for our advanced nuclear technology design and engineering capabilities. The Nuclear Technology Headquarters is near the Oak Ridge National Laboratory, the Spallation Neutron Source, the National Transportation Research Center, and The University of Tennessee's Center of Excellence in Engineering. We expect to grow the number of personnel working at the facility over the next year and expect to ultimately employ up to 30 personnel at the facility.

We believe the above-mentioned facilities and offices are adequate and suitable for our current needs and that, should it be needed, suitable additional or alternative space will be available to accommodate any such expansion of our operations.

Material Agreements and Current Memoranda of Understanding

Services Agreement by and between Nano Nuclear Energy Inc. and Cambridge AtomWorks (2024) Limited ("Cambridge AtomWorks")

On August 2, 2023, we entered into a services agreement with Cambridge AtomWorks LLP, which was terminated and replaced on July 29, 2024, with a services agreement with Cambridge AtomWorks (2024) Limited (or Cambridge AtomWorks). Pursuant to this 2024 agreement, Cambridge AtomWorks agreed to conduct a conceptual design feasibility study that analyzes the main design parameters of a microreactor and the proposed materials used to construct a power plant. The responsibilities of Cambridge AtomWorks include but are not limited to selecting materials for core components, designing a reactivity control system, establishing an achievable lifetime for reactor power and fuel, and developing a pathway for an experimental prototype for testing decay heat removal, power conversion cycles, and start-up and shutdown operations. This agreement contains customary data security and privacy, confidentiality, indemnification, and intellectual property covenants.

In consideration of the services provided, we will pay Cambridge AtomWorks up to \$4,864,567 in fees. These fees are to be paid over a two-year term and are based on specific activities that Cambridge AtomWorks must perform. The agreement expires two years from the effective date, or until July 25, 2026, whichever is later.

Memorandum of Understanding by and between Centrus and HALEU Energy

On March 30, 2023, our subsidiary HALEU Energy entered into a memorandum of understanding with Centrus. Pursuant to this agreement, both parties will explore the possibility of Centrus providing High-Assay Low-Enriched Uranium (HALEU) to HALEU Energy, as needed, to support HALEU Energy's research, development, and commercialization efforts, for fuel qualification, for our initial test reactor cores and our commercial variant micro reactors. The parties will also (i) explore the compatibility of HALEU Energy's engineering and technical needs, and Centrus' technical and manufacturing capabilities to satisfy those engineering and technical needs; (ii) explore Centrus providing engineering and/or advanced manufacturing services to HALEU Energy; and (iii) explore Centrus providing consulting services to HALEU Energy in the areas of fabrication, deconversion, regulatory and licensing, and transportation.

This is a nonbinding and nonexclusive relationship and has customary covenants regarding confidentiality. The term of this agreement ends on December 31, 2025, and may be extended prior to its expiration by mutual agreement of the parties.

Strategic Partnership Project Agreement No. 23SP817 between Nano Nuclear Energy Inc. and BEA

On February 14, 2023, we entered into a Strategic Partnership Project (SPP) agreement with BEA. Pursuant to the SPP agreement, BEA is the management and operating contractor of the INL and is operating as a contractor for the DOE. The purpose of the SPP agreement is to establish an expert design panel for our ZEUS microreactor design. This review panel will provide recommendations for the current reactor design and outline a path forward for further design and collaboration between BEA and us. The estimated period of performance for completion of the statement of work (“SOW”) outlined in the SPP agreement was six months from the effective date of this SPP agreement (the later of the date signed by the last signatory or the date on which BEA received advance funding from Nano).

On December 6, 2023, we entered into an amendment to the SPP agreement with BEA, pursuant to which the estimated timeline for completion of the SOW was extended from July 6, 2023 through January 3, 2025 and the term of the SPP agreement may be extended by mutual written agreement of both us and BEA.

Services Agreement between Nano Nuclear Energy Inc. and Nuclear Education and Engineering Consulting LLC (“NEEC”)

On January 19, 2024, we entered into a services agreement with NEEC, effective on January 15, 2024. Pursuant to the NEEC agreement, NEEC will support the design and development of a solid core 1 Mwe nuclear reactor according to certain high-level objectives established by us, and in return, NEEC is entitled to a monthly fee of \$80,000 or less depending on the workload.

The NEEC agreement contains customary provisions regarding confidentiality, indemnification, data security, and privacy.

The NEEC agreement will expire two years from January 15, 2024 and may be terminated sooner by either party in the event that the other party is in breach, and it may be terminated with or without cause by NEEC upon thirty days’ written notice to us.

Legal Proceedings

On August 9, 2024, a putative securities class action lawsuit was filed against us and certain of our officers in the United States District Court for the Southern District of New York, captioned *Yvette Yang v. Nano Nuclear Energy Inc., et al.*, No. 1:24-cv-06057 (S.D.N.Y.). The complaint asserts claims for alleged violations of federal securities laws related to statements concerning our business and prospects, including our progress toward microreactor development. The plaintiff seeks to represent a class of certain persons who purchased or otherwise acquired the our common stock during the period from May 8, 2024 through July 18, 2024 and seeks unspecified damages and other relief. We dispute the allegations in the complaint and intends to defend the case vigorously. The case is at an early stage and we cannot reasonably estimate the amount of any potential financial loss or cost that could result from this lawsuit.

In addition, on August 23, 2024, a putative shareholder derivative lawsuit was filed purportedly on behalf of our company, as nominal defendant, against certain of our directors and officers in the Eighth Judicial District Court of Clark County, Nevada, captioned *William Latza, Derivatively on Behalf of Nano Nuclear, Inc. v. James Walker, et al.*, No. A-24-900423-C. The complaint asserts claims for alleged breach of fiduciary duties and corporate waste, among others, related to statements concerning our business and prospects, including our progress toward microreactor development. On behalf of our company, the plaintiff seeks damages from the director and officer defendants and an order directing our company to take actions to reform and improve corporate governance and internal procedures. The director and officer defendants deny all allegations of liability and intend to vigorously defend against all claims. Given the preliminary stage of the lawsuit and the inherent uncertainties of litigation, we cannot determine with certainty the outcome of the case at this time.

In addition, from time to time, we may be subject to various additional claims, lawsuits, and other legal and administrative proceedings that may arise in the ordinary course of business. Some of these claims, lawsuits, and other proceedings may range in complexity and result in substantial uncertainty; it is possible that they may result in damages, fines, penalties, non-monetary sanctions, or relief.

As we continue to grow and develop our products, we anticipate that we will expend significant financial and managerial resources in the defense of our products in the future. We also anticipate that we will expend significant financial and managerial resources to defend against claims that our products and services infringe upon the intellectual property rights of third parties.

Government Regulation

Microreactor Business

Nuclear Safety Regulation. The commercial use of nuclear technology is regulated in all countries, and approval from national regulatory bodies is required for the design, construction, and operation of nuclear plants, including our proposed microreactors. Nuclear safety regulators primarily consider the safety and robustness of designs of nuclear plants against applicable internal hazards (e.g., component failures and fires) and external hazards (e.g., earthquakes and weather loads such as snow, rain and wind), and also consider the environmental impacts of construction and operations (e.g., water use and preservation of historical sites and animal and plant species) of nuclear plants. Nuclear safety regulation must be addressed on a country-by-country basis, although regulators may collaborate when a design is deployed in multiple countries.

Our microreactor licensing strategy includes two primary goals: (1) obtain regulatory approval using the most efficient licensing pathway by engaging the regulator early and developing a complete and high-quality application; and (2) maintain a standard design for our microreactor in as many markets as possible by pursuing NRC Standard Design Certification that can be completely referenced in customer license applications.

Nuclear Safety Regulatory Approval in the United States. For a nuclear plant to be constructed and operated in the United States, an applicant must develop and submit either a construction permit application followed by an operating license application in accordance with 10 CFR Part 50 or submit a combined license application in accordance with 10 CFR Part 52. An applicant utilizing either licensing pathway can incorporate by reference a design certification thus limiting the scope of its license application to site-specific information and operational programs. A customer desiring to construct and operate one of our ZEUS or ODIN microreactors can increase the efficiency of NRC regulatory approval by incorporating by reference the NRC standard design certification for one of our microreactors into its application. In accordance with our licensing strategy, we expect to obtain NRC approval and certification of our standard microreactor design for incorporation by reference into prospective customer license applications. The design certification process ensures that NRC review of the design is final and that prospective customers that use our NRC standard design certification without modification will only need to support NRC review of site-specific design features (e.g., physical security systems, water intake structures, on-site emergency plan), operational programs (e.g., maintenance, emergency preparedness), and environmental impacts. Through design finality, the NRC will not re-review our microreactor design.

Nuclear Safety Regulatory Approval Internationally. We are evaluating plans for pursuing international markets and engaging with international regulators with respect to our proposed microreactors. In the event that we pursue markets outside of the U.S., we will assess all international regulatory requirements which may be applicable to our business.

Other Regulations. In addition to nuclear safety regulations, we are also subject to such other nuclear regulatory controls as nuclear material safeguards and non-proliferation restrictions, and liability insurance regimes (e.g., Price-Andersen Act, the 1960 Paris Convention, the 1963 Vienna Convention, and the 1997 Convention on Supplementary Compensation). We only plan to sell our microreactors in jurisdictions where nuclear liability is exclusively channeled to the plant operator.

Customers purchasing our microreactors must also obtain the permits, licenses, and insurance required for the jurisdiction where the facility will be located. In the U.S., a nuclear plant developer must obtain an NRC construction license and operating license issued pursuant to 10 CFR Part 50 or a combined construction and operating license issued pursuant to 10 CFR Part 52. Other U.S. federal permits or licenses required for a nuclear plant may include those issued by the Army Corps of Engineers; the Federal Aviation Administration; the U.S. Department of Transportation; and the U.S. Environmental Protection Agency. State or local regulators may also require permits or licenses for a nuclear plant, including a National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges from Construction Activities and to Construct a Sanitary Wastewater, Wastewater Treatment facility; Section 401 Water Quality Certification; Well Permits; Solid Waste Handling Permit; and appropriate building permits.

Export Controls. Our microreactor business is subject to, and complies with, stringent U.S. import and export control laws, including the Export Administration Regulations (EAR) regulations from the Bureau of Industry and Security which is part of the U.S. Department of Commerce, and regulations issued by the DOE. The regulations exist to advance the national security and foreign policy interests of the U.S. and to further its nonproliferation policies. Nuclear technology, also known as technical data, is controlled by 10 CFR Part 810, under the regulations of the DOE. Nuclear hardware and codes specifically designed or modified for use in a nuclear reactor are controlled by the NRC under 10 CFR Part 110. We will work to ensure that strict internal control and measures are implemented to comply with export control regulations. Appendix A to 10 CFR Part 810 provides a list of countries that are considered Generally Authorized meaning they are considered to be non-sensitive. Countries not on this list are required to be specifically authorized prior to sharing any nuclear technology. Under Part 110, the NRC regulates the export or import of nuclear hardware, material and code, following the same sensitive countries versus. non sensitive countries' regulatory structure embedded in 10 CFR Part 810.

Fuel Processing and Transportation Businesses

Nuclear Safety Regulation. The commercial nuclear fuel industry is heavily regulated in the United States and regulatory approval is required for the design, safety systems and operation of a nuclear fuel facility such as our proposed HALEU fuel processing facility. Nuclear safety regulators from the NRC consider safety related impacts to the facility from external events (e.g., wildfires, impacts from nearby facilities), natural phenomena hazards (e.g., seismic events, wind, snow, floods), fire protection, environmental conditions and dynamic effects associated with operations, chemical protection, emergency response, criticality control, and instrumentation and control. The facility license application must identify items relied on for safety in order to limit potential radiation and chemical related impacts to workers, the public, and the environment.

A nuclear fuel facility must also consider the impacts of the facility on the environment. An environmental report will be prepared which describes the impact of constructing the facility on the environment; adverse environmental impacts that cannot be avoided; alternatives to the proposed facility construction; the relationship between short-term uses and enhancement of long-term productivity; and irreversible commitments of resources. The NRC will consider environmental impacts in its licensing decision making process. The NRC will need to make an environmental related finding of no significant impact (FONSI) prior to issuance of a license for the fuel facility.

Our regulatory licensing strategy is to design a HALEU nuclear fuel processing facility using proven technology, processes and safety systems and engage the NRC early in the license application development process. Our intent is to produce a high-quality application that can be reviewed and approved by the NRC in the minimum amount of time.

On the fuel transportation side, we are evaluating the availability and use of comprehensive nuclear material packaging. The use of NRC certified transportation packages under applicable federal rules and meeting the appropriate Department of Transportation regulatory requirements for radioactive materials are necessary for nuclear fuel shipments within the United States. Additionally, international shipping requirements which follow IAEA regulations (and those of the recipient country), are needed for any international transport of nuclear fuel.

Nuclear Safety Regulatory Approval in the United States. In order for a nuclear fuel facility to be constructed and operated, a license application and supporting documentation needs to be prepared and submitted for review and approval by NRC. The safety basis for the facility is documented in an integrated safety analysis (ISA). An ISA is a systematic examination of the facility's processes, equipment, structures, and personnel activities to ensure that all relevant hazards that could result in unacceptable consequences have been adequately evaluated and appropriate protective measures have been identified. NRC fuel cycle facilities are similar to chemical processing plants and ISA techniques that have been applied in the chemical industry are generally applicable to a nuclear fuel facility. A document that contains a summary of the ISA will be submitted to the NRC with the license application.

The license application submitted to the NRC will also include (a) an overview of the site and processes; (b) the licensee organization, (c) the ISA methodology to be used, (d) a radiation protection program, (e) a nuclear criticality safety program; (f) a chemical process safety program; (g) a fire safety program; (h) an emergency management plan; (i) an environmental protection description; (j) a decommissioning plan; (k) a management measures program; (l) a material control and accounting plan ; and (m) a physical protection plan.

An environmental report detailing the potential impacts of the facility (and alternatives) will also be prepared and submitted to the NRC for review. We expect that the NRC will complete its review of our license application and environmental report within 30-months. We believe that the NRC review time can be compressed by submitting a high-quality application for a facility using proven technology and following guidance documents prepared by the NRC. Communication with the NRC both during the pre-application period and during the review will help facilitate a successful licensing review.

After obtaining a license from the NRC, we will construct the facility in an expeditious manner. After construction is completed, it is expected that the NRC will perform an operational readiness review of the facility and grant NANO an authorization to operate.

To transport the fuel within the United States, NRC certified transportation packages will be used. If necessary, the package certificate of compliance will be amended by the package certificate holder in order to add our fabricated fuel as an authorized content for the transportation package. The certificate of compliance amendment request, if needed, will follow the appropriate regulatory requirements in the United States that are contained in 10 CFR Part 71.

Nuclear Safety Regulatory Approval Internationally. Since the fuel facility is being licensed to produce our fuel in the United States by the NRC, no international regulatory approvals will be needed.

Shipping of the fuel will occur in the United States using NRC certified transportation packages and following the appropriate regulatory requirements that are necessary for fuel shipments. For international shipments, additional shipping approvals will be needed depending on the country that the fuel will be shipped to. International shipping requirements will be addressed by following IAEA transportation requirements for transport of nuclear fuel and the recipient's countries requirements.

Other Regulation. In addition to nuclear safety regulations, our fuel processing and transportation businesses are subject to other nuclear regulatory controls such as special nuclear material safeguards and non-proliferation restrictions. Other U.S. federal and state permits such as air quality, liquid effluent controls, and building permits will be required depending on the fuel facility design (types and quantity of waste materials produced) and the state in which the facility will be located which has not yet been determined.

Export controls. Exports related to our fuel processing facility and products are controlled by the NRC under applicable federal regulations. Nuclear fuel processing plant equipment and components are under NRC's export licensing authority as per Appendix O to 10 CFR Part 110. This includes items that are considered especially designed for the fabrication of nuclear fuel including equipment that: (a) directly processes or controls the production flow of nuclear material; (b) seal the nuclear material with cladding; (c) check the integrity of cladding; (d) check the finished treatment of the sealed fuel; or (e) is used for assembling reactor fuel elements. This section of the regulations also includes equipment or systems of equipment specifically designed or prepared for use in a fuel processing plant. Additionally, 10 CFR 110.9a states that the export control of special nuclear material is also controlled by the NRC.

Many types of controls are required to ensure compliance with NRC export control regulations. For example, 10 CFR 110.28 lists embargoed destinations for exporting nuclear materials and technology. An application to the NRC for a specific license to export special nuclear material will be required. The specific license is issued on a case-by-case basis to a single specified person or entity which submits and is legally responsible for the proposed export transactions as described on NRC Form 7 application submitted to the NRC.

Corporate Information

We were incorporated in the State of Nevada on February 2, 2022. Our principal offices are located at 10 Times Square, 30th Floor, New York, NY 10018, and our telephone number is (212) 634-9206. Our website is www.nanonuclearenergy.com. Our website and the information on or that can be accessed through such website are not part of this prospectus.

MANAGEMENT

Executive Officers and Directors

The following table sets forth information regarding our executive officers and directors as of the date of this prospectus. Unless otherwise stated, the business address for our executive officers and directors is that of our principal executive office at 10 Times Square, 30th Floor, New York, NY 10018.

Name	Age	Position
James Walker	41	Chief Executive Officer and Director
Jay Jiang Yu	44	President, Secretary, Treasurer, and Chairman of the Board of Directors
Jaisun Garcha	44	Chief Financial Officer
Winston Khun Hunn Chow	47	Chief Policy Officer
Dr. Tsun Yee Law	41	Independent Director
Diane Hare	34	Independent Director
Dr. Kenny Yu	38	Independent Director

James Walker has been our Chief Executive Officer and director since 2022. Mr. Walker has over seventeen years of engineering project management experience across various industries, such as construction, mechanical engineering, and nuclear engineering. Since 2020, Mr. Walker has served as the senior executive manager at Ares, where he is responsible for the construction of plants, purchases of land, operations, marketing, financing, safety regulation compliance, and shareholder relations. He is also concurrently serving on the board of directors of several small-cap publicly traded companies in Canada, including Bayhorse Silver Inc. (Ticker: BHS, Canada: TSX Venture) and Xander Resources, Inc. (Ticker: XND, Canada: TSX Venture), and serves as a consultant to LIST. From 2016 to 2020, Mr. Walker served as the head of company strategy of Lithium Energy Products (or Lithium), a company primarily engaged in the exploration of lithium prospects, where he oversaw the company's projects, resource allocation, grant submissions, and collaborative ventures. Prior to joining Lithium, from 2013 to 2016, Mr. Walker was an engineering project manager for the United Kingdom's Ministry of Defence (or the Ministry of Defence). While there, he was responsible for infrastructure projects and worked in each stage of the nuclear product life cycle, from concept to decommissioning. At the Ministry of Defence, Mr. Walker was primarily engaged in design, modelling, rigs, testing, and problem shooting. He also managed multidisciplinary teams involving engineers, managers, contractors and finance and commercial personnel, and served as the project lead and manager for the building of a nuclear material reclamation plant, and as the engineering manager for constructing factories and facilities designed to manufacture reactor cores. Between 2012 and 2013, Mr. Walker was seconded and worked as a nuclear physicist at Rolls-Royce, leading a project to model various configurations of Rolls-Royce's Zero-Power reactor using probabilistic physics software to digitally replicate real-world behavior and determine program accuracy margins. Prior to this role, Mr. Walker served as a mechanical engineer and a nuclear engineer at the Ministry of Defence.

Mr. Walker holds a Bachelor of Engineering degree in Mechanical Engineering from the University of Nottingham, a Master of Science degree in Mining Engineering from the University of Exeter, and a Master of Science degree in Nuclear Engineering from Cranfield University. He is also a Chartered Engineer (CEng, issued 2014) with the IMechE, a Professional Engineer (PEng, issued 2023) with the Canadian Council of Professional Engineers, qualified Project Manager with APM in 2015, and a Chartered Physicist with the Institute of Physics in 2023. We believe that Mr. Walker is well qualified to serve as a director of our company because of his extensive experience within the nuclear industry and with public markets and the operation of public and private companies.

Jay Jiang Yu is our founder, and has been our President, Secretary and Treasurer, and Chairman of the Board since 2022. Since 2022, Mr. Yu has served as president and chairman of the board of LIST. Since 2022, Mr. Yu has been the chairman of the board of directors of St. James Gold Corp. (or St. James Gold), a Canadian-based publicly traded company (Ticker: LORD, Canada: TSX Venture) engaged in the acquisition, exploration, and development of mineral properties. Since 2008, Mr. Yu has served as the chief executive officer and chairman of the board of directors of I Financial Ventures Group, a corporate advisory and start-up consulting business that advises private and public companies. Mr. Yu is also the founder and chief executive officer of Lunar NYC Inc., a youth-focused 501(c)(3) non-profit organization. Earlier in his career, Mr. Yu worked as an analyst in the Corporate & Investment Banking Division at Deutsche Bank, on Wall Street in New York City.

Mr. Yu holds a bachelor's degree in psychology from the City College of New York. He has completed core classes from Borough of Manhattan Community College and has taken continuing education classes at Columbia University. We believe Mr. Yu is qualified to serve as a director of our company because of his experience with public companies, capital fundings, structured financing, and other business development services. In 2021, Mr. Yu was honored as one of The Outstanding 50 Asian Americans in Business.

Jaisun Garcha has been our Chief Financial Officer since 2022. Mr. Garcha has extensive experience and knowledge in financial management, corporate governance, and risk management for public and private companies. Since 2022, Mr. Garcha has served as the part time chief financial officer and a director at LIST. From March 2022 to October 2024, Mr. Garcha served as the chief financial officer of St. James Gold ("St. James"), a Canada-based publicly traded company (Ticker: LORD, Canada: TSX Venture) engaged in mining exploration. From February 2013 to October 2024, Mr. Garcha served as the chief financial officer of Snipp Interactive Inc. ("Snipp Interactive"), a Canada-based publicly traded company (Ticker: SPN, Canada: TSX Venture) engaged in global loyalty and promotion solutions. Prior to this, Mr. Garcha served as the chief financial officer or senior financial consultant of various private and public companies in a wide spectrum of sectors including but not limited to mining, oil and gas exploration, and venture capital. Mr. Garcha began his career as an accountant in 2001. Over the course of his twenty-year career, Mr. Garcha has assisted several companies in going public through initial public offerings and reverse takeovers. Mr. Garcha is a Chartered Professional Accountant (CPA), Certified General Accountant (CGA) and holds a Bachelor of Science degree from the University of British Columbia and a Master of Business Administration from Laurentian University.

Winston Khun Hunn Chow has been our Chief Policy Officer since 2022. Since June 2023, Mr. Chow has acted as chief of party & senior director of energy programs at the Asia Foundation, a non-profit international development organization focused on improving lives and expanding opportunities across Asia and the Pacific. Prior to this, he served as the chief of party & senior advisor of energy at the Aisa Foundation from November 2020 to June 2023. While these positions, Mr. Chow headed the Asia Foundation's \$11.4 million joint United States and Australian government flagship initiative, Mekong Safeguards, which aims to drive sustainable infrastructure development throughout China, Thailand, Vietnam, Laos, Cambodia, and Myanmar. He has worked with governments, banks, and corporations to build sustainable energy, water, and transport infrastructure in these areas. Prior to this, from August 2019 to November 2020, Mr. Chow served as the deputy chief of party at USAID Clean Power Asia of Abt Associates, an organization that uses social science methodologies to help federal agencies understand and address social challenges. In this role, Mr. Chow co-led USAID Clean Power Asia, the U.S. Government's \$15 million flagship regional energy development project in Southeast Asia. From 2016 to 2019, Mr. Chow served as a country representative for the People's Republic of China at Global Green Growth Institute, an inter-governmental organization that champions green growth and climate resilience. While there, he established and led the China county office of Global Green Growth Institute in Beijing, managing strategic mission scope and implementation, budget, financial accounting, hiring and human resources, strategic communications, and overall government relations and collaboration with China. Prior to this, Mr. Chow worked at DOE, where he managed and represented the DOE's \$2.3 billion clean energy division's collaborations with China, Japan and Korea, and worked with U.S. and Chinese companies on projects such as the building of the world's largest CSP solar power plant (Project Delingha). Mr. Chow is the senior China advisor on energy, environment, and social impact at Globality Inc., an AI platform for business consultancy, and he is also a news commentator on energy and environment for the China Global Television Network. Mr. Chow holds a Bachelor of Arts degree and a Master of Public Administration in International Politics from Columbia University, and a Master of Business Administration from the Kelley School of Business at Indiana University.

Dr. Tsun Yee Law has been our director since 2022. Dr. Law is a physician who holds professional memberships in Doctors for Nuclear Energy and the American College of Nuclear Medicine. Since 2022, Dr. Law has served as a director at LIST. Since 2014, Dr. Law has practiced orthopedic medicine in South Florida, specializing in hip and knee osteoarthritis. He is actively engaged in clinical research with a special focus on robotic and sensor technologies, medical innovation, and healthcare investments. Dr. Law has served as a physician consultant for Flagler Healthcare Investment Property Group since 2015 and has served as a physician consultant for Financial Ventures Group since 2017.

Dr. Law has a Bachelor of Business Administration from Davenport University, a Doctorate of Medicine from American Global University School of Medicine, and a Master of Business Administration from Davenport University. We believe that Dr. Law is qualified to serve as a director of our company because of his education background in nuclear medicine and nuclear energy as well as his business background.

Diane Hare has been our director since April 28, 2023. Ms. Hare has been the chief executive officer of BizLove LLC (or BizLove), a consultancy firm which she founded in 2018, primarily engaged in helping organizations grow by delivering strategic positioning and cross-functional strategies for transformative moments such as mergers and acquisitions, product and service launches, growth strategies, and digital/data priorities. From 2011 to 2018, Ms. Hare worked at Ernst & Young, where she served the fortune 500 and specialized in purpose-driven enterprise transformation. Ms. Hare holds a Bachelor of Business Administration in Finance from Iona University and received her Maser of Business Administration in Marketing and International Business from Long Island University. We believe Ms. Hare is qualified to serve as a director of our company because of her experience in business strategy consultancy.

Dr. Kenny Yu has been our director since May 8, 2023. Dr. Yu is a licensed pharmacist in New York and has been the director of Pharmacy Services at NYU Langone Health since 2021. In this role, he provides executive leadership and coordination for all pharmacy services provided within NYU Langone Health to promote the standardization and alignment of practices across all pharmacy sites. Dr. Yu has also served as Educational Advisory Counsel at Apexus LLC, a company engaged in increasing access to medications and improving patient care nationwide. Dr. Yu was the inaugural director of 340B pharmacy services, a drug pricing program, in 2016. In this role, he managed both the compliance and optimization of the 340B program, which he and his team built from the ground up. Dr. Yu holds a Master of Business Administration from George Washington University and a Doctorate in Pharmacy from the Ernest Mario School of Pharmacy at Rutgers University. We believe that Dr. Yu is qualified to serve as a director of our company because of his experience in analyzing and interpreting financial information.

Our Executive Advisory Board

We have assembled an Executive Advisory Board comprised of military, scientific and governmental experts. Our Executive Advisory Board provides industry knowledge and important contacts to our management team. The following table sets forth certain information regarding our Executive Advisory Board:

Name	Age	Position
Gen. Wesley K. Clark (Ret.), KBE	79	Chairman of Executive Advisory Board for Military and Defense
Dr. Robert Gallucci	78	Chairman of the Executive Advisory Board for Nuclear Policy
Gov. Andrew M. Cuomo	66	Executive Advisory Board Member
Lt. General Terry G. Robling (Ret.)	70	Chairman of the Executive Advisory Board for Federal and Defense Appropriations and Requirements
Daniel M. Donovan Jr.	67	Chairman of the Executive Advisory Board for Market Intelligence
Mark Nichols	55	Executive Advisor for Military, Defense and Policy
Dr. Lassina Zerbo	60	Chairman of the Executive Advisory Board for Africa
David Huckeba	69	Chairman of the Executive Advisory Board for USA
Ruth Jin	48	Chair of Executive Advisory Board for Corporate Governance
Michelle Amante-Harstine	68	Senior Strategic Advisor to the Executive Advisory Board for U.S. Energy Initiatives
Tom Cuce	59	President of Advanced Fuel Transportation (our subsidiary)

Gen. Wesley K. Clark (Ret.), KBE has been the Chairman of Executive Advisory Board for Military and Defense since 2023. General Clark graduated first in his class from WestPoint Academy in June 1966 with a bachelor's degree, and was awarded a Rhodes Scholarship to the University of Oxford, where he obtained a M.A. degree in Economics. His military career involved multiple commands and spanned three decades, propelling him into the international spotlight.

From 1994 to 1996, he acted as director of strategic plans and policy for the Joint Chiefs of Staff at the Pentagon. General Clark then took the role of the lead military negotiator for the Bosnian Peace Accords in 1995 before serving as the Supreme Allied Commander Europe, the second-highest military position within NATO, from July 1997 to May 2000. In 2000, Gen. Clark received the Presidential Medal of Freedom from President Bill Clinton for his service to the nation, and in 2003 ran for President of the United States. In 2004, Gen. Clark founded and continues to serve as Chairman and Chief Executive Officer of Wesley K. Clark & Associates, a strategic advisory and consulting firm, and in 2009, he co-founded and became chairman of Enverra, Inc., an investment banking firm. Between 2018 and 2019, Gen. Clark served as a Centennial Fellow at Georgetown University. In 2019, Gen. Clark founded Renew America Together, a non-profit intended to promote and achieve greater common ground in America by reducing partisan division and gridlock. Gen. Clark currently also serves Chairman and Founder of Enverra, Inc., a licensed investment bank; Chairman of Energy Security Partners, LLC, an energy security company; as well as a board member for, among other companies, BNK Petroleum, Leagold Mining, and International Crisis Group. He also serves as the Co-Chair of Growth Energy, Chairman of Clean Terra, Inc., and Chairman of City Year Little Rock, an education advocacy group in that city.

Dr. Robert Gallucci has been the chairman of our Executive Advisory Board for Nuclear Policy since 2023. Dr. Gallucci previously served as U.S. Ambassador-at-Large and Special Envoy for the U.S. Department of State, focusing on the non-proliferation of ballistic missiles and weapons of mass destruction. He was the chief U.S. negotiator during the North Korean nuclear crisis of 1994, and served as Assistant Secretary of State for Political Military Affairs and as Deputy Executive Chairman of the United Nations Special Commission following the first Gulf War. Upon leaving public service, Dr. Gallucci served as Dean of the School of Foreign Service at Georgetown University for 13 years, and since January 2018, he has been serving as Distinguished Professor in the Practice of Diplomacy at Georgetown University. Dr. Gallucci was named president of the John D. and Catherine T. MacArthur Foundation in 2009. Dr. Gallucci holds a Bachelor of Arts from Stony Brook University, and a Master of Arts and a Doctor of Philosophy from Brandeis University.

Gov. Andrew M. Cuomo has been our Executive Advisory Board Member since March 2024. Gov. Cuomo served as the 56th Governor of New York from 2011 to 2021. Before his tenure as governor, he was the Secretary of Housing and Urban Development under President Bill Clinton from 1997 to 2001 and served as New York's Attorney General from 2007 to 2010. Gov. Cuomo oversaw numerous significant initiatives, including the Clean Energy Standard, during his time in office as well as major infrastructure developments like the Mario M. Cuomo Bridge construction and the LaGuardia Airport redevelopment. He supported social initiatives such as the Marriage Equality Act and managed responses to Hurricane Sandy and the COVID-19 pandemic during his time as governor. Gov. Cuomo received a Bachelor of Arts degree from Fordham University and a Juris Doctor degree from Albany Law School.

Lt. General Terry G. Robling (Ret.) has been chairman of our Executive Advisory Board for Federal and Defense Appropriations and Requirements since August 2024. Lt. General Robling's 38 years of distinguished service in the United States Marine Corps earned him 31 Department of Defense commendations, including the Order of the Rising Sun from the Emperor of Japan and the Legion of Honour (Rank of Knight) from the President of France. A three-star general, Lt. Gen. Robling culminated his military career as the Commanding General of U.S. Marine Corps Forces, Pacific, where he oversaw all Marine Corps operations in the strategically vital Asia-Pacific region. A naval aviator with over 5,200 flight hours and a graduate of the U.S. Navy Fighter Weapons School ("Top Gun"), Lt. Gen. Robling has participated in numerous combat and operational missions. His leadership roles positioned him as one of the most influential figures in the Marine Corps, responsible for managing large-scale military operations and fostering international partnerships critical to U.S. national security. Following his retirement, Lt. Gen. Robling turned to the private sector, founding a firm specializing in consulting services for large aerospace manufacturers, before eventually taking up the positions of Chief Executive Officer and Chairman of the Board of PKL Services Inc., which he held for over five years. Currently, Lt. Gen. Robling is a strategic advisor to numerous companies and sits on the advisory board of multiple non-profit associations. Lt. General Robling received a Bachelor of Science degree from Central Washington University and a Master's Degree from the National Defense University.

Daniel M. Donovan Jr. has been chairman of our Executive Advisory Board for Market Intelligence since August 2024. From 2015 to 2019 he served as a member of the U.S. House of Representatives representing the 11th District of New York. During his time in Congress, Mr. Donovan was a vocal advocate for national security, veterans' affairs, and disaster recovery, serving on several key committees and subcommittees. As part of the Committee on Homeland Security, he chaired the Subcommittee on Emergency Preparedness, Response, and Communication, and was also an active member of the Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies. Additionally, Mr. Donovan contributed to the Committee on Foreign Affairs, where he served on the Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations, as well as the Subcommittee on the Western Hemisphere. Mr. Donovan also previously serviced as the District Attorney for Richmond County, New York (Staten Island) and as an Assistant District Attorney for New York County. Mr. Donovan received a Bachelor of Arts degree from St. John's University and a Juris Doctor degree from Fordham University.

Mark Nichols has been our Executive Advisor for Military, Defense and Policy since 2023. Currently, Mr. Nichols is President of Seven Summits LLC, a strategic advisor firm in Washington D.C. Mr. Nichols has an extensive background in European affairs, energy, infrastructure, commodities, emerging markets, and national security. From 2004 to 2011, Mr. Nichols worked at Wesley K. Clark and Associates, focusing on a variety of projects in the energy, defense, and security sectors. Previously during the Clinton Administration, Mr. Nichols was a senior advisor at the State Department in the Office of the Assistant Secretary for Europe. He worked on the NATO 50th Anniversary Summit, The Sarajevo Summit and the Stability Pact for Southeast Europe, a multi-billion dollar program with the EU to rebuild the region after the wars in Bosnia and Kosovo. Mr. Nichols earned a Bachelor of Arts in European History from Bard College and graduated from Columbia University with a master's degree in international affairs (SIPA).

Dr. Lassina Zerbo has been the chairman of our Executive Advisory Board for Africa since 2022. Dr. Zerbo is a Burkinabé politician and scientist who served as the Prime Minister of Burkina Faso from 2021 to 2022. Since 1994, he has served as a nuclear science diplomat and a geophysicist, focusing on Africa's responses to global challenges. Dr. Zerbo currently serves as a chairman of the board of directors at the Rwanda Atomic Energy Board, an organization which establishes nuclear facilities based on the international standards, and coordinates the research and implementation of the Centre for Nuclear Science and Technology project. From 2013 to 2021, Dr. Zerbo served as the 3rd Executive Secretary of the Comprehensive Nuclear-Test-Ban Treaty Organization, an interim organization tasked with building up the verification regime of the Comprehensive Nuclear-Test-Ban Treaty in preparation for the treaty's entry into force. Between 1992 and 1994, Dr. Zerbo was a post-doctorate in Airborne Radiometric and Electromagnetic at Geotrex, Ottawa, and a post-doctorate in Time Domain Electromagnetic and Complex Resistivity at Zonge Engineering and Research Organization in Tucson, Arizona. Dr. Zerbo received a Ph.D. in Geophysics at Université de Paris XI, in Orsay, France in 1992, a Master of Science in Geophysics at Université de Paris VI in Paris, Jussieu, France in 1989, and a bachelor's degree in Fundamental and Applied Geology at Université de Caen in Normandie, France in 1988.

David Huckeba has been the chairman of our Executive Advisory Board for the USA since 2022. Mr. Huckeba has been a managing partner of FreightSource LLC, a third-party logistics company engaged in transportation management services, since January 2018. Mr. Huckeba is also currently a partner of Monolith Commercial Group, LLC, a nationwide general contracting firm that specializes in hospitality and hotel renovation. Mr. Huckeba spent 34 years at UPS, where he held various leadership positions in operations, industrial engineering, and corporate transportation planning. Since retiring from UPS in 2010, Mr. Huckeba has started four transportation focused companies, a restaurant and hospitality company with four restaurant concepts, and a hotel and commercial general contracting company. Mr. Huckeba received a Bachelor of Arts in Business from DePaul University.

Ruth Jin has been the Chair of Executive Advisory Board for Corporate Governance since 2023. Ms. Jin has 19 years of experience delivering high-quality and business-focused legal solutions to private fund sponsors and asset managers of all sizes and strategies. Her work encompasses a variety of matters, including fund formation, regulatory compliance, exit strategies, private and public securities offerings, forming a SPAC, and guiding portfolio companies for their initial public offerings. In addition, Ms. Jin has extensive experience advising businesses through all stages of growth from start-up and capital raising right through to initial public offering and their ongoing securities law compliance and periodic reporting. Ms. Jin is recognized as Top 10% Attorneys by Lawyers of Distinction and was selected as a Top Rated Lawyer and a Legal Leader by ALM on New York Magazine and New York Law Journal in 2020, 2021, and 2022, respectively. She was also selected as a 2019 Woman Leaders in the Law by ALM on New York Law Journal and New York Magazine and in 2013, she was selected as Rising Star by Super Lawyer magazine, a rating company of outstanding lawyers by Thomson Reuters. Ms. Jin received a Bachelor of Laws from Peking University, a Master of Laws and a Doctor of Juridical Science from University of Tokyo, and a Master of Laws from Georgetown University.

Michelle Amante-Harstine has been the Senior Strategic Advisor to the Executive Advisory Board for U.S. Energy Initiatives since 2023. Since 2022, she has been the Chief Executive Officer of Congressional Energy Engagement, LLC., a company engaged in empowering lasting U.S. bi-partisan energy solutions, and since 2023, she has also been serving on the Tennessee Nuclear Energy Advisory Council. Between 2017 and 2020, Ms. Harstine served on the DOE's Office of Nuclear Energy, where she was a Senior Advisor for Stakeholder Engagement, where she developed strategic relationships, designed, developed, and led inaugural initiatives on Capitol Hill, such as the Atomic Wings Lunch & Learns and the Up & Atom Morning Briefings, bringing together Members of Congress, Congressional staff, industry, educational institutions, national laboratories, Embassy representatives and the Administration. With over 25 years of experience in both the public and private sectors spearheading government, business, community and organization initiatives, Ms. Harstine focuses on advanced nuclear technologies through strategic communication engagements among bipartisan Members of Congress and C-level industry and organization leaders. She developed the U.S. Congressional Energy Leaders Forum, monthly by-invitation only bipartisan programs for U.S. Members of Congress and C-Level nuclear energy leaders and has brought them under the American Nuclear Society with the Nuclear Policy Leadership Dinner & Discussion. She previously launched the National K-12 education initiative "Navigating Nuclear: Energizing Our World" with DOE, the American Nuclear Society and Discovery Education, to engage the ORNL and University Students for two-day immersive programs.

Tom Cuce has been President of Advanced Fuel Transportation Inc. since 2023. His expertise has been honed by over 25 years of driving transformative supply chain solutions and profitability through strategic planning and process optimization across the global logistics and package delivery industry. Mr. Cuce has held numerous positions with UPS, the multinational shipping and receiving and supply chain management company, including Vice-President of Package Operations and Southern California District Manager, before serving as UPS President of Global Transportation. He currently serves on the Advisory Board of several private companies and is the Founder and President of Summit View Solutions. Mr. Cuce received a Bachelor of Science in Business Administration and Management from Manhattan College.

Role of the Executive Advisory Board

The role of our Executive Advisory Board is to assist our management with general business and strategic planning, leveraging the expertise of its members in nuclear industry, military and governmental matters. The function of the Executive Advisory Board includes, without any limitation, the following:

- leveraging their professional networks and relationships to connect us with key industry stakeholders, potential partners, clients, and other valuable contacts and marketing resources;
- assessing the impact of our programs, projects and events;
- offering ad hoc support and expertise on specific challenges or opportunities as they arise, serving as a valuable resource for our management team;
- serving as a non-political advocate and ambassador for our company, including seeking new business opportunities for us and connecting us with individuals relevant to the development and advancement of our projects.
- offering strategic advice and counsel to our management team based on the members' diverse experiences and expertise, contributing to the formulation and execution of effective business strategies; and
- providing industry-specific knowledge and insights to help us navigate market trends and safety standards, anticipate challenges, and identify opportunities for growth and innovation.

Consulting Agreements with the Members of the Executive Advisory Board

We have entered into a consulting agreement with each member of our Executive Advisory Board under similar terms and conditions, except for Gov. Andrew M. Cuomo and Mark Nichols. Our arrangement with Gov. Andrew M. Cuomo has been formalized through a consulting agreement with Innovation Strategies LLC, who serves as the manager, and is subject to analogous terms and conditions, and our arrangement with Mark Nichols has also been formalized through a consulting agreement with Seven Summits, LLC, who serves as the president, and is subject to analogous terms and conditions. Our Executive Advisory Board members are not employees of our company; instead, they serve as independent contractors and can resign or be terminated by us at any time. They may pursue any other activities and engagements during their terms of agreements with us.

Pursuant to these consulting agreements, each member of our Executive Advisory Board is entitled to certain cash payments and options to purchase shares of our common stock for services rendered. These agreements also contain customary restrictive covenants relating to confidentiality, non-solicitation, non-disparagement, and indemnification. The term of these agreements is between 18 months and 36 months, commencing from their respective effective dates between August 2022 and August 2023, subject to early termination. During the years ended September 30, 2023 and 2022, our executive advisory board was paid a total of \$70,000 and \$20,000, respectively.

Option Agreements with the Members of the Executive Advisory Board

We have entered into stock option agreements with the members of our Executive Advisory Board pursuant to the 2023 Stock Option Plan #2 (as defined below), except for Tom Cuce and Gov. Andrew M. Cuomo who were granted options that are not governed by either our 2023 Stock Option Plan #1 or our Stock Option Plan #2. Under the stock option agreements, each member was granted an option to acquire certain common stock at certain exercise price.

Their options shall fully vest on the effective date of their option agreements and exercisable at any time until their respective expiration date. The following table provides information regarding each stock options held by the named member of our Executive Advisory Board as of the date of this prospectus.

	Grant Date	Vesting Start date	Number of securities underlying unexercised options vested (#)	Number of securities underlying unexercised options unvested (#)	Options exercise price (\$)	Option Expiration date
Gen. Wesley K. Clark KBE	August 30, 2023	August 30, 2023	125,000	-	\$ 3.00	August 30, 2026
Dr. Robert Gallucci	June 7, 2023	June 7, 2023	75,000	-	\$ 3.00	June 7, 2026
Gov. Andrew M. Cuomo	March 13, 2024	March 13, 2024	125,000	-	\$ 3.00	March 13, 2027
Mark Nichols	June 7, 2023	June 7, 2023	75,000	-	\$ 3.00	June 7, 2026
Dr. Lassina Zerbo	-	-	-	-	\$ -	-
Ruth Jin	June 7, 2023	June 7, 2023	50,000	-	\$ 3.00	June 7, 2026
Michelle Amante-Harstine	August 30, 2023	August 30, 2023	50,000	-	\$ 3.00	August 30, 2026
Tom Cuce	August 30, 2023	August 30, 2023	60,000	-	\$ 3.00	August 30, 2026

Family Relationships

There are no family relationships between or among any of the current directors, executive officers or persons nominated or charged to become directors or executive officers.

Number and Terms of Office of Officers and Directors

Our business and affairs are organized under the direction of our board of directors. Our board of directors consists of five directors, including two executive directors and three independent directors.

Our bylaws provide that the number of directors will be fixed by the board of directors within a range of between one and fifteen directors. The directors need not be stockholders unless so required by our articles of incorporation. The minimum or maximum number may be increased or decreased from time to time only by an amendment to the bylaws, which power belongs exclusively to our board of directors.

Our officers are appointed by the board of directors and shall hold office at the discretion of the board of directors until their successors are duly elected and qualified, unless sooner removed. Our board of directors is authorized to appoint officers to the offices set forth in our bylaws.

Director Independence

The Nasdaq listing standards require that a majority of our board of directors be independent. An “independent director” is defined generally as a person who has no material relationship with the listed company (either directly or as a partner, shareholder or officer of an organization that has a relationship with our company). We have three “independent directors” as defined in the Nasdaq listing standards and applicable SEC rules prior to completion of this offering.

Our board has determined that Dr. Tsun Yee Law, Dr. Kenny Yu and Ms. Diane Hare are independent directors under applicable SEC and Nasdaq rules. Our independent directors have regularly scheduled meetings at which only independent directors are present.

Board Committees

Our board of directors has established an Audit Committee, a Nominating and Corporate Governance Committee and a Compensation Committee. Our board of directors has adopted a charter for each of these three committees. Copies of each committee’s charter have been posted on the Investor Relations section of our website, which are located at www.nanonuclearenergy.com. Each of the committees of our board of directors shall have the composition and responsibilities described below. Our board of directors may from time to time establish other committees as it deems appropriate.

Audit Committee

Drs. Kenny Yu, Tsun Yee Law and Ms. Diane Hare serve as members of our Audit Committee with Dr. Tsun Yee Law serving as the chairman of the Audit Committee. Each of our Audit Committee members satisfies the “independence” requirements of the Nasdaq listing rules and meets the independence standards under Rule 10A-3 under the Exchange Act. Our board of directors has determined that Ms. Diane Hare possesses accounting or related financial management experience that qualifies her as an “audit committee financial expert” as defined by the rules and regulations of the SEC. Our Audit Committee oversees our accounting and financial reporting processes and the audits of our financial statements. Our Audit Committee performs several functions, including:

- evaluating the performance, independence and qualifications of our independent registered public accounting firm and determining whether to retain our existing independent registered public accounting firm or engage new independent registered public accounting firm;
- reviewing and approving the engagement of our independent registered public accounting firm to perform audit services and any permissible non-audit services;

- reviewing our annual and quarterly financial statements and reports, including the disclosures contained under the caption “*Management’s Discussion and Analysis of Financial Condition and Results of Operations*,” and discussing the statements and reports with our independent registered public accounting firm and management;
- reviewing with our independent registered public accounting firm and management significant issues that arise regarding accounting principles and financial statement presentation and matters concerning the scope, adequacy and effectiveness of our financial controls;
- reviewing our major financial risk exposures, including the guidelines and policies to govern the process by which risk assessment and risk management is implemented; and
- reviewing and evaluating on an annual basis the performance of the audit committee, including compliance of the audit committee with its charter.

Compensation Committee

Drs. Kenny Yu, Tsun Yee Law and Ms. Diane Hare serve as members of our Compensation Committee with Dr. Tsun Yee Law serving as the chairman of the Compensation Committee. All of our Compensation Committee members satisfy the “independence” requirements of the Nasdaq listing rules and meet the independence standards under Rule 10A-3 under the Exchange Act. The functions of this committee include, among other things:

- reviewing, modifying and approving (or if it deems appropriate, making recommendations to the full board of directors regarding) our overall compensation strategy and policies;
- reviewing and approving the compensation, the performance goals and objectives relevant to the compensation, and other terms of employment of our executive officers;
- reviewing and approving (or if it deems appropriate, making recommendations to the full board of directors regarding) the equity incentive plans, compensation plans and similar programs advisable for us, as well as modifying, amending or terminating existing plans and programs;
- reviewing and approving the terms of any employment agreements, severance arrangements, change in control protections and any other compensatory arrangements for our executive officers;
- reviewing with management and approving our disclosures under the caption “*Compensation Discussion and Analysis*” in our periodic reports or proxy statements to be filed with the SEC; and
- preparing the report that the SEC requires in our annual proxy statement.

Nominating and Corporate Governance Committee

Drs. Kenny Yu, Tsun Yee Law and Ms. Diane Hare serve as members of our Nominating and Corporate Governance Committee with Ms. Diane Hare serving as the chairwoman of the Compensation Committee. All of our Nominating and Corporate Governance Committee members satisfy the “independence” requirements of the Nasdaq listing rules and meet the independence standards under Rule 10A-3 under the Exchange Act. The functions of this committee include, among other things:

- identifying, reviewing and evaluating candidates to serve on our board of directors consistent with criteria approved by our board of directors;
- evaluating director performance on the board and applicable committees of the board and determining whether continued service on our board is appropriate;
- evaluating, nominating and recommending individuals for membership on our board of directors; and
- evaluating nominations by stockholders of candidates for election to our board of directors.

The nominating and corporate governance committee takes into account many factors in determining recommendations for persons to serve on the board of directors, including the following:

- personal and professional integrity, ethics and values;
- experience in corporate management, such as serving as an officer or former officer of a publicly-held company;
- experience as a board member or executive officer of another publicly-held company;
- strong finance experience;
- diversity of expertise and experience in substantive matters pertaining to our business relative to other board members;
- diversity of background and perspective including, without limitation, with respect to age, gender, race, place of residence and specialized experience;
- experience relevant to our business industry and with relevant social policy concerns; and
- relevant academic expertise or other proficiency in an area of our business operations.

Role of Board in Risk Oversight Process

Jay Jiang Yu, our President, Secretary, Treasurer, and Chairman of the Board of Directors, currently beneficially owns approximately 40.06% of the voting power of our common stock, and will own approximately []% of the voting power of our common stock, after the closing of this offering. Periodically, our board of directors assesses these roles and the board of directors leadership structure to ensure the interests of our company and our stockholders are best served. Our board of directors has determined that its current leadership structure is appropriate. Jay Jiang Yu, our President, Secretary, Treasurer, and Chairman of the Board of Directors, and James Walker, our CEO and director, have extensive knowledge of all aspects of our company, our business and risks.

While management is responsible for assessing and managing risks to our company, our board of directors is responsible for overseeing management's efforts to assess and manage risk. This oversight is conducted primarily by our full board of directors, which has responsibility for general oversight of risks, and standing committees of our board of directors. Our board of directors satisfies this responsibility through full reports by each committee chair regarding the committee's considerations and actions, as well as through regular reports directly from officers responsible for oversight of particular risks within our company. Our board of directors believes that full and open communications between management and the board of directors are essential for effective risk management and oversight.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves, or in the past has served, as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any entity that has one or more executive officers who serve as members of our board of directors or our compensation committee. None of the members of our compensation committee is, or has ever been, an officer or employee of our company.

Code of Business Conduct and Ethics

On or prior to the completion of this offering, we will adopt a written code of business conduct and ethics that applies to our employees, officers and directors. A current copy of the code will be posted on the Corporate Governance section of our website, which will be located at www.nanonuclearenergy.com. We intend to disclose future amendments to certain provisions of our code of business conduct and ethics, or waivers of such provisions applicable to any principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, and our directors, on our website identified above or in filings with the SEC.

Involvement in Certain Legal Proceedings

Except as set forth under “*Business—Legal Proceedings*” above, to the best of our knowledge, none of our directors or executive officers has, during the past ten years:

- been convicted in a criminal proceeding or been subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
- had any bankruptcy petition filed by or against the business or property of the person, or of any partnership, corporation or business association of which he was a general partner or executive officer, either at the time of the bankruptcy filing or within two years prior to that time;
- been subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, by any court of competent jurisdiction or federal or state authority, permanently or temporarily enjoining, barring, suspending or otherwise limiting, his involvement in any type of business, securities, futures, commodities, investment, banking, savings and loan, or insurance activities, or to be associated with persons engaged in any such activity;
- been found by a court of competent jurisdiction in a civil action or by the SEC or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated;
- been the subject of, or a party to, any federal or state judicial or administrative order, judgment, decree, or finding, not subsequently reversed, suspended or vacated (not including any settlement of a civil proceeding among private litigants), relating to an alleged violation of any federal or state securities or commodities law or regulation, any law or regulation respecting financial institutions or insurance companies including, but not limited to, a temporary or permanent injunction, order of disgorgement or restitution, civil money penalty or temporary or permanent cease-and-desist order, or removal or prohibition order, or any law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity; or
- been the subject of, or a party to, any sanction or order, not subsequently reversed, suspended or vacated, of any self-regulatory organization (as defined in Section 3(a)(26) of the Exchange Act), any registered entity (as defined in Section 1(a)(29) of the Commodity Exchange Act), or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

From time to time, we may be subject to various legal or administrative claims and proceedings arising in the ordinary course of business. Litigation or any other legal or administrative proceeding, regardless of the outcome, is likely to result in substantial cost and diversion of our company’s resources, including our company’s management’s time and attention.

EXECUTIVE AND DIRECTOR COMPENSATION

The following table sets forth the aggregate compensation paid to our named executive officers and directors for the fiscal year ended September 30, 2023 and 2022. Individuals we refer to as our “named executive officers” include our President and Chairman and any other highly compensated executive officers whose salary and bonus for services rendered in all capacities equaled or exceeded \$100,000 during the fiscal years ended September 30, 2023 and 2022.

Summary Compensation Table

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation ⁽¹⁾ (\$)	Total (\$)
Jay Jiang Yu <i>President, Secretary, Treasurer, and Chairman of the Board of Directors</i>	2023	-	-	\$ 317,652	-	-	\$ 225,000	\$ 542,652
	2022	-	-	-	-	-	\$ 80,000	\$ 80,000
James Walker <i>Chief Executive Officer and Director</i>	2023	-	-	\$ 317,652	-	-	\$ 90,000	\$ 407,652
	2022	-	-	-	-	-	\$ 15,000	\$ 15,000
Jaisun Garcha <i>Chief Financial Officer</i>	2023	-	-	\$ 77,786	-	-	\$ 90,000	\$ 167,786
	2022	-	-	\$ -	-	-	\$ 30,000	\$ 30,000
Winston Khun Hunn Chow <i>Chief Policy Officer</i>	2023	-	-	\$ 116,059	-	-	\$ 25,000	\$ 141,059
	2022	-	-	\$ -	-	-	\$ 10,000	\$ 10,000
Dr. Tsun Yee Law <i>Independent Director</i>	2023	-	-	\$ 8,553	-	-	\$ 15,000	\$ 23,553
	2022	-	-	-	-	-	\$ 5,000	\$ 5,000
Diane Hare <i>Independent Director</i>	2023	-	-	\$ 35,019	-	-	\$ 5,000	\$ 40,019
	2022	-	-	-	-	-	-	-
Dr. Kenny Yu <i>Independent Director</i>	2023	-	-	\$ 35,019	-	-	\$ 5,000	\$ 40,019
	2022	-	-	-	-	-	-	-

(1) Consists of consulting fees or directors fees paid and accrued pursuant to their respective consulting agreements with us.

Retention Arrangements with our Executive Officers and Directors

Consulting Agreements with Our Executive Officers

We have entered into a consulting agreement with each of our executive officers under similar terms except for Jay Jiang Yu, our President, Secretary, Treasurer, and Chairman of the Board. We do not have direct employment or consulting agreement with him; instead, we entered into a consulting agreement with I Financial Ventures Group LLC where Jay Jiang Yu is the sole member and manager and will provide relevant services to us. In general, our executive officers are not employees of our company, instead, they serve as independent contractors and can be terminated by either party at any time. They may pursue any other activities and engagements during their terms of agreements with us.

Pursuant to those agreements, our executive officers are entitled to a retention fee for services so rendered, and at the sole discretion of our company, they are also eligible to receive additional compensation awards and participate in our employee benefit programs. Those agreements also contain customary restrictive covenants relating to confidentiality, non-competition, non-solicitation, and non-disparagement, as well as indemnification.

The term of those agreements is 36 months (except for the one with Jay Jiang Yu with a period of 120 months) commencing from their respective effective date of those agreements, subject to early termination.

Independent Director Agreements with Our Independent Directors

We have entered into independent director agreements with each of our independent directors under similar terms. In general, our independent directors are not employees of our company, instead, they serve as independent contractors and can be terminated by either party at any time. They may pursue any other activities and engagements during their terms of agreements with us.

Pursuant to those agreements, each of our independent directors is (i) entitled to a cash compensation of \$5,000 upon full execution of his agreements with us, and an additional \$10,000 at one year anniversary of such agreement, for services so rendered; and (ii) granted options to purchase 40,000 shares of our company's common stock at an exercise price of \$3.00 per share, exercisable within three years. Those agreements also contain customary restrictive covenants relating to confidentiality, non-competition, non-solicitation and non-disparagement, as well as indemnification.

The term of those agreements is twenty-four (24) months commencing from their respective effective date of those agreements, subject to renewal and early termination.

2023 Stock Option Agreements

We have entered into nonqualified stock option agreements (or the 2023 Stock Option Agreements) pursuant to the 2023 Stock Option Plan #1 (as defined below) and the 2023 Stock Option Plan #2 (as defined below) with our executive officers and directors under similar terms. Under the 2023 Stock Option Agreements, each applicable executive officer and officer was granted an option to acquire certain common stock under those two option plans at certain exercise price.

Their options shall vest immediately on the date of grant, subject to their continued service with our company or its subsidiaries on each applicable vesting date. The following table provides information regarding each stock options held by the named executive officers and directors as of the date of this prospectus.

	Grant Date	Vesting Start date	Number of securities underlying unexercised options vested (#)	Number of securities underlying unexercised options unvested (#)	Options exercise price (\$)	Option Expiration date
Jay Jiang Yu <i>President, Secretary, Treasurer, and Chairman of the Board of Directors</i>	February 10, 2023	February 10, 2023	500,000	-	\$ 1.50	February 10, 2026
	June 7, 2023	June 7, 2023	200,000	-	\$ 3.00	June 7, 2026
James Walker <i>Chief Executive Officer and Director</i>	February 10, 2023	February 10, 2023	500,000	-	\$ 1.50	February 10, 2026
	June 7, 2023	June 7, 2023	200,000	-	\$ 3.00	June 7, 2026
Jaisun Garcha <i>Chief Financial Officer</i>	February 10, 2023	February 10, 2023	150,000	-	\$ 1.50	February 10, 2026
	June 7, 2023	June 7, 2023	40,000	-	\$ 3.00	June 7, 2026
Winston Khun Hunn Chow <i>Chief Policy Officer</i>	February 10, 2023	February 10, 2023	100,000	-	\$ 1.50	February 10, 2026
	June 7, 2023	June 7, 2023	100,000	-	\$ 3.00	June 7, 2026
Dr. Tsun Yee Law <i>Independent Director</i>	February 10, 2023	February 10, 2023	30,000	-	\$ 1.50	February 10, 2026
Diane Hare <i>Independent Director</i>	June 7, 2023	June 7, 2023	40,000	-	\$ 3.00	June 7, 2026
Dr. Kenny Yu <i>Independent Director</i>	June 7, 2023	June 7, 2023	40,000	-	\$ 3.00	June 7, 2026

2023 Stock Option Plans

On February 10, 2023, and on June 7, 2023, our board adopted two distinct stock option plans for our company (which we refer to individually, the 2023 Stock Option Plan #1 and the 2023 Stock Option Plan #2; collectively, the 2023 Stock Option Plans). There are currently 3,819,883 shares available for issuance under the 2023 Stock Option Plan #1, and the maximum number of shares available under the plan increases on an annual basis. There are currently 2,015,226 shares available for issuance under the 2023 Stock Option Plan #2, and the maximum number of shares available increases quarterly, beginning on June 30, 2023. The plans are otherwise substantially similar in their substance.

The principal purposes of the 2023 Plans are to: (a) improve individual performance by providing long-term incentives and rewards to certain of our employees, directors, and consultants; (b) assist our company in attracting, retaining, and motivating certain employees, directors, and consultants with experience and ability; and (c) align the interests of such persons with those of our stockholders.

The following description of the principal terms of the 2023 Stock Option Plan #1 and the 2023 Stock Option Plan #2 is a summary and is qualified in its entirety by their full text and all amendments thereto.

Administration

The 2023 Stock Option Plans may be administered by our board or a committee appointed by, and consisting of two or more members of, the Board (or the Plan Administrator). At any time when no committee has been appointed to administer each of the 2023 Stock Option Plans, the Board will be the Plan Administrator. The Plan Administrator, in its exclusive discretion, selects the individuals to whom awards may be granted, the types of awards granted, the time or times at which such awards are granted, and the terms and conditions of such awards. The Plan Administrator also has exclusive authority to interpret each of the 2023 Stock Option Plans and the terms of any instrument evidencing any awards and may adopt and change rules and regulations of general application for their administration. The Plan Administrator may delegate administrative duties to such of our company's officers as it so determines. Unless sooner terminated, each of the 2023 Stock Option Plans shall terminate ten years after the earlier of the plan's adoption by the Board and approval by our company's stockholders.

Share Reserve

The 2023 Stock Option Plan #1 provides for the grant of options to purchase up to 3,247,030 shares of the common stock of the Corporation. The maximum aggregate number of shares of common stock that may be optioned and sold under the 2023 Stock Option Plan #1 will be subject to an increase on the first day of each fiscal quarter equal to 15% increase in the total outstanding shares of our common stock in the preceding quarter. As of the date of this prospectus, there are 3,819,883 shares available for issuance under the 2023 Stock Option Plan #1.

The 2023 Stock Option Plan #2 provides for the grant of options to purchase up to 1,727,730 shares of the common stock of the Corporation. The maximum aggregate number of shares of common stock that may be optioned and sold under the 2023 Stock Option Plan #2 will be increased each quarter, with the first quarterly increase on June 20, 2023, and every three months thereafter. As of the date of this prospectus, there are 2,015,226 shares available for issuance under the 2023 Stock Option Plan #2.

The maximum number of shares available under each of the 2023 Stock Option Plans is equal to the lesser of: (1) the number of shares equal to 15% of the outstanding shares of common stock on the applicable adjustment date (or the Adjustment Date), less (a) the number of shares of common stock that may be optioned and sold under the plan prior to the Adjustment Date, and (b) the number of shares of common stock that may be optioned and sold under any other stock option plan of our company in effect as of the Adjustment Date; or (2) such lesser number of shares of common stock as may be determined by the board. Any shares of common stock that have been made subject to an award that cease to be subject to the award (other than by reason of exercise or settlement of the award to the extent it is exercised for or settled in shares) shall again be available for issuance in connection with future grants of awards under each of the 2023 Stock Option Plans.

Withholding

Our company may require participants to pay to our company the amount of any taxes that our company is required by applicable federal, state, local or foreign law to withhold with respect to the grant, vesting or exercise of awards granted under the 2023 Stock Option Plans.

Eligibility

An award may be granted to any officer, director or employee of our company (which we refer to as a Related Company, as defined in the 2023 Stock Option Plans), that the Plan Administrator from time to time selects. An award may also be granted to any consultant, agent, advisor or independent contractor who provides services to our company or any Related Company, so long as such Consultant Participant: (a) is a natural person; (b) renders bona fide services that are not in connection with the offer and sale of our company's securities in a capital-raising transaction; and (c) does not directly or indirectly promote or maintain a market for our company's securities.

Types of Option Awards

The 2023 Stock Option Plans provide for the grant of stock options, which may be incentive stock options (or ISOs) or nonqualified stock options (or NSOs), which entitle the holder to purchase a specified number of shares of common stock at a specified price (the exercise price), subject to the terms and conditions of the stock option grant. An option holder may pay the exercise price of an option in cash or by any other method of payment which the Stock Option Administrator shall approve. Each of the 2023 Stock Option Plans provides that an option has a term of 10 years from the grant date.

The exercise price of an ISO shall be at least 100% of the fair market value of the common stock on the grant date. If an ISO is granted to a recipient who owns more than 10% of the total combined voting power of all classes of the stock of our company or of its parent or subsidiary corporations (which we refer to as a Ten Percent Stockholder), the exercise price of the ISO shall not be less than 110% of the fair market value of the common stock on the grant date.

Taxation

The aggregate fair market value, determined at the time of grant, of common stock with respect to ISOs that are exercisable for the first time by an option holder during any calendar year may not exceed \$100,000. Options or portions thereof that exceed such limit will generally be treated as NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our company's total combined voting power or that of any of our company's affiliates unless the option exercise price is at least 110% of the fair market value of common stock on the date of grant.

Changes to Capital Structure

In the event of certain changes in capitalization, including a stock split, stock dividend, or an extraordinary corporate transaction such as any reorganization, merger, consolidation, recapitalization, or reclassification, proportionate adjustments will be made in the number and kind of shares available for issuance under each of the 2023 Stock Option Plans, the number and kind of shares subject to each outstanding award, and/or the exercise price of each outstanding award.

Transferability

Awards granted under the 2023 Stock Option Plans may not be assigned, pledged, or transferred in any manner, other than by will or by the applicable laws of descent and distribution, and may be exercised, during the lifetime of the participant, only by the participant. Notwithstanding the foregoing, the Plan Administrator may, in its discretion, permit award transfers after the participant's death. If the Plan Administrator makes an award transferable, such award will be subject to all the terms and conditions of the plan and those contained in the instrument evidencing the award.

Amendment and Termination

Our board may amend, suspend or terminate each of the 2023 Stock Option Plans at any time. Any such termination will not affect outstanding awards. No amendment, alteration, suspension, or termination of the 2023 Stock Option Plans will materially impair the rights of any participant, unless mutually agreed otherwise between the participant and our company. Approval of the stockholders shall be required for any amendment, where required by applicable law, as well as (i) to increase the number of shares of common stock available for issuance under each of the 2023 Stock Option Plans and (ii) to change the persons or class of persons eligible to receive awards under each of the 2023 Stock Option Plans. Unless sooner terminated, the February 2023 Stock Option Plan shall terminate ten years after the earlier of the plan's adoption by the Board and approval by our company's stockholders.

Compensation of Directors

Our directors received an aggregate of \$25,000 and \$5,000, respectively, for the fiscal year ended September 30, 2023 and 2022.

Outstanding Equity Awards at Fiscal Year-End

There was no issuance of shares of common stock as equity awards to any of our executive officers and directors during the fiscal years ended September 30, 2023 and 2022.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information concerning the ownership of our common stock as of the date of this prospectus, with respect to: (i) each person, or group of affiliated persons, known to us to be the beneficial owner of more than 5% of our common stock; (ii) each of our directors; (iii) each of our named executive officers; and (iv) all of our current directors and executive officers as a group.

Applicable percentage ownership is based on 30,715,663 shares of common stock outstanding as of October 2, 2024. The percentage of beneficial ownership after this offering assumes the sale and issuance of the Units in this offering and no exercise by the representative of the underwriters of its over-allotment option to purchase additional shares of common stock and/or the Warrants.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting or investment power with respect to such securities. In addition, pursuant to such rules, we deemed outstanding shares of common stock subject to options or warrants held by that person that are currently exercisable or exercisable within 60 days of the date of this prospectus. We did not deem such shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the beneficial owners named in the table below have sole voting and investment power with respect to all shares of our common stock that they beneficially own, subject to applicable community property laws.

Name and Address of Beneficial Owner ⁽¹⁾	Shares of common stock Beneficially Owned Prior to Offering		Shares of common stock Beneficially Owned After Offering	
	Number	Percentage ⁽²⁾	Number	Percentage ⁽³⁾
5% or Greater Stockholders				
I Financial Ventures Group LLC. ⁽⁴⁾	10,700,000	34.06%	10,700,000	[]%
Mongkol Prakitchaiwatthana ⁽⁵⁾	2,000,000	6.51%	2,000,000	[]%
Executive Officers, Directors and Director Nominees				
Jay Jiang Yu ⁽⁴⁾	10,700,000	34.06%	10,700,000	[]%
James Walker ⁽⁶⁾	1,000,000	3.18%	1,000,000	[]%
Jaisun Garcha ⁽⁷⁾	440,000	1.42%	440,000	[]%
Winston Khun Hunn Chow ⁽⁸⁾	500,000	1.62%	500,000	[]%
Dr. Tsun Yee Law ⁽⁹⁾	130,000	*	130,000	*
Diane Hare ⁽¹⁰⁾	40,000	*	40,000	*
Dr. Kenny Yu ⁽¹¹⁾	55,000	*	55,000	*
All directors and executive officers as a group (seven individuals)	12,865,000	41.01%	12,865,000	[]%

* Less than 1%.

- (1) Except as otherwise indicated, the business address of our directors and executive officers is 10 Times Square, 30th Floor, New York, NY 10018.
- (2) Based on 30,715,663 shares of common stock outstanding as of October 2, 2024.
- (3) Based on [] shares of common stock outstanding immediately after the offering assuming no exercise of the over-allotment option for this offering.
- (4) Represents 10,000,000 shares of common stock held by I Financial Ventures Group LLC. (or the I Financial), a Limited Liability company incorporated under the laws of Delaware and includes 700,000 shares of common stock issuable upon the exercise of the vested options within 60 days of the date of this prospectus. Jay Jiang Yu, our President, Secretary, Treasurer, and Chairman of the Board of Directors, is the sole shareholder and director of I Financial, and exercises voting and dispositive power of the securities held by I Financial. The address of I Financial is c/o 10 Times Square, 30th Floor, New York, NY 10018.
- (5) Represents 2,000,000 shares of common stock held by Mongkol Prakitchaiwatthana, an investor.
- (6) Represents 300,000 shares of common stock held by James Walker, our Chief Executive Officer and director, and includes 700,000 shares of common stock issuable upon the exercise of the vested options within 60 days of the date of this prospectus.
- (7) Represents 250,000 shares of common stock held by Jaisun Garcha, our Chief Financial Officer and director, and includes 190,000 shares of common stock issuable upon the exercise of the vested options within 60 days of the date of this prospectus.
- (8) Represents 300,000 shares of common stock held by Winston Khun Hunn Chow, our Chief Policy Officer, and includes 200,000 shares of common stock issuable upon the exercise of the vested options within 60 days of the date of this prospectus.
- (9) Represents 100,000 shares of common stock held by Dr. Tsun Yee Law, our independent director, and includes 30,000 shares of common stock issuable upon the exercise of the vested options within 60 days of the date of this prospectus.
- (10) Includes 40,000 shares of common stock issuable upon the exercise of the vested options by Diane Hare, our independent director, within 60 days of the date of this prospectus.
- (11) Represents 15,000 shares of common stock held by Dr. Kenny Yu, our independent director, and includes 40,000 shares of common stock issuable upon the exercise of the vested options within 60 days of the date of this prospectus.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

During the period from February 8, 2022 (inception) to the date of this prospectus, we have entered into or participated in the following transactions with related persons:

Amount Due to Related Parties

As of June 30, 2024, we did not have any amounts due to related parties. As of September 30, 2023, we had amounts due to related parties totaling \$35,000, of which \$30,000 was due to our Chief Executive Officer James Walker, and \$5,000 was due to our President, Secretary, Treasurer, and Chairman of the Board Jay Jiang Yu. The amounts due as of September 30, 2023 corresponded to unpaid amounts due to officers and directors for services rendered during the year ended September 30, 2023.

For the nine months ended June 30, 2024, we incurred consulting fees of \$290,000 to our President, Secretary, Treasurer, and Chairman of the Board, Jay Jiang Yu, \$110,000 to our Chief Executive Officer James Walker, \$140,000 to our Chief Financial Officer Jaisun Garcha, and incurred total directors' fees of \$95,000 to three independent directors (including \$25,000 for Dr. Tsun Yee Law, \$35,000 for Diane Hare and \$35,000 for Dr. Kenny Yu) which was included in the consolidated statement of operation under general and administrative expenses.

For the year ended September 30, 2023, we incurred consulting fees of \$225,000 to our President, Secretary, Treasurer, and Chairman of the Board, Jay Jiang Yu, \$90,000 to our Chief Executive Officer James Walker, \$90,000 to our Chief Financial Officer Jaisun Garcha, \$25,000 to our Chief Policy Officer Winston Khun Hunn Chow, and incurred total directors' fees of \$25,000 to three independent directors (including \$15,000 for Dr. Tsun Yee Law, \$5,000 for Diane Hare and \$5,000 for Dr. Kenny Yu), which was included in the accompanying consolidated statement of operation under general and administrative expenses. For the period from inception to September 30, 2022, we incurred consulting fees of \$80,000 to its President and Chairman Jay Jiang Yu, \$15,000 to our Chief Executive Officer James Walker, \$30,000 to our Chief Financial Officer Jaisun Garcha, \$10,000 to our Chief Policy Officer Winston Khun Hunn Chow, and incurred total directors' fees of \$5,000 to one independent director, namely Dr. Tsun Yee Law, which was included in the accompanying consolidated statement of operations under general and administrative expenses.

Investment in LIS Technologies

In August 2024, we invested \$2,000,000 as an equity investment into LIST as part of its \$11.88 million seed funding round. This additional capital into LIST is anticipated to help fuel the development of its proprietary, patented advanced laser enrichment technology.

LIST is a U.S. based, proprietary developer of a patented advanced laser technology, making use of infrared wavelengths to selectively excite the molecules of desired isotopes to separate them from other isotopes. The Laser Isotope Separation Technology ("L.I.S.T") has a huge range of applications, including being the only U.S.-origin (and patented) laser uranium enrichment company, and several major advantages over traditional methods such as gas diffusion, centrifuges, and prior art laser enrichment. The L.I.S.T proprietary laser-based process is more energy-efficient and has the potential to be deployed with highly competitive capital and operational costs due to high throughput, high duty cycle and reduced complexity compared to competing technologies.

L.I.S.T is optimized for LEU (Low Enriched Uranium) for existing civilian nuclear power plants, HALEU for the next generation of Small Modular Reactors (SMR) and microreactors like the ones we are developing, the production of stable isotopes for medical and scientific research, and applications in quantum computing manufacturing for semiconductor technologies. For laser enrichment of uranium, this method has sufficient selectivity that will enable the production of LEU in a single stage and HALEU in two stages.

Concurrently with our investment in LIST, we entered into an agreement with LIST to collaborate and assist in developing their technologies to secure a fuel supply at a reduced cost to us for our future operations and the wider nuclear energy industry. Through collaboration with LIST, we anticipate that we will build supportive facilities around LIST's enrichment facility, including such facilities as deconversion and fuel fabrication.

We also leased approximately 7,000 square feet of dedicated space within our Oak Ridge, Tennessee based nuclear technology facility to LIST to enable the next phase of the revitalization of its proprietary laser-based process. We lease this space to LIST for \$7,000 per month. The lease is effective on September 2, 2024 and has a term ending on September 1, 2034.

Our relationship with LIST is considered a related party transaction since certain of our executive directors and officers, including Jay Jiang Yu, Jaisun Garcha, and Dr. Tsun Yee Law, also serve as directors and officers for LIST, and James Walker serves as a consultant to LIST. Our investment in LIST was unanimously approved by all of our disinterested independent directors.

Facilities

See "*Business — Facilities and Planned Fuel Processing Facility.*"

Share Issuances

See "*History of Securities Issuances.*"

Consulting Agreements with Senior Executives

We have utilized independent contractor relationships from our inception to date, but in connection with the consummation of this offering, we intend to enter into formal employment agreements with our senior executive officers.

On February 8, 2022, we entered into an agreement with an affiliate of Jay Jiang Yu, our President, Secretary, Treasurer, and Chairman of the Board, providing for a monthly retention fee of \$10,000. During the period from February 8, 2022 (inception) to September 30, 2022, our officers received \$135,000 in total cash compensation and our one independent director received a total of \$5,000 as directors' fees.

During the nine months ended June 30, 2024, our officers received \$540,000 in total cash compensation and our three independent directors received a total of \$95,000 as directors' fees. During the year ended September 30, 2023, our officers received \$430,000 in total cash compensation and our three independent directors received a total of \$25,000 as directors' fees.

See *“Executive and Director Compensation — Retention Arrangements with our Executive Officers and Directors.”*

Consulting Agreements with the Members of the Executive Advisory Board

We have entered into a consulting agreement with each member of our Executive Advisory Board under similar terms and conditions, except for Mark Nichols. Our arrangement with Mark Nichols, however, has been formalized through a consulting agreement with Seven Summits, LLC, who serves as the president, and is subject to analogous terms and conditions.

During the nine months ended June 30, 2024, our executive advisory board was paid a total of \$40,000. During the years ended September 30, 2023 and 2022, our executive advisory board was paid a total of \$70,000 and \$20,000, respectively.

See *“Management - Consulting Agreements with the Members of the Executive Advisory Board.”*

Company Policies on Related Party Transactions

A “Related Party Transaction” is a transaction, arrangement, or relationship in which we or any of our subsidiaries was, is or will be a participant, the amount of which involved exceeds \$100,000 in any one fiscal year, and in which any related person had, has or will have a direct or indirect material interest. A “Related Person” means:

- any person who is, or at any time during the applicable period was, one of our executive officers, one of our directors, or a nominee to become one of our directors;
- any person who is known by us to be the beneficial owner of more than 5.0% of any class of our voting securities;
- any immediate family member of any of the foregoing persons, which means any child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law of a director, executive officer or a beneficial owner of more than 5.0% of any class of our voting securities, and any person (other than a tenant or employee) sharing the household of such director, executive officer or beneficial owner of more than 5.0% of any class of our voting securities; and
- any firm, corporation, or other entity in which any of the foregoing persons is employed or is a general partner or principal or in a similar position or in which such person has a 5% or greater beneficial ownership interest in any class of our company's voting securities.

Our Board intends to adopt a related party transactions policy. Pursuant to this policy, our Audit Committee will review all material facts of all Related Party Transactions and either approve or disapprove entry into the Related Party Transaction, subject to certain limited exceptions. In determining whether to approve or disapprove entry into a Related Party Transaction, our Audit Committee shall consider, among other factors, the following: (i) whether the Related Party Transaction is on terms no less favorable than terms generally available to an unaffiliated third-party under the same or similar circumstances and (ii) the extent of the Related Person's interest in the transaction. Further, the policy will require that all Related Party Transactions required to be disclosed in our filings with the SEC be so disclosed in accordance with applicable laws, rules and regulations.

DESCRIPTION OF CAPITAL STOCK

The aggregate number of shares that we are authorized to issue is 300,000,000, consisting of 275,000,000 shares of common stock, par value \$0.0001 per share, and 25,000,000 shares of preferred stock, par value \$0.0001 per share. As of October 2, 2024, there were 30,715,663 shares of common stock outstanding and there was no preferred stock outstanding.

We are offering [_____] Units consisting of an aggregate of [_____] shares of common stock and Warrants to purchase up to [_____] shares of our common stock. The Units have no stand-alone rights and will not be certificated or issued as stand-alone securities. The shares of common stock and the Warrants underlying the Units are immediately separable and will be issued separately in this offering.

The following summary of the capital stock and our articles of incorporation and bylaws does not purport to be complete and is qualified in its entirety by reference to the provisions of applicable law and our articles of incorporation and bylaws, as amended, which are filed as exhibits to the registration statement of which this prospectus is a part.

Common Stock

Voting Rights. Holders of shares of common stock are entitled to one vote per share held of record on all matters to be voted upon by the stockholders. Holders of shares of common stock have no cumulative voting rights.

Quorum. Our bylaws provide that the holders of not less than one third (33 1/3 percent) of the outstanding shares of common stock entitled to vote constitutes a quorum. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairman of the meeting or by vote of the holders of a majority of the shares represented thereat, but no other business shall be transacted at such meeting. Where a separate vote by a class or classes or series is required, except where otherwise provided by the statute or by the articles of incorporation or the bylaws, as amended, one-third (33 1/3 percent) of the outstanding shares of such class or classes or series, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter and, except where otherwise provided by the statute or by the articles of incorporation or the bylaws, as amended, the affirmative vote of the majority (plurality, in the case of the election of directors) of the votes cast, including abstentions, by the holders of shares of such class or classes or series shall be the act of such class or classes or series.

Dividend Rights. Holders of shares of common stock are entitled to ratably receive dividends when and if declared by the board of directors out of funds legally available for that purpose, subject to the provisions of our articles of incorporation and bylaws, any statutory or contractual restrictions on the payment of dividends, and any prior rights and preferences that may be applicable to any outstanding preferred stock.

Liquidation Rights. Upon liquidation, dissolution, distribution of assets or other winding up, the holders of common stock are entitled to receive ratably the assets available for distribution to the stockholders after payment of liabilities and the liquidation preference of any of our outstanding shares of preferred stock.

Other Matters. The shares of common stock have no preemptive or preferential right to acquire any of our shares or securities, including shares or securities held in our treasury. All outstanding shares of our common stock are fully paid and non-assessable.

Preferred Stock

Our articles of incorporation give the board of directors the power to issue shares of preferred stock in one or more series without stockholder approval. The board of directors has the discretion to determine the designations, rights, qualifications, preferences, privileges, and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock. The purpose of authorizing the board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from acquiring, a majority of our outstanding voting stock.

Stock Options

As of the date of this prospectus, we had reserved the following shares of common stock for issuance pursuant to stock options under the 2023 Stock Option Plan #1 and 2023 Stock Option Plan #2:

- up to 3,819,883 shares of our common stock reserved for issuance with an exercise price of \$1.50 per share under stock option agreements pursuant to the 2023 Equity Incentive Plan #1, subject to an increase on the first day of each fiscal quarter equal to 15% increase in the total outstanding shares of our common stock in the preceding quarter; and
- up to 2,015,226 shares of our common stock reserved for issuance with an exercise price of \$3.00 per share under stock option agreements pursuant to the 2023 Equity Incentive Plan #2, subject to an increase at each quarter, with the first quarterly increase on June 30, 2023, and every three months thereafter (the "Adjustment Date"), by an amount equal to the lesser of (i) 15% of the total outstanding shares of our common stock on the applicable Adjustment Date less (a) the number of shares of common stock that may be optioned and sold under such plan prior to the applicable Adjustment Date and (b) the number of shares of common stock that may be optioned and sold under any other stock option plans of our company in effect as of the applicable Adjustment Date; or (ii) such lesser number of shares of common stock as may be determined by the board.

In August 2024, we issued an aggregate of 250,000 shares of common stock to our consultants who exercised their options pursuant to 2023 Stock Option Plan #1 and 2023 Stock Option Plan #2.

In September 2024, we issued an aggregate of 343,000 shares of common stock to our consultants who exercised their options pursuant to 2023 Stock Option Plan #1 and 2023 Stock Option Plan #2.

Warrants Issued in this Offering

The following summary of certain terms and provisions of the Warrants offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Warrant Agent Agreement being entered into between us and VStock Transfer, LLC, as warrant agent, the form of which has been filed as an exhibit to the registration statement of which this prospectus is a part. Prospective investors should carefully review the terms and provisions of the Warrant Agent Agreement (which includes the form of Warrant) for a complete description of the terms and conditions of the Warrants.

Exercisability. The Warrants are exercisable on the original issuance date and will expire on the date that is five years after their original issuance. The Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice. In no event may the Warrants be net cash settled.

Exercise Limitation. A holder will not have the right to exercise any portion of the Warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Warrants. However, any holder may increase or decrease such percentage, provided that any increase will not be effective until the 61st day after such election.

Exercise Price. The Warrants will have an exercise price of \$[_____] per whole share and will be exercisable from the initial issuance date until they expire on the five-year anniversary of the original issuance date. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

Cashless Exercise. If, at the time a holder exercises its Warrant, there is no effective registration statement registering, or the prospectus contained therein is not available for an issuance of the shares underlying the Warrant to the holder, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Warrant.

Transferability. Subject to applicable laws, the Warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing. There is no established trading market for the Warrants being offered and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the Warrants will be limited and should be considered illiquid.

Fundamental Transactions. If a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the Warrants with the same effect as if such successor entity had been named in the warrant itself. If holders of our common stock are given a choice as to the securities, cash or property to be received in a fundamental transaction, then the holder shall be given the same choice as to the consideration it receives upon any exercise of the warrant following such fundamental transaction.

Rights as a Stockholder. Except as otherwise provided in the Warrants or by virtue of such holder's ownership of shares of our common stock, the holder of a Warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the Warrant.

Warrants Issued in Our July 2024 Follow-on Offering

The following summary of certain terms and provisions of the warrants issued in our July 2024 Follow-on Offering is not complete and is subject to, and qualified in its entirety by, the provisions of the Warrant Agent Agreement being entered into between us a VStock Transfer, LLC, as warrant agent, the form of which has been filed as an exhibit to our Current Report on Form 8-K, dated July 15, 2024. Prospective investors should carefully review the terms and provisions of the Warrant Agent Agreement (which includes the form of Warrant) for a complete description of the terms and conditions of the Warrants.

Exercisability. The warrants are exercisable on the original issuance date and will expire on the date that is five years after their original issuance. The Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice. In no event may the Warrants be net cash settled.

Exercise Limitation. A holder will not have the right to exercise any portion of the Warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Warrants. However, any holder may increase or decrease such percentage, provided that any increase will not be effective until the 61st day after such election.

Exercise Price. The Warrants will have an exercise price of \$20.00 per whole share and will be exercisable from the initial issuance date until they expire on the five-year anniversary of the original issuance date. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

Cashless Exercise. If, at the time a holder exercises its Warrant, there is no effective registration statement registering, or the prospectus contained therein is not available for an issuance of the shares underlying the Warrant to the holder, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the Warrant.

Transferability. Subject to applicable laws, the Warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing. There is no established trading market for the Warrants being offered and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the Warrants will be limited and should be considered illiquid.

Fundamental Transactions. If a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the Warrants with the same effect as if such successor entity had been named in the warrant itself. If holders of our common stock are given a choice as to the securities, cash or property to be received in a fundamental transaction, then the holder shall be given the same choice as to the consideration it receives upon any exercise of the warrant following such fundamental transaction.

Rights as a Stockholder. Except as otherwise provided in the Warrants or by virtue of such holder's ownership of shares of our common stock, the holder of a Warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the Warrant.

Representative's Warrant

We have agreed to issue the Representative's Warrant to the representative of the underwriters of this offering as a portion of the underwriting compensation payable in connection with this offering. The Representative's Warrant shall be exercisable for [_____] shares of our common stock (or 7% of the shares of common stock sold in this offering). The Representative's Warrant shall contain customary "cashless exercise" provisions and shall be exercisable at any time, and from time to time, in whole or in part, during the four-and-a-half-year period commencing six months after the closing of this offering at an exercise price of 125% of the public offering price of the Units offered hereby. Please see "*Underwriting — Representative's Warrant*" for further information.

Representative's Warrant – July 2024 Public Offering

In connection with our public offering in July 2024, we issued a warrant to the representative of the underwriters (The Benchmark Company, who is the same representative of the underwriters for this offering) as a portion of the underwriting compensation payable in connection with such offering. Such warrant is exercisable for 44,118 shares of our common stock. Such warrant contains customary “cashless exercise” provisions and shall be exercisable at any time, and from time to time, in whole or in part, for a term of five years from the first day of the seventh month after the closing of our initial public offering at an exercise price of \$25.00 per share.

IPO Representative's Warrant

In connection with our initial public offering in May 2024, we issued a warrant to the representative of the underwriters (The Benchmark Company, who is the same representative of the underwriters for this offering) as a portion of the underwriting compensation payable in connection with such offering. Such warrant is exercisable for 179,375 shares of our common stock. Such warrant contains customary “cashless exercise” provisions and shall be exercisable at any time, and from time to time, in whole or in part, for a term of five years from the first day of the seventh month after the closing of our initial public offering at an exercise price of \$5.00 per share.

IPO Lock-Up Agreements

No lock-up agreements will be required in connection with this offering.

However, pursuant to certain “lock-up” agreements, our executive officers, directors and our existing stockholders prior to our initial public offering holding five percent (5%) or more of our common stock and securities exercisable for or convertible into our common stock outstanding immediately upon the closing of our initial public offering (which closed in May 2024), have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic risk of ownership of, directly or indirectly, engage in any short selling of any common stock or securities convertible into or exchangeable or exercisable for any common stock, whether currently owned or subsequently acquired, without the prior written consent of the representative of the underwriters, for a period of six (6) months following the closing of our initial public offering.

In addition, we have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic risk of ownership of, directly or indirectly, engage in any short selling of any common stock or securities convertible into or exchangeable or exercisable for any common stock, whether currently owned or subsequently acquired, without the prior written consent of the representative of the underwriters, for a period of six (6) months following the closing of our initial public offering.

IPO Lock-Up Agreements (With Leak-Out Provisions)

In addition to the arrangements described above under “Lock-Up Agreements”, each existing stockholder of our company who holds less than five percent (5%) of our common stock prior to our initial public offering (who we refer to as the Leak Out Holders) is subject to lock-up agreement with leak-out provisions restricting sales of certain percentages of their common stock during a period ranging from 30 days to 150 days following the closing of our initial public offering as follows:

- (i) Leak Out Holders will be permitted to sell 10% of their common stock after 30 days following the closing of our initial public offering;
- (ii) Leak Out Holders will be permitted to sell an additional 20% of their common stock beginning 60 days following the closing of our initial public offering;
- (iii) Leak Out Holders will be permitted to sell an additional 20% of their common stock beginning 90 days following the closing of our initial public offering;
- (iv) Leak Out Holders will be permitted to sell an additional 25% of their common stock beginning 120 days following the closing of our initial public offering; and
- (v) Leak Out Holders will be permitted to sell the final 25% of their common stock beginning 150 days following the closing of our initial public offering.

Nevada Anti-Takeover Provisions

Nevada law, NRS Sections 78.411 through 78.444, regulate business combinations with interested stockholders. Nevada law defines an interested stockholder as a beneficial owner (directly or indirectly) of 10% or more of the voting power of the outstanding shares of the corporation. Pursuant to Sections NRS 78.411 through 78.444, combinations with an interested stockholder remain prohibited for three years after the person became an interested stockholder unless (i) the transaction is approved by the board of directors or the holders of a majority of the outstanding shares not beneficially owned by the interested party, or (ii) the interested stockholder satisfies certain fair value requirements. NRS 78.434 permits a Nevada corporation to opt-out of the statute with appropriate provisions in its articles of incorporation.

NRS Sections 78.378 through 78.3793 regulates the acquisition of a controlling interest in an issuing corporation. An issuing corporation is defined as a Nevada corporation with 200 or more stockholders of record, of which at least 100 stockholders have addresses of record in Nevada and does business in Nevada directly or through an affiliated corporation. NRS Section 78.379 provides that an acquiring person and those acting in association with an acquiring person obtain only such voting rights in the control shares as are conferred by a resolution of the stockholders of the corporation, approved at a special or annual meeting of the stockholders. Stockholders who vote against the voting rights have dissenters' rights in the event that the stockholders approve voting rights. NRS Section 378 provides that a Nevada corporation's articles of incorporation or bylaws may provide that these sections do not apply to the corporation. We have not opted out of these sections in our articles of incorporation and bylaws.

Removal of Directors; Vacancies

Under NRS 78.335, one or more of the incumbent directors may be removed from office by the vote of stockholders representing two-thirds or more of the voting power of the issued and outstanding stock entitled to vote. Our bylaws provide that any newly created position on the board of directors that results from an increase in the total number of directors and any vacancies on the board of directors will be filled only by the affirmative vote of a majority of the remaining directors, even if less than a quorum.

No Cumulative Voting

The NRS does not permit stockholders to cumulate their votes other than in the election of directors, and then only if expressly authorized by the corporation's articles of incorporation. Our articles of Incorporation does not expressly authorize cumulative voting.

The combination of these provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of us by replacing our board of directors. Because our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

Articles of Incorporation and Bylaw Provisions, As Amended

Our purpose is to engage in any lawful act or activity for which corporations may now or hereafter be organized under NRS Section 78 other than the business of a trust company, savings and loan association, thrift company or corporation organized for the purpose of conducting a banking business.

Board of Directors

Our bylaws provides that the number of directors will be fixed by the board of directors within a range of between one and fifteen directors. The directors need not be stockholders unless so required by our articles of incorporation. The minimum or maximum number may be increased or decreased from time to time only by an amendment to the bylaws, which power belongs exclusively to our board of directors.

Requirements for Advance Notification of Director Nominations and Stockholder Proposals

Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors. In order for any matter to be properly brought before a meeting of our stockholders, the stockholder submitting the proposal or nomination will have to comply with advance notice requirements and provide us with certain information.

For business to be properly brought before an annual meeting, the proposing stockholder must have given written notice of the nomination or proposal, either by personal delivery or by United States mail to the Secretary of our company not later than the close of business on the sixtieth (60th) day nor earlier than the close of business on the ninetieth (90th) day prior to the first anniversary of the preceding year's annual meeting; provided, however, that in the event that no annual meeting was held in the previous year or the date of the annual meeting has been changed by more than thirty (30) days from the date contemplated at the time of the previous year's proxy statement, notice by the stockholder to be timely must be so received not earlier than the close of business on the ninetieth (90th) day prior to such annual meeting and not later than the close of business on the later of the sixtieth (60th) day prior to such annual meeting or, in the event public announcement of the date of such annual meeting is first made by our company fewer than seventy (70) days prior to the date of such annual meeting, the close of business on the tenth (10th) day following the day on which public announcement of the date of such meeting is first made by the Corporation. No business shall be conducted at any annual meeting except in accordance with the procedures set forth in our bylaws.

For business to be properly brought before a special meeting of stockholders, the notice of the meeting must set forth the general nature of the business to be considered. No business may be transacted at such special meeting otherwise than specified in such notice. The special meeting may be called for by (i) the Chairman of the board of directors, or (ii) the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the board of directors for adoption), and shall be held at such place, on such date, and at such time as the Board of Directors, shall determine. The board of directors shall determine the time and place of such special meeting, which shall be held not less than thirty-three (30) nor more than one hundred twenty (120) days after the date of the receipt of the request.

Authorized but Unissued Capital Stock

Neither Nevada law nor our governing documents require stockholder approval for any issuance of authorized shares, except as provided in NRS 78.2055 with respect to a decrease in the number of issued and outstanding shares of a class or series without a corresponding decrease in the authorized shares. Our authorized but unissued common stock are therefore available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes, including future offerings to raise additional capital, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock could render more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Stockholder Action by Written Consent

Any action required or permitted by the NRS to be taken at a meeting of stockholders may be taken without a meeting if, before or after the action, a written consent to the action is signed by stockholders holding a majority of the voting power of our company or, if different, the proportion of voting power required to take the action at a meeting of stockholders.

History of Securities Issuances

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 issuance 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 shares were offered and sold by the initial purchasers to qualified institutional buyers, or (iv) under Rule 701 promulgated under the Securities Act in that the transactions were under compensatory benefit plans and contracts relating to compensation.

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 822,144 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.

In June 2024, we issued an aggregate of 50,000 shares of common stock to Dr. Maidana as consideration for the ALIP Acquisition.

In August 2024, we issued an aggregate of 20,000 shares of common stock to certain consultants for services received.

In August 2024, we issued an aggregate of 250,000 shares of common stock to consultants who exercised their stock options.

In September 2024, we issued an aggregate of 343,000 shares of common stock to consultants who exercised their stock options.

Transfer Agent and Registrar

The transfer agent and registrar of our common stock is VStock Transfer, LLC. The transfer agent and registrar's address is 18 Lafayette Place, Woodmere, New York 11598. VStock Transfer, LLC is also the warrant agent for the warrants issued in our July 2024 Follow-on Offering and this offering.

Listing

Our common stock is listed on Nasdaq under the symbol "NNE".

SHARES ELIGIBLE FOR FUTURE SALE

The market for our common stock is very new, and a robust and liquid trading market for our common stock may not develop or be sustained after this offering. Future sales of substantial amounts of our common stock in the public market, or the perception that such sales could occur, could adversely affect market prices prevailing from time to time and could impair our ability to raise capital through the sale of our equity securities. Furthermore, because only a limited number of shares will be available for sale shortly after this offering due to existing contractual and legal restrictions on resale as described below, there may be sales of substantial amounts of our common stock in the public market after the restrictions lapse. This may adversely affect the prevailing market prices for the shares of our common stock, and our ability to raise equity capital in the future.

Based on the number of shares outstanding as of the date of this prospectus, upon the closing of this offering, approximately [_____] shares of common stock will be outstanding, assuming a public offering price of \$[_____] per Unit, offered hereby and further assuming no exercise of the over-allotment option for this offering. Of the shares to be outstanding immediately after completion of the offering, all [_____] Units sold in this offering will be freely tradable except that any shares purchased in this offering by our affiliates, as that term is defined in Rule 144 under the Securities Act, would only be able to be sold in compliance with the Rule 144 limitations described below.

All of our existing stockholders holding five percent (5%) or more of our common stock prior to our initial public offering, our officers and directors have entered into lock-up agreements with the representative of the underwriters under which they have agreed, subject to specific exceptions, not to sell any of our stock for at least 180 days following the closing of our initial public offering, as described below. As a result of these agreements, subject to the provisions of Rule 144 or Rule 701, shares will be available for sale in the public market as follows:

- beginning on the date of this prospectus, all of the shares sold in this offering will be immediately available for sale in the public market (except as described above); and
- beginning 181 days after the date of this prospectus, additional shares will become eligible for sale in the public market, of which shares will be held by affiliates and subject to the volume and other restrictions of Rule 144, as described below.

Rule 144

In general, under Rule 144 as currently in effect, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, any person who is not an affiliate of ours and has held their shares for at least six months, as measured by SEC rule, including the holding period of any prior owner other than one of our affiliates, may sell shares without restriction, provided current public information about us is available. In addition, under Rule 144, any person who is not an affiliate of ours and has held their shares for at least one year, as measured by SEC rule, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares immediately upon the closing of this offering without regard to whether current public information about us is available. Beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is an affiliate of ours and who has beneficially owned restricted securities for at least six months, as measured by SEC rule, including the holding period of any prior owner other than one of our affiliates, is entitled to sell a number of restricted securities within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately [_____] shares immediately after this offering; and
- the average weekly trading volume of our common stock on Nasdaq during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales of restricted securities under Rule 144 held by our affiliates are also subject to requirements regarding the manner of sale, notice and the availability of current public information about us. Rule 144 also provides that affiliates relying on Rule 144 to sell shares of our common stock that are not restricted securities must nonetheless comply with the same restrictions applicable to restricted securities, other than the holding period requirement. Notwithstanding the availability of Rule 144, the holders of five percent (5%) or more of our restricted securities have entered into IPO lock-up agreements as described below and their restricted securities will become eligible for sale at the expiration of the restrictions set forth in those agreements.

Rule 701

Under Rule 701 under the Securities Act, shares of our common stock acquired upon the exercise of currently outstanding options or pursuant to other rights granted under our stock plans may be resold, by:

- persons other than affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject only to the manner-of-sale provisions of Rule 144; and
- our affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject to the manner-of-sale and volume limitations, current public information and filing requirements of Rule 144, in each case, without compliance with the six-month holding period requirement of Rule 144.

Notwithstanding the foregoing, all our Rule 701 shares are subject to lock-up agreements as described above and in the section titled “*Underwriting*” and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

IPO Lock-Up Agreements

No lock-up agreements will be required in connection with this offering.

Notwithstanding the foregoing, pursuant to certain “lock-up” agreements, our executive officers, directors and all of our existing stockholders and holders prior to our initial public offering holding five percent (5%) or more of our common stock securities exercisable for or convertible into our common stock outstanding immediately upon the closing of our initial public offering (which closed in May 2024), have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic risk of ownership of, directly or indirectly, engage in any short selling of any common stock or securities convertible into or exchangeable or exercisable for any common stock, whether currently owned or subsequently acquired, without the prior written consent of the representative of the underwriters, for a period of six (6) months following the closing of our initial public offering.

In addition, our company has agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic risk of ownership of, directly or indirectly, engage in any short selling of any common stock or securities convertible into or exchangeable or exercisable for any common stock, whether currently owned or subsequently acquired, without the prior written consent of the representative of the underwriters, for a period of six (6) months following the closing of our initial public offering.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a summary of the material U.S. federal income tax consequences of the ownership and disposition of our common stock acquired in this offering by a “non-U.S. holder” (as defined below), but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the United States Internal Revenue Code of 1986, as amended, or the Code, Treasury Regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed, possibly retroactively, so as to result in U.S. federal income tax consequences different from those set forth below. We have not sought, and do not intend to seek, any ruling from the Internal Revenue Service, or IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any state or local or non-U.S. jurisdiction or under U.S. federal gift and estate tax rules, or arising out of other non-income tax rules, except to the limited extent set forth below. In addition, this discussion does not address tax considerations applicable to an investor’s particular circumstances or to investors that may be subject to special tax rules, including, without limitation:

- banks, insurance companies, regulated investment companies, real estate investment trusts or other financial institutions;
- persons subject to the alternative minimum tax or the tax on net investment income;
- persons subject to special tax accounting rules as a result of any item of gross income with respect to our common stock being taken into account in an applicable financial statement;
- tax-exempt organizations or governmental organizations;
- pension plans and tax-qualified retirement plans;
- controlled foreign corporations, passive foreign investment companies and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnership for U.S. federal income tax purposes (and investors therein);
- brokers or dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to own, more than five percent of our capital stock (except to the extent specifically set forth below);
- certain former citizens or long-term residents of the United States;
- persons who hold our common stock as a position in a hedging transaction, “straddle,” “conversion transaction” or other risk reduction transaction or integrated investment;
- persons who hold or receive our common stock pursuant to the exercise of any option or otherwise as compensation;
- persons who do not hold our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment); and
- persons deemed to sell our common stock under the constructive sale provisions of the Code.

In addition, if a partnership, entity or arrangement classified as a partnership or flow-through entity for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner generally will depend on the status of the partner and upon the activities of the partnership or other entity. A partner in a partnership or other such entity that will hold our common stock should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of our common stock through a partnership or other such entity, as applicable.

This summary is for informational purposes only and is not tax advice. Each non-U.S. holder is urged to consult its own tax advisor with respect to the application of the U.S. federal income tax laws to its particular situation, as well as any tax consequences of the purchase, ownership and disposition of our common stock arising under the U.S. federal gift or estate tax rules or under the laws of any state, local, non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

Non-U.S. Holder Defined

For purposes of this discussion, a “non-U.S. holder” is a beneficial owner of our common stock that, for U.S. federal income tax purposes, is neither a “U.S. person” nor an entity (or arrangement) treated as a partnership. A “U.S. person” is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity taxable as a corporation created or organized in the United States or under the laws of the United States or any political subdivision thereof, or otherwise treated as such for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of its source; or
- a trust (x) whose administration is subject to the primary supervision of a U.S. court and that has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (y) that has made a valid election under applicable Treasury Regulations to be treated as a U.S. person.

Distributions

As described in the section titled “*Dividend Policy*,” we have never declared or paid cash dividends on our common stock. However, following the completion of this offering, if we do make distributions of cash or property on our common stock to non-U.S. holders, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, the excess will first constitute a return of capital and will reduce each non-U.S. holder’s adjusted tax basis in our common stock, but not below zero. Any additional excess will then be treated as capital gain from the sale of stock, as discussed under “*Gain on Disposition of common stock*.”

Subject to the discussions below on effectively connected income, backup withholding and the Foreign Account Tax Compliance Act, or FATCA, any dividend paid to a non-U.S. holder generally will be subject to U.S. federal withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty between the United States and such non-U.S. holder’s country of residence. In order to receive a reduced treaty rate, such non-U.S. holder must provide the applicable withholding agent with an IRS Form W-8BEN or W-8BEN-E or other appropriate version of IRS Form W-8 certifying qualification for the reduced treaty rate. A non-U.S. holder of shares of our common stock eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS. If such non-U.S. holder holds our common stock through a financial institution or other agent acting on the non-U.S. holder’s behalf, the non-U.S. holder will be required to provide appropriate documentation to such agent, which then will be required to provide certification to the applicable withholding agent, either directly or through other intermediaries. Each non-U.S. holder should consult its own tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Dividends received by a non-U.S. holder that are treated as effectively connected with such non-U.S. holder’s conduct of a trade or business within the United States (and, if an applicable income tax treaty so provides, such non-U.S. holder maintains a permanent establishment or fixed base in the United States to which such dividends are attributable) are generally exempt from the 30% U.S. federal withholding tax, subject to the discussion below on backup withholding and FATCA withholding. To claim this exemption, a non-U.S. holder must provide the applicable withholding agent with a properly executed IRS Form W-8ECI or other applicable IRS Form W-8 properly certifying such exemption. Such effectively connected dividends, although not subject to U.S. federal withholding tax, are taxed at the same graduated rates applicable to U.S. persons, net of certain deductions and credits, subject to an applicable income tax treaty providing otherwise. In addition, if a non-U.S. holder is a corporation, dividends such non-U.S. holder receives that are effectively connected with its conduct of a U.S. trade or business may also be subject to a branch profits tax at a rate of 30% or such lower rate as may be specified by an applicable income tax treaty between the United States and such non-U.S. holder’s country of residence. Each non-U.S. holder should consult its own tax advisor regarding the tax consequences of the ownership and disposition of our common stock, including any applicable tax treaties that may provide for different rules.

Gain on Disposition of Common Stock

Subject to the discussion below regarding backup withholding and FATCA withholding, a non-U.S. holder generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of our common stock unless:

- the gain is effectively connected with such non-U.S. holder's conduct of a U.S. trade or business (and, if an applicable income tax treaty so provides, such non-U.S. holder maintains a permanent establishment or fixed base in the United States to which such gain is attributable);
- such non-U.S. holder is an individual who is present in the United States for an aggregate 183 days or more during the taxable year in which the sale or disposition occurs and certain other conditions are met; or
- our common stock constitutes a United States real property interest, or USRPI, by reason of our status as a "United States real property holding corporation," or USRPHC, for U.S. federal income tax purposes.

We believe that we are not currently and will not become a USRPHC for U.S. federal income tax purposes, and the remainder of this discussion so assumes. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our U.S. and worldwide real property interests plus our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, as long as our common stock is regularly traded on an established securities market, your common stock will be treated as U.S. real property interests only if you actually (directly or indirectly) or constructively hold more than 5% of such regularly traded common stock at any time during the shorter of the five-year period preceding your disposition of, or your holding period for, our common stock.

A non-U.S. holder described in the first bullet above will be required to pay U.S. federal income tax on the gain derived from the sale (net of certain deductions and credits) under regular graduated U.S. federal income tax rates. In addition, a non-U.S. holder that is a corporation may be subject to the branch profits tax at a 30% rate on a portion of its effectively connected earnings and profits for the taxable year that are attributable to such gain, as adjusted for certain items. A lower rate may be specified by an applicable income tax treaty.

A non-U.S. holder described in the second bullet above will be subject to tax at 30% (or such lower rate specified by an applicable income tax treaty) on the gain derived from the sale, which gain may be offset by U.S. source capital losses of such non-U.S. holder for the taxable year, provided such non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses.

Each non-U.S. holder should consult its own tax advisor regarding any applicable income tax or other treaties that may provide for different rules.

Information Reporting and Backup Withholding

Generally, we or an applicable withholding agent must report annually to the IRS the amount of dividends paid to a non-U.S. holder, such non-U.S. holder's name and address, and the amount of tax withheld, if any. A similar report is sent to such non-U.S. holder. Pursuant to any applicable income tax treaty or other agreement, the IRS may make such report available to the tax authority in such non-U.S. holder's country of residence.

Dividends paid by us (or our paying agent) to a non-U.S. holder may also be subject to backup withholding at a current rate of 24%.

Such information reporting and backup withholding requirements may be avoided, however, if such non-U.S. holder establishes an exemption by providing a properly executed, and applicable, IRS Form W-8, or otherwise establishes an exemption. Generally, such information reporting and backup withholding requirements will not apply to a non-U.S. holder where the transaction is effected outside the United States, through a non-U.S. office of a non-U.S. broker. Notwithstanding the foregoing, backup withholding and information reporting may apply, however, if the applicable withholding agent has actual knowledge, or reason to know, that such non-U.S. holder is a U.S. person.

Backup withholding is not an additional tax; rather, the U.S. federal income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a refund or credit may generally be obtained from the IRS, provided that the required information is furnished to the IRS in a timely manner.

Foreign Account Tax Compliance Act (FATCA)

Sections 1471 to 1474 of the Code, Treasury Regulations issued thereunder and related official IRS guidance, commonly referred to as FATCA, generally impose a U.S. federal withholding tax of 30% on dividends on our common stock paid to a “foreign financial institution” (as defined under FATCA, and which may include banks, traditional financial institutions, investment funds, and certain holding companies), unless such institution enters into an agreement with the U.S. Department of the Treasury to, among other things, identify accounts held by certain “specified United States persons” or “United States-owned foreign entities” (each as defined under FATCA), report annually substantial information about such accounts, and withhold on certain payments to non-compliant foreign financial institutions and certain other account holders. FATCA also generally imposes a U.S. federal withholding tax of 30% on dividends on our common stock paid to a “non-financial foreign entity” (as specially defined under FATCA), unless such entity provides identifying information regarding each of its direct or indirect “substantial United States owners” (as defined under FATCA), certifies that it does not have any substantial United States owners, or otherwise establishes an exemption. Accordingly, the institution or entity through which our common stock is held will affect the determination of whether such withholding is required.

The withholding obligations under FATCA generally apply to dividends on our common stock. Such withholding will apply regardless of whether the beneficial owner of the payment otherwise would be exempt from withholding pursuant to an applicable tax treaty with the United States, the Code, or other exemptions described above. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes.

Under proposed regulations, FATCA withholding on payments of gross proceeds has been eliminated. These proposed regulations are subject to change.

An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Prospective investors are encouraged to consult with their own tax advisors regarding the application of FATCA withholding to their investment in, and ownership and disposition of, our common stock.

The preceding discussion of U.S. federal tax considerations is for general information only. It is not tax advice to investors in their particular circumstances. Each prospective investor should consult its own tax advisor regarding the particular U.S. federal, state and local and non-U.S. tax consequences of purchasing, holding and disposing of our common stock, including the consequences of any proposed change in applicable laws.

UNDERWRITING

In connection with this offering, we will enter into an underwriting agreement with The Benchmark Company, LLC (“Benchmark”) as representative for the underwriters in this offering. Each underwriter named below has severally agreed to purchase from us, on a firm commitment basis, the Units set forth opposite its name below, at the public offering price, less the underwriting discounts set forth on the cover page of this prospectus.

Underwriter	Number of Units
The Benchmark Company, LLC	
Total	

The underwriters are committed to purchase all of the Units offered by us other than those covered by the over-allotment option to purchase additional securities described below, if they purchase any such securities. The obligations of the underwriters may be terminated upon the occurrence of certain events specified in the underwriting agreement. Furthermore, pursuant to the underwriting agreement, the underwriters’ obligations are subject to customary conditions, representations and warranties contained in the underwriting agreement, such as receipt by the underwriters of officers’ certificates and legal opinions.

Our company has agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act of 1933, as amended, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the Units, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Over-allotment Option

We have granted the representative of the underwriters an over-allotment option. This option, which is exercisable for up to 30 days after the date of this prospectus, permits the underwriters to purchase a maximum of [_____] shares of common stock and/or additional Warrants to purchase up to [_____] shares of common stock (equal to 15% of the number of shares of common stock and/or the number of shares of common stock underlying the Warrants sold in this offering) from us to cover over-allotments, if any, at a price per Unit equal to the public offering price per Unit less the underwriting discounts set forth on the cover of this prospectus. The over-allotment option may be exercised by the representative in any combination of shares and/or Warrants up to the maximum amounts indicated above. We will be obligated, pursuant to the option, to sell these additional securities to the underwriters to the extent the option is exercised.

Discounts and Expenses

The following table shows the public offering price, underwriting discount and proceeds, before expenses, to us. The information assumes either no exercise or full exercise by the underwriters of their over-allotment option.

	Per Unit	Total Without Exercise of Over-Allotment Option	Total With Exercise of Over Allotment Option
Public offering price	\$		
Underwriting discount ⁽¹⁾⁽²⁾	\$		
Proceeds, before expenses, to us	\$		

(1) Represents underwriting discounts equal to seven percent (7%) per Unit (or \$[_____] per Unit).

(2) Does not include (i) a non-accountable expense allowance equal to one percent (1%) of the gross proceeds received by us from the sale of our Units in the offering, and (ii) the reimbursement of certain expenses of the underwriters.

The underwriters propose to offer the Units offered by us to the public at the public offering price per Unit set forth on the cover of this prospectus. In addition, the underwriters may offer some of the Units to other securities dealers at such price less a concession of \$[_____] per Unit. After the offering, the public offering price and concession to dealers may be changed.

We will pay the out-of-pocket accountable and documented expenses of the underwriters in connection with this offering. The underwriting agreement, however, provides that in the event the offering is terminated, any advance expense deposits paid to the underwriters will be returned to the extent that offering expenses are not actually incurred in accordance with FINRA Rule 5110(g)(4)(A).

We have agreed to pay the representative of the underwriters a non-accountable expense allowance equal to one percent (1%) of the aggregate gross proceeds received by it from the sales of the Units from this offering, including any over-allotment option exercised by The Benchmark Company. Our company has also agreed to pay all reasonable, necessary, accountable and documented out-of-pocket expenses relating to the offering including, but not limited to: (a) all filing fees and communication expenses associated with the review of this offering by FINRA; (b) all fees, expenses and disbursements relating to the registration, qualification or exemption of securities offered under the securities laws of foreign jurisdictions designated by Benchmark; (c) the fees and expenses of the underwriters' legal counsel (or the Benchmark Legal Expenses) up to a maximum of \$[_____] ; (e) the underwriters' use of Ipreo's book-building, prospectus tracking and compliance software for the offering; and (f) "road show" expenses for the offering. Such actual out-of-pocket expenses (inclusive of the Benchmark Legal Expenses) shall be capped at \$[_____].

We estimate that the total expenses of the offering payable by us, excluding underwriting discounts, will be approximately \$[_____].

Listing

Our common stock is listed on Nasdaq under the symbol "NNE."

Representative Warrants

Upon the closing of this offering, we have agreed to issue to Benchmark a five-year warrant to purchase up to seven percent (7%) of the shares of common stock included as part of the Units sold by us in this offering. The Representative's Warrants will be exercisable at a per Unit exercise price equal to \$[_____] (or 125% of the public offering price per Unit). The Representative's Warrants will be exercisable at any time, and from time to time, in whole or in part, during the four-and-a-half-year period commencing six months after the closing of this offering, which period shall not extend further than five years from the date of commencement of sales in this offering in compliance with Financial Industry Regulatory Authority, or FINRA, Rule 5110. The Representative's Warrants are also exercisable on a cashless basis. The Representative's Warrants have been deemed compensation by FINRA and are therefore subject to a 180-day lock-up pursuant to FINRA Rule 5110. Except as permitted by Rule 5110, the representative for the underwriters (or permitted assignees under the Rule) will not sell, transfer, assign, pledge, or hypothecate the Representative's Warrants or the securities underlying the Representative's Warrants, nor will any of them engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the option or the underlying securities for a period of six months from the commencement of sales under this prospectus. The exercise price and number of securities upon exercise of the Representative's Warrants may be adjusted in certain circumstances including in the event of a share dividend, extraordinary cash dividend or our recapitalization, reorganization, merger or consolidation. However, the Representative's Warrant exercise price or underlying shares will not be adjusted for issuances of shares of common stock at a price below the Representative's Warrant exercise price.

IPO Lock-Up Agreements

No lock-up agreements will be required in connection with this offering.

Notwithstanding the foregoing, pursuant to certain “lock-up” agreements, our executive officers, directors and all of our existing stockholders and holders of securities exercisable for or convertible into our common stock outstanding immediately upon the closing of our initial public offering (which closed in May 2024), have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic risk of ownership of, directly or indirectly, engage in any short selling of any common stock or securities convertible into or exchangeable or exercisable for any common stock, whether currently owned or subsequently acquired, without the prior written consent of Benchmark, for a period of six (6) months following the closing of our initial public offering.

IPO Lock-Up Agreements (With Leak-Out Provisions)

In addition to the arrangements described above under “Lock-Up Agreements”, each existing stockholder of our company who holds less than five percent (5%) of our common stock prior to the closing of our initial public offering (who we refer to as the Leak Out Holders) is subject to lock-up agreement with leak-out provisions restricting sales of certain percentages of their common stock during a period ranging from 30 days to 150 days following the closing of our initial public offering as follows:

- (i) Leak Out Holders will be permitted to sell 10% their common stock after 30 days following the closing of our initial public offering;
- (ii) Leak Out Holders will be permitted to sell an additional 20% of their common stock beginning 60 days following the closing of our initial public offering;
- (iii) Leak Out Holders will be permitted to sell an additional 20% of their common stock beginning 90 days following the closing of our initial public offering;
- (iv) Leak Out Holders will be permitted to sell an additional 25% of their common stock beginning 120 days following the closing of our initial public offering; and
- (v) Leak Out Holders will be permitted to sell the final 25% of their common stock beginning 150 days following the closing of our initial public offering.

Discretionary Accounts

The underwriters do not intend to confirm sales of the securities offered hereby to any accounts over which they have discretionary authority.

IPO Right of First Refusal

We have granted Benchmark a right of first refusal, for a period of twelve (12) months from the closing of our initial public offering, to act as lead or joint-lead investment banker, lead or joint-lead book runner and/or lead or joint placement agent at the underwriter’s discretion, for each and every future public and private equity, equity-linked or debt (excluding commercial bank debt) offering, including all equity linked financings during such twelve (12) month period, of our company, or any successor to or subsidiary of our company.

Electronic Offer, Sale and Distribution of Shares

A prospectus in electronic format may be made available on the websites maintained by the underwriters, if any, participating in this offering and the underwriters participating in this offering may distribute prospectuses electronically. The underwriters may agree to allocate a number of shares for sale to its online brokerage account holders. Internet distributions will be allocated by the underwriters that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of, nor incorporated by reference into, this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or the underwriters in their capacity as underwriters, and should not be relied upon by investors.

Other Relationships

The underwriters and their affiliates may, in the future provide various investment banking, commercial banking and other financial services for our company and its affiliates for which they have received, and may in the future receive, customary fees. However, except as disclosed in this prospectus, our company has no present arrangements with the underwriters for any further services.

Offering Price Determination

The offering price of our common stock in this offering has been, and the exercise price of the Representative's Warrants will be, negotiated between us and Benchmark. Factors considered in determining the public offering price of the shares include the history and prospects of our company, the stage of development of our business, our business plans for the future and the extent to which they have been implemented, an assessment of our management, general conditions of the securities markets at the time of the offering and such other factors as are deemed relevant.

Stabilization

In connection with this offering, the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate-covering transactions, penalty bids and purchases to cover positions created by short sales.

- Stabilizing transactions permit bids to purchase common stock so long as the stabilizing bids do not exceed a specified maximum and are engaged in for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.
- Over-allotment transactions involve sales by the underwriters of shares of common stock in excess of the number of shares of common stock the underwriters are obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares of common stock over-allotted by the underwriters is not greater than the number of shares of common stock that they may purchase in the over-allotment option. In a naked short position, the number of shares of common stock involved is greater than the number of shares of common stock in the over-allotment option. The underwriters may close out any short position by exercising their over-allotment option and/or purchasing shares of common stock in the open market.
- Syndicate covering transactions involve purchases of shares of common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares of common stock to close out the short position, the underwriters will consider, among other things, the price of shares of common stock available for purchase in the open market as compared with the price at which they may purchase shares of common stock through exercise of the over-allotment option. If the underwriters sell more shares of common stock than could be covered by exercise of the over-allotment option and, therefore, have a naked short position, the position can be closed out only by buying shares of common stock in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there could be downward pressure on the price of the shares of common stock in the open market that could adversely affect investors who purchase in the offering.
- Penalty bids permits the underwriters to reclaim a selling concession from a syndicate member when the shares of common stock originally sold by that syndicate member are purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of the shares of common stock or preventing or retarding a decline in the market price of its shares of common stock. As a result, the price of the common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither our company nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of our company's common stock. These transactions may be effected on Nasdaq, in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

Passive Market Making

In connection with this offering, the underwriters may engage in passive market making transactions in our company's common stock on Nasdaq in accordance with Rule 103 of Regulation M under the Exchange Act, during a period before the commencement of offers or sales of the shares of common stock and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, then that bid must then be lowered when specified purchase limits are exceeded.

Offer Restrictions Outside the United States

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

LEGAL MATTERS

The validity of the issuance of the securities offered by us in this offering will be passed upon for us by Parsons Behle & Latimer, Reno, Nevada. Certain legal matters will be passed upon for us by Ellenoff Grossman & Schole LLP, New York, New York. The underwriters are being represented by Lucosky Brookman LLP, Woodbridge, New Jersey.

EXPERTS

WithumSmith+Brown, PC (or Withum), our independent registered public accounting firm, has audited our consolidated balance sheets as of September 30, 2023 and 2022, and the related consolidated statements of operations, changes in stockholders' equity and cash flows for the year ended September 30, 2023 and for the period from February 8, 2022 (inception) through September 30, 2022, as set forth in their report dated January 30, 2024. We have included our consolidated financial statements in this prospectus and in the registration statement in reliance on Withum's report given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the Units offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits filed therewith. For further information about us and the common stock offered hereby, reference is made to the registration statement and the exhibits filed therewith. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete, please see the copy of the contract or document that has been filed for the complete contents of that contract or document. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The exhibits to the registration statement should be reviewed for the complete contents of these contracts and documents.

We are subject to file periodic reports, proxy statements and other information with the SEC pursuant to the Exchange Act. The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the website is www.sec.gov.

We also maintain a website at www.nanonuclearenergy.com. You may access these materials at our website free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained in, or that can be accessed through, our website is not a part of, and is not incorporated into, this prospectus.

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NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS

	<u>June 30, 2024</u> (Unaudited)	<u>September 30, 2023</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 13,789,532	\$ 6,952,795
Prepaid expenses	530,188	205,857
Total current assets	<u>14,319,720</u>	<u>7,158,652</u>
Deferred offering costs	-	75,000
Deposits	235,235	-
Right of use asset	1,872,763	-
Total assets	<u>\$ 16,427,718</u>	<u>\$ 7,233,652</u>
LIABILITIES, MEZZANINE, AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 231,611	\$ 190,005
Due to related parties	-	35,000
Lease liability, current	352,281	-
Contingent consideration	1,222,000	-
Total current liabilities	<u>1,805,892</u>	<u>225,005</u>
Lease liability, non-current	1,618,510	-
Total liabilities	<u>3,424,402</u>	<u>225,005</u>
Mezzanine Equity		
Common stock subject to possible redemption; 0 shares as of June 30, 2024 and 2,000,000 shares as of September 30, 2023	-	5,000,000
Stockholders' Equity		
Preferred stock, \$0.0001 par value; 25,000,000 authorized as of June 30, 2024 and 100,000,000 authorized as of September 30, 2023; none issued and outstanding as of June 30, 2024 and September 30, 2023	-	-
Common stock, \$0.0001 par value; 275,000,000 authorized as of June 30, 2024 and 100,000,000 authorized as of September 30, 2023; 29,003,888 and 23,184,869 shares issued and outstanding as of June 30, 2024 and September 30, 2023, respectively, excluding 2,000,000 shares as of September 30, 2023 subject to possible redemption	2,900	2,319
Additional paid-in capital	27,942,461	9,288,553
Accumulated deficit	(14,942,045)	(7,282,225)
Total stockholders' equity	<u>13,003,316</u>	<u>2,008,647</u>
Total liabilities, mezzanine equity, and stockholders' equity	<u>\$ 16,427,718</u>	<u>\$ 7,233,652</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended		Nine Months Ended	
	June 30, 2024	June 30, 2023	June 30, 2024	June 30, 2023
Operating expenses				
General and administrative	\$ 2,301,307	\$ 2,038,259	\$ 4,553,512	\$ 3,722,232
Research and development	2,019,812	663,144	2,830,367	1,183,750
Change in Fair Value of contingent consideration	385,500	-	385,500	-
Loss from operations	4,706,619	2,701,403	7,769,379	4,905,982
Other income	38,372	1,753	109,559	1,753
Net loss	\$ (4,668,247)	\$ (2,699,650)	\$ (7,659,820)	\$ (4,904,229)
Net loss per share of common stock:				
Basic	\$ (0.17)	\$ (0.12)	\$ (0.31)	\$ (0.22)
Diluted	\$ (0.17)	\$ (0.12)	\$ (0.31)	\$ (0.22)
Weighted-average shares of common stock outstanding:				
Basic	27,730,227	22,846,298	24,919,094	22,121,634
Diluted	27,730,227	22,846,298	24,919,094	22,121,634

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN
MEZZANINE EQUITY AND STOCKHOLDERS' EQUITY
(Unaudited)

For the Three Months Ended June 30, 2024

	Common shares	Amount	Additional paid-in capital	Accumulated deficit	Total Stockholders' equity
Balance as of March 31, 2024	26,007,013	\$ 2,601	\$ 16,907,165	\$ (10,273,798)	\$ 6,635,968
Offering common stock issuances	2,946,875	294	11,787,206	-	11,787,500
Offering costs	-	-	(1,538,405)	-	(1,538,405)
R&D acquisition - common stock issuances	50,000	5	786,495	-	786,500
Net loss	-	-	-	(4,668,247)	(4,668,247)
Balance as of June 30, 2024	29,003,888	\$ 2,900	\$ 27,942,461	\$ (14,942,045)	\$ 13,003,316

For the Nine Months Ended June 30, 2024

	Mezzanine Equity		Common		Additional paid-in capital	Accumulated deficit	Total Stockholders' equity
	Shares	Amount	shares	Amount			
Balance as of September 30, 2023	2,000,000	\$ 5,000,000	23,184,869	\$ 2,319	\$ 9,288,553	\$ (7,282,225)	\$ 2,008,647
Mezzanine equity conversion	(2,000,000)	(5,000,000)	2,000,000	200	4,999,800	-	5,000,000
Offering common stock issuances	-	-	3,769,019	376	14,253,561	-	14,253,937
Offering costs	-	-	-	-	(1,538,405)	-	(1,538,405)
Acquisition common stock issuances	-	-	50,000	5	786,495	-	786,500
Equity-based compensation	-	-	-	-	152,457	-	152,457
Net loss	-	-	-	-	-	(7,659,820)	(7,659,820)
Balance as of June 30, 2024	-	\$ -	29,003,888	\$ 2,900	\$ 27,942,461	\$ (14,942,045)	\$ 13,003,316

For the Three Months Ended June 30, 2023

	Mezzanine Equity		Common		Additional paid-in capital	Accumulated deficit	Total Stockholders' equity
	Shares	Amount	shares	Amount			
Balance as of March 31, 2023	2,000,000	\$ 5,000,000	22,406,869	\$ 2,241	\$ 5,629,112	\$ (3,236,403)	\$ 2,394,950
Common stock issuances	-	-	778,000	78	1,944,922	-	1,945,000
Equity-based compensation	-	-	-	-	1,444,530	-	1,444,530
Net loss	-	-	-	-	-	(2,699,650)	(2,699,650)
Balance as of June 30, 2023	2,000,000	\$ 5,000,000	23,184,869	\$ 2,319	\$ 9,018,564	\$ (5,936,053)	\$ 3,084,830

For the Nine Months Ended June 30, 2023

	Mezzanine Equity		Common		Additional paid-in capital	Accumulated deficit	Total Stockholders' equity
	Shares	Amount	shares	Amount			
Balance as of September 30, 2022	2,000,000	\$ 5,000,000	20,501,500	\$ 2,050	\$ 3,139,450	\$ (1,031,824)	\$ 2,109,676
Common stock issuances	-	-	2,598,369	260	3,765,109	-	3,765,369
Equity-based compensation	-	-	85,000	9	2,114,005	-	2,114,014
Net loss	-	-	-	-	-	(4,904,229)	(4,904,229)
Balance as of June 30, 2023	2,000,000	\$ 5,000,000	23,184,869	\$ 2,319	\$ 9,018,564	\$ (5,936,053)	\$ 3,084,830

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	For the Nine Months Ended June 30, 2024	For the Nine Months Ended June 30, 2023
OPERATING ACTIVITIES		
Net loss	\$ (7,659,820)	\$ (4,904,229)
Adjustments to reconcile net loss to net cash used in operating activities:		
Equity-based compensation	152,457	2,114,014
Amortization of right of use asset	53,893	-
R&D acquisition paid in equity	786,500	-
Change in assets and liabilities:		
Prepaid expenses	(324,331)	(38,588)
Deposits	(235,235)	-
Accounts payable and accrued liabilities	41,606	147,028
Due to related parties	(35,000)	(10,000)
Lease liability	44,135	-
Contingent liability	1,222,000	-
Net cash used in operating activities	<u>(5,953,795)</u>	<u>(2,691,775)</u>
FINANCING ACTIVITIES		
Proceeds from common stock issuances	14,253,937	8,765,369
Offering costs	(1,408,405)	-
Payment of deferred offering costs	(55,000)	(75,000)
Net cash provided by financing activities	<u>12,790,532</u>	<u>8,690,369</u>
Net increase in cash	6,836,737	5,998,594
Cash and cash equivalents, beginning of period	6,952,795	2,129,999
Cash and cash equivalents, end of period	<u>\$ 13,789,532</u>	<u>\$ 8,128,593</u>
Non-cash transactions:		
Conversion from Mezzanine Equity to Stockholders' Equity	\$ (5,000,000)	\$ -
Inception of Right of Use Asset / Liability	\$ 1,926,656	\$ -

The accompanying notes are an integral part of these condensed unaudited consolidated financial statements.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
As of June 30, 2024
(Unaudited)

1. ORGANIZATION AND OPERATIONS AND BASIS OF PRESENTATION

NANO Nuclear Energy Inc. (“NANO” or the “Company”) was incorporated under the laws of the state of Nevada on February 8, 2022 (“Inception”) and is headquartered in New York, New York.

The Company is an early-stage nuclear energy company developing smaller, cheaper, and safer advanced portable clean energy solutions utilizing proprietary reactor designs, intellectual property and research methods. Currently in technical development are “ZEUS”, a solid core battery reactor and “ODIN”, a low-pressure coolant reactor, representing the Company’s first generation of portable, on-demand capable, advanced nuclear micro reactors. The Company envisions readily replaceable mobile reactors which it can provide to customers in several sectors, including data centers, artificial intelligence computer and quantum computing; crypto mining; military applications; disaster relief; transportation (including shipping); mining projects; water desalination and green hydrogen plants; and space exploration.

Through its subsidiary, HALEU Energy Fuel Inc., the Company is also developing a domestic High-Assay Low-Enriched Uranium (“HALEU”) fuel fabrication facility with a capability to provide a fuel pipeline for the broader advanced nuclear reactor industry and providing fuel to power the Company’s microreactors. Further, through its subsidiary Advanced Fuel Transportation Inc., the Company is developing a high-capacity HALEU transportation product, capable of moving commercial quantities of HALEU fuel around North America. The Company also plans to offer nuclear service support and consultation services.

These condensed consolidated interim financial statements include the accounts of the Company and its wholly-owned subsidiaries American Uranium Inc., HALEU Energy Fuel Inc., and Advanced Fuel Transportation Inc. Each of such subsidiaries is a Nevada corporation.

As used herein, the term “Common Stock” refers to the common stock, \$0.0001 par value per share, of the Company.

Liquidity

These condensed consolidated interim financial statements have been prepared on a going concern basis, which assumes the realization of assets and settlement of liabilities in the normal course of business. At June 30, 2024, the Company had working capital of \$12,513,828 and accumulated deficit of \$14,942,045. For the nine months ended June 30, 2024, the Company had net loss of \$7,659,820, and negative cash flows from operations of \$5,953,795. At September 30, 2023, the Company had working capital of \$6,933,647 and accumulated deficit of \$7,282,225. For the year ended September 30, 2023, the Company had net loss of \$6,250,401, and negative cash flows from operations of \$3,867,573. The application of the going concern concept is dependent on the Company’s ability to secure financing from capital markets or other sources, including investors, government grants or alternative funding and, ultimately, on the Company’s ability to generate revenue and profitable operations. Management is of the opinion that sufficient working capital is available to meet the Company’s liabilities and commitments as they come due at least for the next twelve months after the date the condensed consolidated interim financial statements are issued to conform to the going concern uncertainty period. In order to achieve the Company’s long-term strategy, the Company expects to raise additional capital or secure other sources of financing to support its growth. After June 30, 2024, the Company completed an underwritten follow-on public offering generating gross proceeds of approximately \$18.0 million along with a follow-on over-allotment option generating gross proceeds of approximately \$2.70 million. See Note 8 for further information. These unaudited condensed consolidated interim financial statements do not reflect any adjustments or reclassifications of assets and liabilities which would be necessary if the Company were unable to continue as a going concern.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying unaudited interim condensed consolidated interim financial statements have been prepared in accordance with U.S. GAAP for interim financial reporting and the rules and regulations of the Securities and Exchange Commission (“SEC”). References to ASC and ASU included herein refer to the Accounting Standards Codification and Accounting Standards Update established by the Financial Accounting Standards Board (“FASB”) as the source of authoritative U.S. GAAP. All intercompany balances and transactions have been eliminated in consolidation.

In management’s opinion, the unaudited interim condensed consolidated financial statements have been prepared on the same basis as the Company’s annual audited consolidated financial statements. They include all adjustments, consisting of only normal recurring adjustments, necessary for the fair statement of the Company’s financial position as of June 30, 2024, and its results of operations for the three and nine months ended June 30, 2024 and 2023 and cash flows for the nine months ended June 30, 2024 and 2023. The results for the three and nine months ended June 30, 2024 are not necessarily indicative of the results expected for the year or any other periods. The condensed consolidated balance sheet as of September 30, 2023 has been derived from the Company’s audited financial statements.

Cash and Cash Equivalents

Cash equivalents represent short-term, highly liquid investments, which are readily convertible to cash and have maturities of three months or less at time of purchase, while cash equivalents with an initial maturity of between three and twelve months at time of purchase are considered short-term investments. The Company’s cash equivalents consist of certificates of deposit, are classified as held-to-maturity, and the estimated fair value of the investment approximates its amortized cost.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
As of June 30, 2024
(Unaudited)

Use of Estimates

The preparation of condensed consolidated interim financial statements in conformity with GAAP requires management to make certain estimates, judgments and assumptions. The Company believes that the estimates, judgments and assumptions made when accounting for items and matters such as, but not limited to, equity-based compensation and contingencies are reasonable, based on information available at the time they are made. These estimates, judgments and assumptions can affect the reported amounts of assets and liabilities as of the date of the condensed consolidated interim financial statements, as well as amounts reported on the statements of operations during the periods presented. Actual results could differ from those estimates.

Fair Value Measurement

The Company measures certain financial assets and liabilities at fair value. Fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the Company uses a three-level hierarchy, which prioritizes fair value measurements based on the types of inputs used for the various valuation techniques (market approach, income approach and cost approach). The levels of hierarchy are described below:

Level 1 – Quoted prices in active markets for identical instruments.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.

Level 3 – Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability. Financial assets and liabilities are classified in their entirety based on the most stringent level of input that is significant to the fair value measurement. The carrying amount of certain financial instruments, including prepaid expenses and accounts payable approximates fair value due to their short maturities.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash. The Company maintains its cash balances at a financial institution and such amounts exceeded federally insured limits at June 30, 2024 and September 30, 2023. Any loss incurred or a lack of access to such funds could have a significant adverse impact on the Company's financial condition, results of operations, and cash flows.

Prepaid Expenses

Prepaid expenses primarily relate to payments made to consultants and vendors in advance of the service being provided.

Leases

The Company recognizes right-of-use (ROU) assets and lease liabilities for leases with terms greater than 12 months. Leases are classified as either finance or operating leases. This classification dictates whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease. As of June 30, 2024, the Company has one short-term operating lease and one long-term operating lease. As of September 30, 2023, the Company had one short-term operating lease.

Long-term leases (leases with initial terms greater than 12 months) are capitalized at the present value of the minimum lease payments not yet paid. The Company uses its incremental borrowing rate to determine the present value of the lease when the rate implicit in the lease is not readily determinable. Short-term leases (leases with an initial term of 12 months or less or leases that are cancelable by the lessee and lessor without significant penalties) are not capitalized but are expensed on a straight-line basis over the lease term. The Company's short-term lease relates to office facilities which did not meet the criteria for capitalization as of June 30, 2024 and September 30, 2023.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
As of June 30, 2024
(Unaudited)

Mezzanine Equity

The Company recognized a tranche of shares of Common Stock as mezzanine equity since such shares were redeemable at the option of the holder, but not mandatorily redeemable. On March 30, 2024, the Company amended its subscription agreement with the holder of such shares to terminate the redemption right, which resulted in a conversion of such shares from mezzanine equity to stockholders' equity. See Note 5 for further information.

Equity-Based Compensation

Equity-based compensation is measured using a fair value-based method for all equity-based awards. The cost of awarded equity instruments is recognized based on each instrument's grant-date fair value over the period during which the award vests. Equity-based compensation is recorded as either a general and administrative expense or a research and development expense in the condensed consolidated statements of operations.

Research and Development

Research and Development ("R&D") expenses represent costs incurred for designing and engineering products, including the costs of developing design tools, as well as the costs to acquire technology and other assets from third parties. All research and development costs related to product development are expensed as incurred.

Advertising Costs

Advertising costs are expensed as incurred and are recognized as a component of general and administrative expenses on the condensed consolidated statements of operations. Advertising costs expensed were \$227,361 and \$833,589, respectively, for the three and nine months ended June 30, 2024, and \$128,339 and \$305,912, respectively, for the three and nine months ended June 30, 2023.

Legal Contingencies

The Company is not aware of any pending legal proceedings against the Company. The Company records liabilities for losses from legal proceedings when it determines that it is probable that the outcome in a legal proceeding will be unfavorable, and the amount of loss can be reasonably estimated.

Income Taxes

Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets, including tax loss and credit carry forwards, and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recorded when it is "more likely-than-not" that deferred tax assets will not be realized. On a regular basis, the Company evaluates the recoverability of deferred tax assets and the need for a valuation allowance. Such evaluations involve the application of significant judgment. The Company considers multiple factors in its evaluation of the need for a valuation allowance. The Company's net deferred tax assets consist primarily of assets related to net operating losses. The Company's net operating losses and credits have an indefinite life for federal net operating losses ("NOLs") generated through June 30, 2024. At June 30, 2024 and September 30, 2023, the Company recorded a full valuation allowance on its deferred tax assets in the amount of approximately \$3,580,000 and \$1,971,000, respectively. The effective tax rate was 0.0% for the three and nine months ended June 30, 2024 and 2023. The Company's effective tax rate for the three and nine months ended June 30, 2024 and 2023 differs from the federal statutory rate of 21% primarily due to a full valuation allowance against its net deferred tax assets where it is more likely than not that the deferred tax assets will not be realized.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
As of June 30, 2024
(Unaudited)

Until an appropriate level of profitability is attained, the Company expects to maintain a full valuation allowance on its deferred tax assets. Any tax benefits or tax expense recorded on its consolidated statements of operations will be offset with a corresponding valuation allowance until such time that the Company changes its determination related to the realization of deferred tax assets. In the event that the Company changes its determination as to the amount of deferred tax assets that can be realized, the Company will adjust its valuation allowance with a corresponding impact to the provision for income taxes in the period in which such a determination is made. For uncertain tax positions that meet a “more likely-than-not” threshold, the Company recognizes the benefit of uncertain tax positions in the condensed consolidated interim financial statements. The Company’s practice is to recognize interest and penalties, if any, related to uncertain tax positions in income tax expense in the consolidated statements of operations. The Company’s 2023 tax returns remain subject to examination by taxing jurisdictions. At June 30, 2024 and September 30, 2023, the Company does not believe it has any uncertain tax positions that would require either recognition or disclosure in the accompanying condensed consolidated interim financial statements.

Net Loss per Share

Basic net income (loss) per share is computed by dividing net income (loss) attributable to the Company by the weighted average number of shares of Common Stock outstanding during the period. Diluted net income (loss) per share is computed based on the weighted average number of shares of Common Stock outstanding plus the effect of dilutive potential shares of Common Stock outstanding during the period. During the periods when there is a net loss, potentially dilutive shares of Common Stock are excluded from the calculation of diluted net loss per share as their effect is anti-dilutive. During the three and nine months ended June 30, 2024 and 2023, there were no dilutive shares issued or outstanding.

Operating Segments

For the three and nine months ended June 30, 2024 and 2023, the Company was managed as a single operating segment in accordance with the provisions in the Financial Accounting Standards Board (“FASB”) guidance on segment reporting, which establishes standards for, and requires disclosure of, certain financial information related to reportable operating segments and geographic regions. Furthermore, the Company determined that the Company’s Chairman and President is the Chief Operating Decision Maker as he is responsible for making decisions regarding the allocation of resources and assessing performance as well as for strategic operational decisions and managing the organization as a whole.

Recent Accounting Pronouncements

The Company considers the applicability and impact of all Accounting Standards Updates issued by the FASB. There are no accounting pronouncements which have been issued but are not yet effective that would have a material impact on our current condensed consolidated interim financial statements.

3. OTHER INCOME

During the three and nine months ended June 30, 2024, the Company earned interest income of \$38,372 and \$109,559, respectively, on its cash held at a financial institution. During the three and nine months ended June 30, 2023, the Company earned interest income of \$1,753.

4. RELATED PARTIES

At June 30, 2024 and September 30, 2023, the Company had amounts due to related parties of \$nil and \$35,000, respectively. The amounts due at September 30, 2023 corresponded to unpaid amounts due to officers and directors for services rendered during the year ended September 30, 2023. The aggregate compensation paid, or payable, to officers and directors during the three months ended June 30, 2024 and 2023 were \$345,000 and \$110,000, respectively, and during the nine months ended June 30, 2024 and 2023 were \$635,000 and \$315,000, respectively, which are included in the accompanying condensed consolidated statements of operations under general and administrative expenses.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
As of June 30, 2024
(Unaudited)

5. EQUITY

The Company is authorized to issue 275,000,000 shares of Common Stock and 25,000,000 shares of preferred stock, with a par value of \$0.0001 per share. No shares of preferred stock were outstanding during the periods presented. Holders of Common Stock are entitled to one vote per share.

Issuance of Common Stock for Cash

Incorporation

Upon incorporation of the Company, 10,000,000 shares of Common Stock were issued to an affiliate of the Company's founder, chairman and president, Jay Jiang Yu, for proceeds of \$50,000.

Seed Round

The Company's initial round of private financing (the "Seed Round") began in March 2022 and ended in April 2022. During the period from Inception through September 30, 2022, the Company sold 7,500,000 shares of Common Stock at a price of \$0.05 per share for proceeds of \$375,000 as part of the Seed Round.

Angel Round

The Company's second round of private financing (the "Angel Round") began in April 2022 and ended in February 2023. During the period from Inception to September 30, 2022, the Company sold 2,326,500 shares of Common Stock at a price of \$1.00 per share for proceeds of \$2,326,500 as part of the Angel Round. During the year ended September 30, 2023, the Company sold 1,820,369 shares of Common Stock at a price of \$1.00 per share for proceeds of \$1,820,369 as part of the Angel Round.

Series A Round

The Company's third round of private financing (the "Series A Round") began in April 2023 and ended in June 2023. During the year ended September 30, 2023, the Company sold 778,000 shares of Common Stock at a price of \$2.50 per share for proceeds of \$1,945,000 as part of the Series A Round.

Series B Round

The Company's fourth round of private financing (the "Series B Round") began in December 2023 and ended in January 2024. As of December 31, 2023, the Company received \$2,106,437 in subscriptions as part of the Series B Round, and in January 2024, the Company received \$360,000 in subscriptions. In January 2024, the Company sold and issued 822,144 shares of Common Stock at a price of \$3.00 per share for gross proceeds of \$2,466,437 to close the Series B Round.

Initial Public Offering (IPO)

On May 7, 2024, the Company consummated a firm commitment underwritten initial public offering (the "IPO Offering") of an aggregate of 2,562,500 shares of Common Stock at a price of \$4.00 per share (the "IPO Offering Price"), generating gross proceeds of approximately \$10,250,000, and net proceeds (after deducting discounts and offering expenses) of approximately \$9,000,000. In connection with the IPO Offering, the Company granted the lead managing underwriter an option (the "IPO Over-Allotment Option"), exercisable for 30 days from May 7, 2024, to purchase up to an additional 384,375 shares of Common Stock (the "IPO Over-allotment Shares") from the Company at the Offering Price, less the underwriting discount, to cover over-allotments in the Offering. On May 21, 2024, the IPO Over-Allotment Option was exercised in full, and on May 22, 2024, the closing of the purchase of the IPO Over-Allotment Shares occurred, generating gross proceeds to the Company of approximately \$1,537,500 and net proceeds of approximately \$1,414,500. In connection with the IPO Offering, the Company also issued such lead managing underwriter 179,375 warrants exercisable for 179,375 shares of Common Stock at an exercise price per share of \$5.00 for a term of five years from the first day of the seventh month after May 7, 2024. In connection with the IPO Offering and IPO Over-Allotment Option, the Company charged issuance costs of \$1,538,405 to additional paid-in capital during the three and nine months ended June 30, 2024.

Subsequent to June 30, 2024, the Company consummated a firm commitment underwritten follow-on offering. See Note 8 for further information.

Mezzanine Equity

Pursuant to the terms of a subscription agreement (the "Put Right Subscription Agreement") signed by the Company during the year ended September 30, 2023 as part of the Series A Round, a subscriber (the "Subscriber") purchased 2,000,000 shares of Common Stock (the "Put Shares") for \$2.50 per share or \$5,000,000 (the "Purchase Price"). The Put Right Subscription Agreement included a right (the "Put Right") which entitled the Subscriber to elect to sell to the Company any part or all of the Put Shares acquired if: (a) the Company's initial public offering registration statement ("IPO Registration Statement") was not declared effective by the SEC by December 31, 2023; (b) the Company committed a material breach of the Agreement and either that breach was not capable of being remedied or, if capable of remedy, the Company did not remedy that breach as soon as possible and in any event within 30 business days of its receipt of a notice from the Subscriber requiring the Company to remedy that breach.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
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ASC 480-10-S99-3A provides guidance on the classification and measurement of redeemable securities, which requires classification in temporary equity of securities redeemable for cash or other assets if they are redeemable under certain conditions. One of these conditions is the occurrence of an event that is not solely within the control of the issuer. This condition was applicable up to March 30, 2024, as the Subscriber could have exercised the Put Option and required the Company to redeem the Put Shares since the IPO Registration Statement was not declared effective by the SEC by December 31, 2023. This process involved a significant number of third parties and the SEC's declaration of effectiveness was ultimately within the SEC's control. Therefore, this contingently redeemable feature was not considered to be within the control of the Company and was classified within Mezzanine Equity on the accompanying consolidated balance sheet at September 30, 2023. On March 30, 2024, the Subscriber terminated the Put Option at the request of the Company and the amount within Mezzanine Equity was converted to Stockholders' Equity.

Equity-Based Compensation

Issuance of Common Stock for Consulting fees

During the nine months ended June 30, 2023, the Company issued to two consultants an aggregate of 85,000 shares of Common Stock with an aggregate fair value of \$85,000, which represents equity-based compensation and is recorded within operating expenses. The fair value of shares is determined by the value of services rendered as indicated in the corresponding consulting agreements and by reference to recent cash sales of Common Stock to third parties.

Stock Based Compensation

On February 10, 2023, and on June 7, 2023, the Company adopted two distinct stock option plans which are referred to individually, as the 2023 Stock Option Plan #1 and the 2023 Stock Option Plan #2; (collectively, the "2023 Stock Option Plans"). There are 3,370,352 shares available for issuance under the 2023 Stock Option Plan #1, and the maximum number of shares available under the plan may increase on an annual basis on the anniversary date of this option plan if the total number of stock options issued under the 2023 Stock Option Plans is less than 15% of the number of issued shares of Common Stock. There are 1,758,460 shares of Common Stock available for issuance under the 2023 Stock Option Plan #2, and the maximum number of shares available under the plan may increase on a quarterly basis if the total number of stock options issued under the 2023 Stock Option Plans is less than 15% of the number of issued shares of Common Stock. The plans are otherwise substantially similar in their substance.

During the nine months ended June 30, 2024, the Company issued 125,000 fully vested stock options exercisable at \$3.00 per common share with expiry on March 13, 2027. The 125,000 options were valued at \$152,457 based on a Black-Scholes valuation with the following assumptions (Risk-free interest rate: 4.37%; expected life of options: 1.5 years; estimated volatility: 82.5%; dividend rate: 0%).

During the year ended September 30, 2023, the Company issued 2,050,000 fully vested stock options under Stock Option Plan #1 exercisable at \$1.50 per common share with expiry on February 10, 2026, issued 1,450,000 fully vested stock options under Stock Option Plan #2 and 200,000 fully vested stock options which are not governed by the Company's 2023 Stock Option Plans that are exercisable at \$3.00 per common share with expiry on June 7, 2026, and issued 247,000 fully vested stock options under Stock Option Plan #2 and 60,000 fully vested stock options which are not governed by the Company's 2023 Stock Option Plans that are exercisable at \$3.00 per common share with expiry on August 30, 2026. The 2,050,000 options were valued at \$584,484 based on a Black-Scholes valuation with the following assumptions (Risk-free interest rate: 4.19%; expected life of options: 1.5 years; estimated volatility: 82.5%; dividend rate: 0%). The 1,450,000 and 200,000 options were valued at \$1,444,530 based on a Black-Scholes valuation with the following assumptions (Risk-free interest rate: 4.21%; expected life of options: 1.5 years; estimated volatility: 82.5%; dividend rate: 0%). The 247,000 and 60,000 options were valued at \$269,989 based on a Black-Scholes valuation with the following assumptions (Risk-free interest rate: 4.57%; expected life of options: 1.5 years; estimated volatility: 82.5%; dividend rate: 0%).

During the nine months ended June 30, 2024 and during the year ended September 30, 2023, the Company's assumptions utilized in the Black-Scholes valuation were the following: (1) stock price based on recent sales of Common Stock to unrelated parties; (2) estimated the volatility of its underlying stock by using an average of the historical volatility of a group of comparable publicly traded companies; (3) expected dividend yield was calculated using historical dividend amounts; (4) risk-free rate is based on the United States Treasury yield curve in effect at the time of the grant; (5) expected term was estimated based on the vesting and contractual term of the stock option grant.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
As of June 30, 2024
(Unaudited)

The weighted average grant date fair value of stock options issued during the nine months ended June 30, 2024 was \$1.22 per share. There was no remaining stock compensation expense to be recognized at June 30, 2024 as all options vested immediately upon grant.

The weighted average grant date fair value of stock options issued during the year ended September 30, 2023 was \$0.57 per share. There was no remaining stock compensation expense to be recognized at September 30, 2023 as all options vested immediately upon grant.

Option Activity

A summary of cumulative option activity under the 2023 Plan is as follows:

	Options outstanding			
	Number of shares	Weighted average exercise price per share	Weighted average contractual term (in years)	Aggregate intrinsic value (in thousands)
Outstanding – September 30, 2023	4,007,000	\$ 2.23	2.54	\$ 2,004
Options granted	125,000	3.00	2.96	152
Outstanding – June 30, 2024	4,132,000	\$ 2.23	2.54	\$ 2,156
Vested during the period	125,000	\$ 3.00	2.96	\$ 152
Vested at end of period	-	\$ -	-	\$ -
Exercisable at the end of period	4,132,000	\$ 2.26	2.07	\$ 2,156

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
As of June 30, 2024
(Unaudited)

6. RIGHT-OF-USE ASSET AND LEASE LIABILITY

As of June 30, 2024, the Company has one long-term operating lease for its corporate headquarters located at 10 Times Square, 30th Floor, New York, New York 10018. Lease components in the Company's long-term operating lease are accounted for following the guidance in ASC 842 for the capitalization of long-term leases. At June 30, 2024, the lease liability is equal to the present value of the remaining lease payments, discounted using a borrowing rate based on similar debt. Lease activity for the three and nine months ended June 30, 2024 and 2023, was as follows:

Balance sheet information related to the Company's leases is presented below:

Operating leases:	June 30, 2024	September 30, 2023
Operating right-of-use asset	\$ 1,872,763	\$ —
Operating lease liability, current	352,281	—
Operating lease liability, long-term	1,618,510	—

The following provides details of the Company's lease expense:

Lease cost:	Three Months Ended June 30,		Nine Months Ended June 30,	
	2024	2023	2024	2023
Operating lease cost	\$ 103,263	\$ —	\$ 131,632	\$ —

Other information related to leases is presented below:

Cash paid for amounts included in the measurement of lease liabilities:	Three Months Ended June 30,		Nine Months Ended June 30,	
	2024	2023	2024	2023
Operating cash outflows from operating leases	\$ 33,605	\$ —	\$ 33,605	\$ —

	June 30, 2024
Weighted-average discount rate – operating lease	13.5%
Weighted-average remaining lease term – operating lease (in years)	7.3

As of June 30, 2024, the expected annual minimum lease payments of the Company's operating lease liabilities were as follows:

For the Years Ended September 30,	
2024	\$ 100,815
2025	339,411
2026	418,508
2027	428,971
2028	439,695
Thereafter	1,306,255
Total future minimum lease payments, undiscounted	3,033,655
Less: Imputed interest for leases in excess of one year	(1,062,864)
Present value of future minimum lease payments	1,970,791
Less: Current portion of lease liabilities	(352,281)
Total lease liabilities less current portion	<u>\$ 1,618,510</u>

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
As of June 30, 2024
(Unaudited)

7. ACQUISITION OF ALIP TECHNOLOGY

On June 21, 2024, the Company acquired a novel annular linear induction pump (“ALIP”) technology used in small nuclear reactor cooling (“ALIP Acquisition”) from noted physicist, research engineer and project manager Carlos O. Maidana, PhD. In connection with the transaction, Dr. Maidana has agreed to collaborate with the Company as a consultant on further development of the ALIP technology with a view towards achieving SBIR Phase III Award status. These efforts will build on previous Department of Energy (“DOE”) grants for the technology aggregating over \$1.37 million in prior phases. Pursuant to a consulting agreement between NANO and Dr. Maidana, NANO will provide funding (estimated to be approximately \$350,000) and other resources necessary for the SBIR Phase III project, and Dr. Maidana will be the Principal Investigator on this project. The SBIR program is a federal initiative designed to support small businesses in conducting research and development with strong potential for commercialization. By funding these projects, the SBIR program aims to stimulate technological innovation and facilitate the transition of research into viable products and services. SBIR Phase I focuses on feasibility and technical merit, Phase II involves further development and prototype creation, and Phase III centers on commercialization, requiring external funding to bring the innovation to market. The ALIP technology, which is based on electromagnetic (rather than moving) pumps, is a key-enabling technology to the Company’s ODIN microreactor in development. NANO’s engineers have worked to identify relevant technologies to further optimize and simplify ODIN’s design. The acquired ALIP technology, to be refined during the SBIR Phase III program, is an example of this strategy. The Company also believes there is significant potential for this technology to be separately commercialized within a year as a component for all salt-based coolant reactors. There are numerous advanced reactor designs which utilize salt-based coolants in fission and fusion energy industries, as well as in the advanced materials, space exploration, marine propulsion, and high-temperature and industrial process sectors.

The ALIP SBIR Phase III project acquired by the Company integrates several previous SBIR efforts, specifically:

- Grant Number DE-SC0019835: Development of a Small Electromagnetic Pump for Molten Salt.
- Grant Number DE-SC0022805: Software for Multiphysics Analysis and Design of Annular Linear Induction Pumps.
- Grant Number DE-SC0013992: Computational Tools for the Design of Liquid Metal Thermomagnetic Systems.

As part of this transaction, Dr. Maidana assigned to NANO all intellectual property rights associated with the ALIP technology and product, his work on the foregoing grants and the proposal for the SBIR Phase III program. As consideration for the ALIP Acquisition, the Company (i) issued 50,000 shares of Common Stock to Dr. Maidana and (ii) paid Dr. Maidana cash consideration of \$50,000. Additionally, the Company agreed to deliver to Dr. Madana an additional (iii) 50,000 shares of Common Stock and (iv) cash consideration of \$50,000, contingent upon the successful completion of the SBIR Phase III project prior to June 21, 2025. The Company anticipates that the completion of the SBIR Phase III project will occur prior to June 21, 2025, and therefore has calculated the contingent consideration at the closing price of NANO’s stock on the date of acquisition. The ALIP Acquisition has been accounted for as an acquisition of in-process R&D that has been fully expensed on the acquisition date as R&D costs.

The ALIP Acquisition was recorded at its fair value as of June 21, 2024. The total purchase price was approximately \$1.67 million and is comprised of:

	Total
Cash (paid on closing)	\$ 50,000
Common shares (issued on closing)	786,500
Contingent cash	50,000
Contingent common shares (fair value at closing)	786,500
Total purchase price	\$ 1,673,000

As of June 21, 2024, the contingent cash and common shares obligation was recorded at its fair value of \$836,500 based on the closing price of NANO’s stock on the date of acquisition. At June 30, 2024, the contingent cash and common shares obligation was revalued to its fair value of \$1,222,000 based on the closing price of NANO’s stock on June 30, 2024, which resulted in a revaluation expense of \$385,500.

8. SUBSEQUENT EVENTS

The Company has evaluated all events or transactions that occurred after June 30, 2024, through the date that the condensed consolidated interim financial statements were issued. During this period, there were no material subsequent events requiring disclosure except as stated as follows:

On July 15, 2024, the Company consummated a firm commitment underwritten follow-on public offering (the “Follow-on Offering”) of an aggregate of 900,000 units, consisting of an aggregate of 900,000 shares of Common Stock and 900,000 warrants to purchase up to 450,000 shares of Common Stock (the “Follow-on Warrants”) based on an offering price of \$20.00 per unit (the “Follow-on Offering Price”), generating gross proceeds of approximately \$18.0 million, less underwriting discounts and other Follow-on Offering expenses. The units issued in the Follow-On Offering have no stand-alone rights, are not certificated and have not been issued as stand-alone securities. In connection with the Follow-on Offering, the Company granted the lead managing underwriter an option (“Follow-on Over-allotment Option”), exercisable for 30 days from July 15, 2024, to purchase up to an additional 135,000 shares of Common Stock (the “Follow-on Over-allotment Shares”) and 135,000 Warrants to purchase 67,500 shares of Common Stock (the “Follow-on Over-allotment Warrants”) from the Company at the Follow-on Offering Price, less underwriting discounts and other Follow-on Offering expenses, to cover over-allotments in the Follow-on Offering. On July 12, 2024, the underwriter exercised the Follow-on Over-allotment Option in full with respect to the Follow-on Over-allotment Warrants, which closed on July 15, 2024 for nominal consideration.

On July 16, 2024, the underwriter exercised the Follow-on Over-allotment Option in full with respect to the Follow-on Over-allotment Shares, and on July 18, 2024, the closing of the purchase of the Follow-on Over-Allotment Shares occurred, generating gross proceeds to the Company of approximately \$2.70 million and net proceeds of approximately \$2.48 million.

Between July 15, 2024 and August 13, 2024, 127,550 Warrants were exercised to purchase 63,775 Common Stock at an exercise price of \$20.00 per share generating gross proceeds of approximately \$1,275,500, and 25,000 stock options were exercised to purchase 25,000 common shares at an exercise price of \$1.50 per share generating proceeds of approximately \$37,500.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of
Nano Nuclear Energy, Inc. and Subsidiaries:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Nano Nuclear Energy, Inc. and Subsidiaries (the “Company”) as of September 30, 2023 and 2022, and the related consolidated statements of operations, stockholders’ equity and cash flows for the year ended September 30, 2023 and for the period from February 8, 2022 (“Inception”) through September 30, 2022, and the related notes to the consolidated financial statements (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of September 30, 2023 and 2022, and the results of its operations and its cash flows for the year ended September 30, 2023 and for the period from Inception through September 30, 2022, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ WithumSmith+Brown, PC

We have served as the Company’s auditor since 2023.

New York, New York
January 30, 2024

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

	September 30, 2023	September 30, 2022
ASSETS		
Current assets:		
Cash	\$ 6,952,795	\$ 2,129,999
Prepaid expenses	205,857	117,448
Total current assets	7,158,652	2,247,447
Deferred offering costs	75,000	-
Total assets	\$ 7,233,652	\$ 2,247,447
LIABILITIES, MEZZANINE, AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 190,005	\$ 102,771
Due to related parties	35,000	35,000
Total liabilities	225,005	137,771
Mezzanine Equity		
Common stock subject to possible redemption;	-	-
2,000,000 and nil shares as of September 30, 2023 and September 30, 2022, respectively	5,000,000	-
Stockholders' Equity		
Preferred stock, \$0.0001 par value; 100,000,000 authorized; none issued and outstanding as of September 30, 2023 and September 30, 2022	-	-
Common stock, \$0.0001 par value; 100,000,000 authorized;	-	-
23,184,869 and 20,501,500 shares issued and outstanding as of September 30, 2023 and September 30, 2022, respectively, excluding 2,000,000 shares subject to possible redemption	2,319	2,050
Additional paid-in capital	9,288,553	3,139,450
Accumulated deficit	(7,282,225)	(1,031,824)
Total stockholders' equity	2,008,647	2,109,676
Total liabilities, mezzanine equity, and stockholders' equity	\$ 7,233,652	\$ 2,247,447

The accompanying notes are an integral part of these consolidated financial statements.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Year Ended September 30, 2023	For the Period from February 8, 2022 (Inception) through September 30, 2022
Operating expenses		
General and administrative	\$ 4,749,395	\$ 919,520
Research and development	1,534,000	140,304
Loss from operations	(6,283,395)	(1,059,824)
Other income	32,994	28,000
Net loss	\$ (6,250,401)	\$ (1,031,824)
Net loss per share of common stock:		
Basic	\$ (0.28)	\$ (0.06)
Diluted	\$ (0.28)	\$ (0.06)
Weighted-average shares of common stock outstanding:		
Basic	22,389,627	16,554,191
Diluted	22,389,627	16,554,191

The accompanying notes are an integral part of these consolidated financial statements.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

For the Year Ended September 30, 2023

	<u>Mezzanine Equity</u>		<u>Permanent Equity</u>				
	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>	<u>Additional paid-in capital</u>	<u>Accumulated deficit</u>	<u>Total</u>
Balance as of September 30, 2022	-	\$ -	20,501,500	\$ 2,050	\$ 3,139,450	\$ (1,031,824)	\$ 2,109,676
Common stock issuances	2,000,000	5,000,000	2,598,369	260	3,765,109	-	3,765,369
Equity-based compensation	-	-	85,000	9	2,383,994	-	2,384,003
Net loss	-	-	-	-	-	(6,250,401)	(6,250,401)
Balance as of September 30, 2023	<u>2,000,000</u>	<u>\$ 5,000,000</u>	<u>23,184,869</u>	<u>\$ 2,319</u>	<u>\$ 9,288,553</u>	<u>\$ (7,282,225)</u>	<u>\$ 2,008,647</u>

For the Period From February 8, 2022 (Inception) through September 30, 2022

	<u>Mezzanine Equity</u>		<u>Permanent Equity</u>				
	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>	<u>Additional paid-in capital</u>	<u>Accumulated deficit</u>	<u>Total</u>
Balance as of February 8, 2022 (Inception)	-	\$ -	-	\$ -	\$ -	\$ -	\$ -
Common stock issuances	-	-	19,826,500	1,982	2,749,518	-	2,751,500
Equity-based compensation	-	-	675,000	68	389,932	-	390,000
Net loss	-	-	-	-	-	(1,031,824)	(1,031,824)
Balance as of September 30, 2022	<u>-</u>	<u>\$ -</u>	<u>20,501,500</u>	<u>\$ 2,050</u>	<u>\$ 3,139,450</u>	<u>\$ (1,031,824)</u>	<u>\$ 2,109,676</u>

The accompanying notes are an integral part of these consolidated financial statements.

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Year Ended September 30, 2023	For the Period from February 8, 2022 (Inception) through September 30, 2022
OPERATING ACTIVITIES		
Net loss	\$ (6,250,401)	\$ (1,031,824)
Adjustments to reconcile net loss to net cash used in operating activities:		
Equity-based compensation	2,384,003	390,000
Change in assets and liabilities:		
Prepaid expenses	(88,409)	(117,448)
Accounts payable and accrued liabilities	87,234	102,771
Due to related parties	-	35,000
Net cash used in operating activities	(3,867,573)	(621,501)
FINANCING ACTIVITIES		
Proceeds from common stock issuances	8,765,369	2,751,500
Payment of deferred offering costs	(75,000)	-
Net cash provided by financing activities	8,690,369	2,751,500
Net increase in cash	4,822,796	2,129,999
Cash, beginning of period	2,129,999	-
Cash, end of period	\$ 6,952,795	\$ 2,129,999

The accompanying notes are an integral part of these consolidated financial statements.

1. ORGANIZATION AND OPERATIONS AND BASIS OF PRESENTATION

NANO Nuclear Energy Inc. (“NANO” or the “Company”) was incorporated under the laws of the state of Nevada on February 8, 2022 (“Inception”) and is headquartered in New York, NY. The Company intends to progress its collaborative research projects towards development, rigs and models, zero-power reactors, and ultimately towards reactor manufacture and deployments. The Company envisions readily replaceable mobile reactors which it can provide to customers, along with operative personnel, to power projects, residential and commercial enterprises, and major development projects. The Company is committed to providing smaller, cheaper, and safer nuclear energy solutions for the future by incorporating the latest technology into its own proprietary novel reactor designs, intellectual properties, research methods and through its subsidiary, HALEU Energy Fuel Inc. The subsidiary will focus on the future development of a domestic source for a High-Assay Low-Enriched Uranium (HALEU) fuel processing pipeline for the broader advanced nuclear reactor industry and providing fuel to power the Company’s reactors. Currently in technical development are “ZEUS”, a Solid Core Battery Reactor and “ODIN”, a Low-Pressure Coolant Reactor, representing the Company’s first generation of portable, on-demand capable, advanced nuclear micro reactors.

These consolidated financial statements include the accounts of the Company and its wholly-owned legal subsidiaries American Uranium Inc., which was incorporated in Nevada, HALEU Energy Fuel Inc., which was incorporated in Nevada and Advanced Fuel Transportation Inc., which was incorporated in Nevada.

Liquidity

These consolidated financial statements have been prepared on a going concern basis, which assumes the realization of assets and settlement of liabilities in the normal course of business. At September 30, 2023, the Company had working capital of \$6,933,647, net loss of \$6,250,401, accumulated deficit of \$7,282,225 and negative cash flows from operations of \$3,867,573. At September 30, 2022, the Company had working capital of \$2,109,676, net loss of \$1,031,824, accumulated deficit of \$1,031,824 and negative cash flows from operations of \$621,501. The application of the going concern concept is dependent on the Company’s ability to receive continued financial support from its stakeholders and, ultimately, on the Company’s ability to generate profitable operations. Management is of the opinion that sufficient working capital is available to meet the Company’s liabilities and commitments as they come due at least for the next twelve months after the date the consolidated financial statements are issued to conform to the going concern uncertainty period. In order to achieve the Company’s long-term strategy, the Company expects to raise additional equity contributions to support its growth. These consolidated financial statements do not reflect any adjustments or reclassifications of assets and liabilities which would be necessary if the Company were unable to continue as a going concern.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”). The consolidated financial statements include the accounts of NANO and its wholly owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make certain estimates, judgments and assumptions. The Company believes that the estimates, judgments and assumptions made when accounting for items and matters such as, but not limited to, equity-based compensation and contingencies are reasonable, based on information available at the time they are made. These estimates, judgments and assumptions can affect the reported amounts of assets and liabilities as of the date of the consolidated financial statements, as well as amounts reported on the statements of operations during the periods presented. Actual results could differ from those estimates.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Fair Value Measurement

The Company measures certain financial assets and liabilities at fair value. Fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the Company uses a three-level hierarchy, which prioritizes fair value measurements based on the types of inputs used for the various valuation techniques (market approach, income approach and cost approach). The levels of hierarchy are described below:

Level 1 – Quoted prices in active markets for identical instruments.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.

Level 3 – Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability. Financial assets and liabilities are classified in their entirety based on the most stringent level of input that is significant to the fair value measurement. The carrying amount of certain financial instruments, including prepaid expenses and accounts payable approximates fair value due to their short maturities.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash. The Company maintains its cash balances at a financial institution and such amounts exceeded federally insured limits at September 30, 2023 and 2022. Any loss incurred or a lack of access to such funds could have a significant adverse impact on the Company's financial condition, results of operations, and cash flows.

Prepaid Expenses

Prepaid expenses primarily relate to payments made to consultants and vendors in advance of the service being provided.

Leases

The Company recognizes right-of-use assets and lease liabilities for leases with terms greater than 12 months. Leases are classified as either finance or operating leases. This classification dictates whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease. As of September 30, 2023 and September 30, 2022, the Company has one short-term operating lease.

Long-term leases (leases with initial terms greater than 12 months) are capitalized at the present value of the minimum lease payments not yet paid. The Company uses its incremental borrowing rate to determine the present value of the lease when the rate implicit in the lease is not readily determinable.

Short-term leases (leases with an initial term of 12 months or less or leases that are cancelable by the lessee and lessor without significant penalties) are not capitalized but are expensed on a straight-line basis over the lease term. The Company's short-term lease relates to office facilities which did not meet the criteria for capitalization as of September 30, 2023 and September 30, 2022.

Mezzanine Equity

The Company recognized a tranche of common shares as mezzanine equity since those common shares may be redeemed at the option of the holder, but is not mandatorily redeemable.

Equity-Based Compensation

Equity-based compensation is measured using a fair value-based method for all equity-based awards. The cost of awarded equity instruments is recognized based on each instrument's grant-date fair value over the period during which the award vests. Equity-based compensation is recorded as a general and administrative expense in the statements of operations.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Research and Development

Research and Development (“R&D”) expenses represent costs incurred for designing and engineering products, including the costs of developing design tools. All research and development costs related to product development are expensed as incurred.

Advertising Costs

Advertising costs are expensed as incurred and are recognized as a component of general and administrative expenses on the consolidated statement of operations. Advertising costs expensed were approximately \$483,500 for the year ended September 30, 2023 and \$13,360 for the period from Inception through September 30, 2022.

Legal Contingencies

The Company is not presently involved in any legal proceedings. The Company records liabilities for losses from legal proceedings when it determines that it is probable that the outcome in a legal proceeding will be unfavorable, and the amount of loss can be reasonably estimated.

Income Taxes

Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets, including tax loss and credit carry forwards, and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recorded when it is “more likely-than-not” that deferred tax assets will not be realized. On a regular basis, the Company evaluates the recoverability of deferred tax assets and the need for a valuation allowance. Such evaluations involve the application of significant judgment. The Company considers multiple factors in its evaluation of the need for a valuation allowance. The Company’s net deferred tax assets consist of assets related to net operating losses. The Company’s net operating losses and credits have an indefinite life for federal net operating losses (“NOLs”) generated through September 30, 2023. At September 30, 2023 and 2022, the Company has recorded a full valuation allowance on its deferred tax assets in the amount of approximately \$1,971,000 and \$281,000, respectively. The Company’s deferred tax assets consist primarily of net operating losses and research and development credits. The effective tax rate was 0.0% for both the year ended September 30, 2023 and for the period from February 8, 2022 (Inception) through September 30, 2022. The Company’s effective tax rate for the year ended September 30, 2023 and period ended September 30, 2022 differs from the federal statutory rate of 21% primarily due to a full valuation allowance against its net deferred tax assets where it is more likely than not that the deferred tax assets will not be realized.

Until an appropriate level of profitability is attained, the Company expects to maintain a full valuation allowance on its deferred tax assets. Any tax benefits or tax expense recorded on its consolidated statements of operations will be offset with a corresponding valuation allowance until such time that the Company changes its determination related to the realization of deferred tax assets. In the event that the Company changes its determination as to the amount of deferred tax assets that can be realized, the Company will adjust its valuation allowance with a corresponding impact to the provision for income taxes in the period in which such a determination is made. For uncertain tax positions that meet a “more likely-than-not” threshold, the Company recognizes the benefit of uncertain tax positions in the consolidated financial statements. The Company’s practice is to recognize interest and penalties, if any, related to uncertain tax positions in income tax expense in the consolidated statements of operations. The Company’s 2023 tax returns remain subject to examination by taxing jurisdictions. At September 30, 2023 and 2022, the Company does not believe it has any uncertain tax positions that would require either recognition or disclosure in the accompanying consolidated financial statements.

Net Loss per Share

Basic net income (loss) per share is computed by dividing net income (loss) attributable to the Company by the weighted average number of shares of common stock outstanding during the period. Diluted net income (loss) per share is computed based on the weighted average number of shares of common stock outstanding plus the effect of dilutive potential shares of common stock outstanding during the period. During the periods when there is a net loss, potentially dilutive shares of common stock are excluded from the calculation of diluted net loss per share as their effect is anti-dilutive. During the year ended September 30, 2023, there were no dilutive shares issued or outstanding.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Operating Segments

For the year ended September 30, 2023, the Company was managed as a single operating segment in accordance with the provisions in the Financial Accounting Standards Board (“FASB”) guidance on segment reporting, which establishes standards for, and requires disclosure of, certain financial information related to reportable operating segments and geographic regions. Furthermore, the Company determined that the Company’s Chairman and President is the Chief Operating Decision Maker as he is responsible for making decisions regarding the allocation of resources and assessing performance as well as for strategic operational decisions and managing the organization as a whole.

Recent Accounting Pronouncements

The Company considers the applicability and impact of all Accounting Standards Updates issued by the FASB. There are no accounting pronouncements which have been issued but are not yet effective that would have a material impact on our current consolidated financial statements.

3. OTHER INCOME

During the year ended September 30, 2023, the Company earned interest income of \$32,994 on its cash held at a financial institution. During the period from Inception through September 30, 2022, the Company was awarded a grant for 200 hours of subject matter expert support at Idaho National Laboratory (“INL”) as part of the National Reactor Innovation Center (“NRIC”) Resource Team program which amounted to \$28,000. NRIC is a national U.S. Department of Energy program led by the INL, allowing collaborators to harness the world-class capabilities of the U.S. National Laboratory System. All amounts related to this grant have been earned as of September 30, 2022.

4. RELATED PARTIES

At September 30, 2023 and September 30, 2022 the Company had amounts due to related parties of \$35,000 and \$35,000, respectively. These amounts corresponded to unpaid amounts due to officers and directors for services rendered during the year ended September 30, 2023 and for the period from Inception through September 30, 2022. During the year ended September 30, 2023, the Company incurred consulting fees of \$225,000 to its President and Chairman, \$90,000 to its Chief Executive Officer, \$90,000 to its Chief Financial Officer, \$25,000 to its Chief Policy Officer, and incurred total directors’ fees of \$25,000 to three independent directors, which was included in the consolidated statement of operation under general and administrative expenses. During the period from Inception through September 30, 2022, the Company incurred consulting fees of \$80,000 to its President and Chairman, \$15,000 to its Chief Executive Officer, \$30,000 to its Chief Financial Officer, \$10,000 to its Chief Policy Officer, and incurred directors’ fees of \$5,000 to one independent director, which is included in the consolidated statements of operations under general and administrative expenses.

5. EQUITY

The Company is authorized to issue 100,000,000 shares of common stock, with a par value of \$0.0001 per share, and 100,000,000 shares of preferred stock, with a par value of \$0.0001 per share. Holders of common stock are entitled to one vote per share.

Issuance of Common Stock for Cash

Incorporation

Upon incorporation of the Company, 10,000,000 shares of common stock were issued to the Company’s founder and president for proceeds of \$50,000.

Seed Round

The Seed Round began in March 2022 and ended in April 2022. During the period from Inception through September 30, 2022, the Company sold 7,500,000 shares of common stock at a price of \$0.05 per share for proceeds of \$375,000 as part of the Company’s Seed Round.

Angel Round

The Angel Round began in April 2022 and ended in February 2023. During period from Inception to September 30, 2022, the Company sold 2,326,500 shares of common stock at a price of \$1.00 per share for proceeds of \$2,326,500 as part of the Company’s Angel Round. During the year ended September 30, 2023, the Company sold 1,820,369 shares of common stock at a price of \$1.00 per share for proceeds of \$1,820,369 as part of the Company’s Angel Round.

5. EQUITY (Continued)

Issuance of Common Stock for Cash (Continued)

Series A Round

The Series A Round began in April 2023 and ended in June 2023. During the year ended September 30, 2023, the Company sold 778,000 shares of common stock at a price of \$2.50 per share for proceeds of \$1,945,000 as part of the Company's Series A Round.

Series B Round

Subsequent to September 30, 2023, the Company sold 822,144 common shares at a price of \$3.00 per common share for gross proceeds of \$2,466,437 in the Series B Round. The Series B Round was completed in January 2024.

Mezzanine Equity

Pursuant to the terms of a subscription agreement (the "Agreement") signed by the Company during the year ended September 30, 2023, a subscriber (the "Subscriber") purchased 2,000,000 shares of common stock (the "Shares") for \$2.50 per share or \$5,000,000 (the "Purchase Price"). The Agreement includes a put right which entitles the Subscriber to elect to sell to the Company any part or all of the Shares acquired by the Subscriber under this Agreement (the "Put Shares") if: (a) the Company's initial public offering registration statement ("IPO Registration Statement") is not declared effective by the Securities and Exchange Commission ("SEC") by December 31, 2023; (b) the Company commits a material breach of the Agreement and either that breach is not capable of being remedied or, if capable of remedy, the Company does not remedy that breach as soon as possible and in any event within 30 business days of its receipt of a notice from the Subscriber requiring the Company to remedy that breach. In the event the Subscriber elects to exercise its right to sell or put the shares to the Company (the "Put Option"), the Subscriber shall deliver a written notice to the Company specifying the number of shares that the Subscriber wishes to sell, and the Company shall be required to purchase from the Subscriber the Put Shares at a price per share equal to the original Purchase Price or \$2.50 per share. The closing of the Put Shares pursuant to the above shall take place no later than 15 days following the receipt of such notice from the Subscriber payable in cash.

ASC 480-10-S99-3A provides guidance on the classification and measurement of redeemable securities, which requires classification in temporary equity of securities redeemable for cash or other assets if they are redeemable under certain conditions. One of these conditions is the occurrence of an event that is not solely within the control of the issuer. This condition is applicable as the Subscriber can exercise the Put Option and require the Company to redeem the shares of common stock if the Company's IPO Registration Statement is not declared effective by the SEC by December 31, 2023. This process involves a significant number of third parties and the SEC's declaration of effectiveness. Therefore, this contingently redeemable feature is not considered to be within the control of the Company and is classified within Mezzanine Equity on the accompanying consolidated balance sheet at September 30, 2023. As of January 30, 2024, the Subscriber has not exercised the Put Option.

Equity-Based Compensation

Issuance of Common Stock for Consulting fees

During the year ended September 30, 2023, the Company issued to two consultants an aggregate of 85,000 shares of common stock with an aggregate fair value of \$85,000, which represents equity-based compensation and is recorded within operating expenses. During the period ended September 30, 2022, the Company issued to various consultants an aggregate of 675,000 shares of common stock with an aggregate fair value of \$390,000, which represents equity-based compensation and is recorded within operating expenses. The fair value of shares is determined by the value of services rendered as indicated in the corresponding consulting agreements and by reference to recent cash sales of common stock to third parties.

Stock Based Compensation

On February 10, 2023, the Company adopted the 2023 Stock Incentive Plan which provides for the grant of incentive stock options and non-qualified stock options to purchase a maximum of 4,974,760 shares of the Company's common stock and other types of awards. The exercise price, vesting and expiry date is determined for each grant by the board of directors or a committee appointed by the board of directors.

During the year ended September 30, 2023, the Company issued 2,050,000 fully vested stock options exercisable at \$1.50 per common share with expiry on February 10, 2026, issued 1,650,000 fully vested stock options exercisable at \$3.00 per common share with expiry on June 7, 2026, and issued 307,000 fully vested stock options exercisable at \$3.00 per common share with expiry on August 30, 2026. The 2,050,000 options were valued at \$584,484 based on a Black-Scholes valuation with the following assumptions (Risk-free interest rate: 4.19%; expected life of options: 1.5 years; estimated volatility: 82.5%; dividend rate: 0%). The 1,650,000 options were valued at \$1,444,530 based on a Black-Scholes valuation with the following assumptions (Risk-free interest rate: 4.21%; expected life of options: 1.5 years; estimated volatility: 82.5%; dividend rate: 0%). The 307,000 options were valued at \$269,989 based on a Black-Scholes valuation with the following assumptions (Risk-free interest rate: 4.57%; expected life of options: 1.5 years; estimated volatility: 82.5%; dividend rate: 0%).

5. EQUITY (Continued)

Equity-Based Compensation (Continued)

Stock Based Compensation (Continued)

During the year ended September 30, 2023, the Company's assumptions utilized in the Black-Scholes valuation were the following: 1) stock price based on recent sales of common stock to unrelated parties; 2) estimated the volatility of its underlying stock by using an average of the historical volatility of a group of comparable publicly traded companies; 3) expected dividend yield was calculated using historical dividend amounts; 4) risk-free rate is based on the United States Treasury yield curve in effect at the time of the grant; 5) expected term was estimated based on the vesting and contractual term of the stock option grant.

The weighted average grant date fair value of stock options issued during the year ended September 30, 2023 was \$0.57 per share. There was no remaining stock compensation expense to be recognized at September 30, 2023 as all options vested immediately upon grant.

For the year ended September 30, 2023, \$1,963,440 was recorded within general and administrative expenses and \$420,563 was recorded within research and development expenses. During the period from Inception through September 30, 2022, the Company did not issue stock options.

Option Activity

A summary of cumulative option activity under the 2023 Plan is as follows:

	Options outstanding			
	Number of shares	Weighted average exercise price per share	Weighted average contractual term (in years)	Aggregate intrinsic value (in thousands)
Outstanding – September 30, 2022	—	\$ —	—	\$ —
Options granted	2,050,000	1.50	3.00	1,025
Options granted	1,650,000	3.00	3.00	825
Options granted	307,000	3.00	3.00	154
Outstanding – September 30, 2023	4,007,000	\$ 2.23	2.54	\$ 2,004
Vested during the year	4,007,000	\$ 2.23	3.00	\$ 2,004
Vested at end of year	4,007,000	\$ 2.23	2.54	\$ 2,004
Exercisable at the end of the year	4,007,000	\$ 2.23	2.54	\$ 2,004

6. SUBSEQUENT EVENTS

The Company has evaluated all events or transactions that occurred after September 30, 2023 through January 30, 2024, which is the date that the consolidated financial statements were available to be issued. During this period, there were no material subsequent events requiring disclosure except as stated as follows:

Subsequent to September 30, 2023, the Company sold 822,144 common shares at a price of \$3.00 per common share for gross proceeds of \$2,466,437.

Through and including [____], 2024 (the 25th day after the date of this prospectus) all dealers that effect transactions in these securities, whether or not participating in the listing, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

[____] Units consisting of [____] Shares of
Common Stock and Warrants to Purchase up to [____] Shares of Common Stock
(and Shares of Common Stock issuable upon exercise of the Warrants)



NANO NUCLEAR ENERGY INC.

PROSPECTUS

THE BENCHMARK COMPANY

[●], 2024

PART II — INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth an itemized statement of the amounts of all expenses (excluding underwriting discounts and non-accountable expense allowance) payable by us in connection with the registration of the common stock offered hereby. With the exception of the SEC registration fee and the FINRA filing fee, the amounts set forth below are estimates.

SEC registration fee	\$	[]
FINRA filing fee		[]
Transfer agent fees		5,000
Accounting fees and expenses		20,000
Legal fees and expenses		400,000
Printing and engraving expenses		25,000
Other expenses		3,500
Total	\$	[]

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.

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 so orders, by independent legal counsel in 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, may provide that the expenses of officers and directors incurred in defending a civil or criminal 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 shares were offered and sold by the initial purchasers to qualified institutional buyers, or (iv) under Rule 701 promulgated under the Securities Act in that the transactions were under compensatory benefit plans and contracts relating to compensation.

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.

In June 2024, we issued an aggregate of 50,000 shares of common stock to Dr. Maidana as consideration for the ALIP Acquisition.

In August 2024, we issued an aggregate of 20,000 shares of common stock to certain consultants for services received.

In August 2024, we issued an aggregate of 250,000 shares of common stock to consultants who exercised stock options.

In September 2024, we issued an aggregate of 343,000 shares of common stock to consultants who exercised stock options.

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
4.3**	Form of Warrant Agent Agreement
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 July 29, 2024, by and between the Registrant and Cambridge AtomWorks (2024) Limited
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**	Filing Fee Table

* Filed as an exhibit to the registrant's Registration on Form S-1 (File No. 333-278076), declared effective on May 6, 2024.

** To be filed.

+ 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 registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the 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 or made in a document incorporated or deemed incorporated by reference into the 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 prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

- (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.

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 October [____], 2024.

Nano Nuclear Energy Inc.

By: _____
Name: James Walker
Title: Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENT, that each person whose signature appears below constitutes and appoints each of James Walker and Jay Jiang Yu, severally, as his true and lawful attorney-in-fact and agent, with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments), and to sign any registration statement for the same offering covered by this registration statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
_____ Jay Jiang Yu	Chairman of the Board and President	October [__], 2024
_____ James Walker	Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	October [__], 2024
_____ Jaisun Garcha	Chief Financial Officer and Secretary <i>(Principal Accounting Officer)</i>	October [__], 2024
_____ Dr. Tsun Yee Law	Independent Director	October [__], 2024
_____ Diane Hare	Independent Director	October [__], 2024
_____ Dr. Kenny Yu	Independent Director	October [__], 2024