

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

**FORM 10-Q**

(Mark One)

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

**For the quarterly period ended March 31, 2024**

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

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_**

**Commission file number 001-42044**

**Nano Nuclear Energy, Inc.**

(Exact name of registrant as specified in its charter)

**Nevada**

(State or other jurisdiction of  
incorporation or organization)

**88-0861977**

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

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

(Address of principal executive offices)

**10018**

(Zip Code)

**(212) 634-9206**

(Registrant's telephone number, including area code)

N/A

(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading symbol(s)	Name of exchange on which registered
<b>Common stock, par value \$0.0001 per share</b>	<b>NNE</b>	<b>Nasdaq Capital Market</b>

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files.) Yes  No

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 definition of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer   
Non-accelerated filer

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 pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

As of June 18, 2024, there were 28,569,513 shares of the Company's common stock issued and outstanding.

NANO NUCLEAR ENERGY INC.  
Form 10-Q  
For the Quarter Ended March 31, 2024

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## CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q (this “Report”) contains “forward-looking statements” (as defined in Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) that reflect our current expectations and views of future events. The forward-looking statements are contained principally in the section of this Report entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Readers are cautioned that significant known and unknown risks, uncertainties and other important factors (including those over which we may have no control and others listed in this Report and in the “Risk Factors” section of our Registration Statement on Form S-1 (File Number 333-278076) as filed with the U.S. Securities and Exchange Commission (the “SEC”), and as amended and declared effective on May 6, 2024 (the “IPO Registration Statement”) may cause our actual results, performance or achievements to be materially different from those 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,” “expect,” “anticipate,” “aim,” “estimate,” “intend,” “plan,” “believe,” “is/are likely to,” “potential,” “continue” or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include statements relating to:

- Our ability to design, develop, manufacture and sell our proposed micro nuclear reactors.
- Our ability to develop a domestic HALEU fuel fabrication 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.
- 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 Report including, without limitation, those under “Management’s Discussion and Analysis of Financial Condition and Results of Operations”, 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 significant 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 in the IPO Registration Statement under the heading “Risk Factors” and elsewhere in the IPO Registration Statement. 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. Prior to investing in our common stock, you should read this Report and our other SEC filings completely and with the understanding that our actual future results may be materially different from what we currently expect. We qualify all of our forward-looking statements by these cautionary statements.

The forward-looking statements made in this Report relate only to events or information as of the date of this Report. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events.

**PART I - FINANCIAL INFORMATION**

**Item 1. Financial Statements.**

**NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES**

**CONDENSED CONSOLIDATED BALANCE SHEETS**

	<b>March 31, 2024</b>	<b>September 30, 2023</b>
	<b>(Unaudited)</b>	
<b>ASSETS</b>		
Current assets:		
Cash	\$ 5,955,028	\$ 6,952,795
Prepaid expenses	634,977	205,857
Total current assets	6,590,005	7,158,652
Deferred offering costs	130,000	75,000
Deposits	235,235	-
Right of use asset	1,914,778	-
Total assets	\$ 8,870,018	\$ 7,233,652
<b>LIABILITIES, MEZZANINE, AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 299,508	\$ 190,005
Due to related parties	25,000	35,000
Lease liability, current	280,951	-
Total current liabilities	605,459	225,005
Lease liability, non-current	1,628,591	-
Total liabilities	2,234,050	225,005
Mezzanine Equity		
Common stock subject to possible redemption; 0 shares as of March 31, 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 March 31, 2024 and 100,000,000 authorized as of September 30, 2023; none issued and outstanding as of March 31, 2024 and September 30, 2023	-	-
Common stock, \$0.0001 par value; 275,000,000 authorized as of March 31, 2024 and 100,000,000 authorized as of September 30, 2023; 26,007,013 and 23,184,869 shares issued and outstanding as of March 31, 2024 and September 30, 2023, respectively, excluding 2,000,000 shares as of September 30, 2023 subject to possible redemption	2,601	2,319
Additional paid-in capital	16,907,165	9,288,553
Accumulated deficit	(10,273,798)	(7,282,225)
Total stockholders' equity	6,635,968	2,008,647
Total liabilities, mezzanine equity, and stockholders' equity	\$ 8,870,018	\$ 7,233,652

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		Six Months Ended	
	March 31, 2024	March 31, 2023	March 31, 2024	March 31, 2023
<b>Operating expenses</b>				
General and administrative	\$ 1,423,309	\$ 1,127,534	\$ 2,252,205	\$ 1,683,973
Research and development	290,539	392,900	810,555	520,606
<b>Loss from operations</b>	<b>1,713,848</b>	<b>1,520,434</b>	<b>3,062,760</b>	<b>2,204,579</b>
Other income	36,220	-	71,187	-
<b>Net loss</b>	<b>\$ (1,677,628)</b>	<b>\$ (1,520,434)</b>	<b>\$ (2,991,573)</b>	<b>\$ (2,204,579)</b>
<b>Net loss per share of common stock:</b>				
Basic	\$ (0.07)	\$ (0.07)	\$ (0.13)	\$ (0.10)
Diluted	\$ (0.07)	\$ (0.07)	\$ (0.13)	\$ (0.10)
<b>Weighted-average shares of common stock outstanding:</b>				
Basic	23,861,244	22,307,508	23,521,208	21,747,734
Diluted	23,861,244	22,307,508	23,521,208	21,747,734

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

NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES

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

For the Three Months Ended March 31, 2024

	Mezzanine Equity		Common Shares	Amount	Stock subscriptions	Additional paid-in capital	Accumulated deficit	Total Stockholders' Equity
	Shares	Amount						
Balance as of December 31, 2023	2,000,000	\$ 5,000,000	23,184,869	\$ 2,319	\$ 2,106,437	\$ 9,288,553	\$ (8,596,170)	\$ 2,801,139
Common stock issuances	-	-	822,144	82	(2,106,437)	2,466,355	-	360,000
Mezzanine equity conversion	(2,000,000)	(5,000,000)	2,000,000	200	-	4,999,800	-	5,000,000
Equity-based compensation	-	-	-	-	-	152,457	-	152,457
Net loss	-	-	-	-	-	-	(1,677,628)	(1,677,628)
Balance as of March 31, 2024	-	\$ -	26,007,013	\$ 2,601	\$ -	\$ 16,907,165	\$ (10,273,798)	\$ 6,635,968

For the Six Months Ended March 31, 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
Common stock issuances	-	-	822,144	82	2,466,355	-	2,466,437
Mezzanine equity conversion	(2,000,000)	(5,000,000)	2,000,000	200	4,999,800	-	5,000,000
Equity-based compensation	-	-	-	-	152,457	-	152,457
Net loss	-	-	-	-	-	(2,991,573)	(2,991,573)
Balance as of March 31, 2024	-	\$ -	26,007,013	\$ 2,601	\$ 16,907,165	\$ (10,273,798)	\$ 6,635,968

For the Three Months Ended March 31, 2023

	Common Shares	Amount	Additional paid-in capital	Accumulated deficit	Total Stockholders' Equity
Balance as of December 31, 2022	22,099,369	\$ 2,214	\$ 4,737,155	\$ (1,715,969)	\$ 3,023,400
Common stock issuances	307,500	27	307,473	-	307,500
Equity-based compensation	-	-	584,484	-	584,484
Net loss	-	-	-	(1,520,434)	(1,520,434)
Balance as of March 31, 2023	22,406,869	\$ 2,241	\$ 5,629,112	\$ (3,236,403)	\$ 2,394,950

For the Six Months Ended March 31, 2023

	Common Shares	Amount	Additional paid-in capital	Accumulated deficit	Total Stockholders' Equity
Balance as of September 30, 2022	20,501,500	\$ 2,050	\$ 3,139,450	\$ (1,031,824)	\$ 2,109,676
Common stock issuances	1,820,369	182	1,820,187	-	1,820,369
Equity-based compensation	85,000	9	669,475	-	669,484
Net loss	-	-	-	(2,204,579)	(2,204,579)
Balance as of March 31, 2023	22,406,869	\$ 2,241	\$ 5,629,112	\$ (3,236,403)	\$ 2,394,950

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)

	<b>For the Six Months Ended March 31, 2024</b>	<b>For the Six Months Ended March 31, 2023</b>
<b>OPERATING ACTIVITIES</b>		
<b>Net loss</b>	\$ (2,991,573)	\$ (2,204,579)
Adjustments to reconcile net loss to net cash used in operating activities:		
Equity-based compensation	152,457	669,484
Amortization of right of use asset	11,878	-
Change in assets and liabilities:		
Prepaid expenses	(429,120)	17,024
Deposits	(235,235)	-
Accounts payable and accrued liabilities	109,503	(6,068)
Due to related parties	(10,000)	55,000
Lease liability	(17,114)	-
<b>Net cash used in operating activities</b>	<u>(3,409,204)</u>	<u>(1,469,139)</u>
<b>FINANCING ACTIVITIES</b>		
Proceeds from common stock issuances	2,466,437	1,820,369
Payment of deferred offering costs	(55,000)	(50,000)
<b>Net cash provided by financing activities</b>	<u>2,411,437</u>	<u>1,770,369</u>
<b>Net (decrease) increase in cash</b>	(997,767)	301,230
Cash, beginning of period	6,952,795	2,129,999
Cash, end of period	<u>\$ 5,955,028</u>	<u>\$ 2,431,229</u>
<b>Non-cash transactions:</b>		
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 March 31, 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 source for a High-Assay Low-Enriched Uranium (“HALEU”) fuel fabrication 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 March 31, 2024, the Company had working capital of \$5,984,546, net loss of \$2,991,573, accumulated deficit of \$10,273,798 and negative cash flows from operations of \$3,409,204. 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. 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 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 equity contributions to support its growth. 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 annual 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 March 31, 2024, and its results of operations for the three and six months ended March 31, 2024 and 2023 and cash flows for the six months ended March 31, 2024 and 2023. The results for the three and six months ended March 31, 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.



**NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**As of March 31, 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 March 31, 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 March 31, 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 March 31, 2024 and September 30, 2023.

**NANO NUCLEAR ENERGY INC. AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**As of March 31, 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 a general and administrative 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. 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 \$434,800 and \$608,600 for the three and six months ended March 31, 2024, respectively and \$159,200 and \$177,600 for the three and six months ended March 31, 2023, respectively.

***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 March 31, 2024. At March 31, 2024 and September 30, 2023, the Company recorded a full valuation allowance on its deferred tax assets in the amount of approximately \$2,599,000 and \$1,971,000, 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 the three and six months ended March 31, 2024 and 2023. The Company's effective tax rate for the three and six months ended March 31, 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 March 31, 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 March 31, 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 six months ended March 31, 2024 and 2023, there were no dilutive shares issued or outstanding.

***Operating Segments***

For the three and six months ended March 31, 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 six months ended March 31, 2024, the Company earned interest income of \$36,220 and \$71,187 on its cash held at a financial institution. During the three and six months ended March 31, 2023, the Company did not earn any interest income.

**4. RELATED PARTIES**

At March 31, 2024 and September 30, 2023, the Company had amounts due to related parties of \$25,000 and \$35,000, respectively. The amounts due at March 31, 2024 and September 30, 2023 corresponded to unpaid amounts due to officers and directors for services rendered during the six months ended March 31, 2024 and during the year ended September 30, 2023. The aggregate compensation paid, or payable, to officers and directors during the three months ended March 31, 2024 and 2023 were \$105,000 and \$115,000, respectively, and during the six months ended March 31, 2024 and 2023 were \$290,000 and \$205,000, respectively, which are included in the condensed consolidated statements of operations under general and administrative expenses.

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**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 the Company's founder and president 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.

***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.

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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 six months ended March 31, 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 three months ended March 31, 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 six months ended March 31, 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.

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The weighted average grant date fair value of stock options issued during the three months ended March 31, 2024 was \$1.22 per share. There was no remaining stock compensation expense to be recognized at March 31, 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.

During the three months ended March 31, 2023, the Company did not issue stock options.

***Option Activity***

A summary of cumulative option activity under the 2023 Plan is as follows:

	<b>Options outstanding</b>			
	<b>Number of shares</b>	<b>Weighted average exercise price per share</b>	<b>Weighted average contractual term (in years)</b>	<b>Aggregate intrinsic value (in thousands)</b>
Outstanding – September 30, 2023	4,007,000	\$ 2.23	2.54	\$ 2,004
Options granted	125,000	3.00	2.96	152
Outstanding – March 31, 2024	<u>4,132,000</u>	<u>\$ 2.23</u>	<u>2.54</u>	<u>\$ 2,156</u>
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

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**6. RIGHT-OF-USE ASSET AND LEASE LIABILITY**

As of March 31, 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 March 31, 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 six months ended March 31, 2024 and 2023, was as follows:

Balance sheet information related to the Company's leases is presented below:

<b>Operating leases:</b>	<b>March 31, 2024</b>	<b>September 30, 2023</b>
Operating right-of-use asset	\$ 1,914,778	\$ —
Operating lease liability, current	280,951	—
Operating lease liability, long-term	1,628,591	—

The following provides details of the Company's lease expense:

<b>Lease cost:</b>	<b>Three Months Ended March 31,</b>		<b>Six Months Ended March 31,</b>	
	<b>2024</b>	<b>2023</b>	<b>2024</b>	<b>2023</b>
Operating lease cost	\$ 28,369	\$ —	\$ 28,369	\$ —

Other information related to leases is presented below:

<b>Cash paid for amounts included in the measurement of lease liabilities:</b>	<b>Three Months Ended March 31,</b>		<b>Six Months Ended March 31,</b>	
	<b>2024</b>	<b>2023</b>	<b>2024</b>	<b>2023</b>
Operating cash outflows from operating leases	\$ 33,605	\$ —	\$ 33,605	\$ —

	<b>March 31, 2024</b>
Weighted-average discount rate – operating lease	13.5%
Weighted-average remaining lease term – operating lease (in years)	7.3

As of March 31, 2024, the expected annual minimum lease payments of the Company's operating lease liabilities were as follows:

<b>For the Years Ended September 30,</b>	
2024	\$ 100,815
2025	339,411
2026	418,508
2027	428,971
2028	439,695
Thereafter	1,306,255
<b>Total future minimum lease payments, undiscounted</b>	<b>3,033,655</b>
Less: Imputed interest for leases in excess of one year	(1,124,113)
<b>Present value of future minimum lease payments</b>	<b>1,909,542</b>
Less: Current portion of lease liabilities	(280,951)
<b>Total lease liabilities less current portion</b>	<b>\$ 1,628,591</b>

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**7. SUBSEQUENT EVENTS**

The Company has evaluated all events or transactions that occurred after March 31, 2024 through the date that the condensed consolidated interim financial statements were available to be issued. During this period, there were no material subsequent events requiring disclosure except as stated as follows:

On May 7, 2024, the Company consummated a firm commitment underwritten initial public offering (the “Offering”) of an aggregate of 2,562,500 shares of Common Stock at a price of \$4.00 per share (the “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 Offering, the Company granted the lead managing underwriter an option (the “Over-Allotment Option”), exercisable for 30 days from May 7, 2024, to purchase up to an additional 384,375 shares of Common Stock (the “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 underwriter of the Offering exercised the Over-Allotment Option in full, and on May 22, 2024, the closing of the purchase of the Over-Allotment Shares occurred, generating gross proceeds to the Company of approximately \$1,537,500 and net proceeds of approximately \$1,414,500.



## Item 2. 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 of the unaudited financial statements and related notes included elsewhere in this Report. Data as of and for the year ended September 30, 2023 has been derived from our audited consolidated financial statements. Data as of and for the three and six months ended March 31, 2024 and 2023 has been derived from our unaudited consolidated financial statements appearing in this Report. This following discussion 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 section titled “Cautionary Note Regarding Forward-Looking Statements” in this Report.*

*All references to “we,” “us,” “our” and the “Company” refer to NANO Nuclear Energy Inc., a Nevada corporation and its consolidated subsidiaries unless the context requires otherwise.*

### 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, illuminating our path toward a sustainable future. Led by a world class scientific and management team, envisioned within our business plan is a comprehensive engagement across every sector of the nuclear power industry, traversing the path from sourcing raw nuclear material and fuel fabrication to the illumination of energy through our cutting edge and advanced small modular nuclear reactors (SMRs, also known as microreactors). Our dedication extends further to encompass commercial nuclear fuel fabrication and transportation as well as 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 fabrication 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 Department of Energy (“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.

Over the next twelve months, we will continue to progress our development of two advanced nuclear microreactors, which we call **ZEUS** and **ODIN**, with estimated expenditures to be approximately \$4 million. This allocation comprises approximately \$2 million dedicated to the research and development of products and technology, with a specific focus on the refinement of microreactor technology and the fuel fabrication process. 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 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 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 Report, we have not generated any revenues. We have incurred accumulated net losses of \$10,273,798 since inception through March 31, 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 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. Our goal is to commercially launch one of these microreactors by 2030. The success of this endeavor will be dependent on our ability to effectively utilize our relationship with INL to advance our microreactor designs through demonstration work and take advantage of the large capabilities offered by the INL nuclear site. 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 of which is currently being finalized by INL. The technical reactor audit provides external input and assistance to advance the concepts and provide validation for the microreactors' direction and technology.

### *Design and Construction of Fuel Fabrication Facility*

We are utilizing our existing relationship with INL to collaborate on the design, construction and commission of our own commercial nuclear High-Assay Low-Enriched Uranium ("HALEU") fuel fabrication facility to supply fabricated fuel to the next generation of advanced nuclear reactor companies, and to supply our own reactors currently under development to the U.S. nuclear industry, the U.S. National Laboratories, and the DOE's nuclear fuel needs as necessary. We hope to have our fuel fabrication facility near INL in operation as soon as 2027. Our proposed fuel fabrication facility is intended to form part of an integrated system with the INL's facilities, being sited directly outside the INL facilities to eliminate transport over civilian roads and making use of INL's capabilities such as fuel characterization. Our submissions to the DOE to advance this fuel facility have been supported by INL, with our submission having been reviewed and edited by INL staff, and the facility site selection led and approved by INL personnel. We anticipate procuring raw 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 product, capable of moving commercial quantities of HALEU fuel around North America. We hope to have our fuel transportation business in operation by 2026. We received an exclusive license for a high capacity HALEU fuel transportation basket design in April 2024, which was designed around a licensed third-party basket and cask technology. 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 this trend as an opportunity for more immediate revenue for our company, and to acquire more expertise to advance our businesses. 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. With an expanded team we plan to retain with a portion of the proceeds from our initial public 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. 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 fabrication 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 and INL have 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 fabrication facility construction intentions. We began scoping studies and cost estimation work for our fuel fabrication 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.

## 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 Three Months Ended March 31, 2024, and the Three Months Ended March 31, 2023*

#### *Revenue*

We have not generated any revenue from our inception through March 31, 2024.

#### *Expenses*

##### *Research and Development Expense*

Our 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.

R&D expenses decreased by \$102,361, or 26%, to \$290,539 for the three months ended March 31, 2024, compared to \$392,900 for the comparative period ended March 31, 2023, primarily due to our decrease in R&D equity-based compensation during the three months ended March 31, 2024 compared to the three months ended March 31, 2023. R&D expenses primarily reflect the internal and external personnel costs corresponding to the design and analysis of our microreactors. During the three months ended March 31, 2024 and 2023, \$nil and \$125,450, respectively, of our R&D expenses corresponded to equity-based compensation.

##### *General and Administrative Expense*

Our general and administrative (“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. Following the IPO, 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 \$295,775, or 26%, to \$1,423,309 for the three months ended March 31, 2024, compared to \$1,127,534 for the comparative period ended March 31, 2023, primarily due to additional office and staff costs to support our R&D activities during the three months ended March 31, 2024 compared to the three months ended March 31, 2023. During the three months ended March 31, 2024, G&A expenses primarily consisted of \$0.6 million in personnel costs. During the period ended March 31, 2023, G&A primarily consisted of \$0.7 million in personnel costs. During the three months ended March 31, 2024 and 2023, \$152,457 and \$459,034, respectively, of our G&A expenses corresponded to equity-based compensation.

##### *Other Income*

During the three months ended March 31, 2024 and 2023, the Company earned interest income of \$36,220 and \$nil, respectively, on its cash held at a financial institution.

## ***Comparison of the Six Months Ended March 31, 2024, and the Six Months Ended March 31, 2023***

### ***Revenue***

We have not generated any revenue from our inception through March 31, 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 \$289,949, or 56%, to \$810,555 for the six months ended March 31, 2024, compared to \$520,606 for the comparative period ended March 31, 2023, primarily due to our increase in R&D activities during the six months ended March 31, 2024 compared to the six months ended March 31, 2023. R&D expenses primarily reflect the internal and external personnel costs corresponding to the design and analysis of our microreactors. During the six months ended March 31, 2024 and 2023, \$nil and \$210,450, 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. Following the IPO, 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 \$568,232, or 34%, to \$2,252,205 for the six months ended March 31, 2024, compared to \$1,683,973 for the comparative period ended March 31, 2023, primarily due to additional office and staff costs to support our R&D activities during the six months ended March 31, 2024 compared to the six months ended March 31, 2023. During the six months ended March 31, 2024, G&A expenses primarily consisted of \$1.0 million in personnel costs. During the period ended March 31, 2023, G&A primarily consisted of \$0.8 million in personnel costs. During the six months ended March 31, 2024 and 2023, \$152,457 and \$459,034, respectively, of our G&A expenses corresponded to equity-based compensation.

#### ***Other Income***

During the six months ended March 31, 2024 and 2023, the company earned interest income of \$71,187 and \$nil, respectively, on its cash held at a financial institution.

### **Item 3. Quantitative and Qualitative Disclosures About Market Risk**

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information otherwise required under this Item.

### **Item 4. Controls and Procedures.**

#### ***Evaluation of Disclosure Controls and Procedures***

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of the end of the period ended March 31, 2024, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based on this evaluation, our principal executive officer and principal financial officer have concluded that, as of the evaluation date, our disclosure controls and procedures were effective as of March 31, 2024. Accordingly, management believes that the financial statements included in this Form 10-Q present fairly in all material respects our financial position, results of operations and cash flows for the period presented.

Disclosure controls and procedures are designed to ensure that information required to be disclosed by us in our Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

#### ***Changes in Internal Control over Financial Reporting***

There have been no changes in internal control over financial reporting (as defined in Rule 13a-15(f) of the Exchange Act) during the quarter ended March 31, 2024, that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

## PART II. OTHER INFORMATION

### Item 1. Legal Proceedings.

From time to time, we may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows.

### Item 1A. Risk Factors.

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information otherwise required under this Item.

### Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

Not applicable.

### Item 3. Defaults upon Senior Securities.

None.

### Item 4. Mine Safety Disclosures.

Not applicable.

### Item 5. Other Information.

None.

### Item 6. Exhibits

Exhibit Number	Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
3.1	<a href="#">Articles of Incorporation of the Company</a>	S-1	333-278076	3.1	March 19, 2024
3.2	<a href="#">Certificate of Amendment to Articles of Incorporation of the Company</a>	S-1	333-278076	3.2	March 19, 2024
3.3	<a href="#">Amended and Restated Bylaws of the Company</a>	S-1	333-278076	3.2	March 19, 2024
31.1*	<a href="#">Certification of Chief Executive Officer, pursuant to Rule 13a-14(a) or Rule 15d-14(a)</a>				
31.2*	<a href="#">Certification of Chief Financial Officer, pursuant to Rule 13a-14(a) or Rule 15d-14(a)</a>				
32.1**	<a href="#">Certification of Chief Executive Officer pursuant to Section 1350 of the Sarbanes-Oxley Act of 2002</a>				
32.2**	<a href="#">Certification of Chief Financial Officer pursuant to Section 1350 of the Sarbanes-Oxley Act of 2002</a>				
101.INS	Inline XBRL Instance Document				
101.SCH	Inline XBRL Taxonomy Extension Schema Document.				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.				
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.				
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.				
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).				

\* Filed herewith

\*\* Furnished herewith

**SIGNATURES**

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

**NANO NUCLEAR ENERGY INC.**

Date: June 20, 2024

By: /s/ James Walker

James Walker  
Chief Executive Officer  
(Principal Executive Officer)

Date: June 20, 2024

By: /s/ Jaisun Garcha

Jaisun Garcha  
Chief Financial Officer  
(Principal Financial and Accounting Officer)

## Certification Pursuant to Rule 13a-14(a)

I, James Walker, hereby certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Nano Nuclear Energy Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's second fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 20, 2024

*/s/ James Walker*

James Walker  
Chief Executive Officer

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**Certification Pursuant to Rule 13a-14(a)**

I, Jaisun Garcha, hereby certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Nano Nuclear Energy Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's second fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 20, 2024

*/s/ Jaisun Garcha*

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Jaisun Garcha  
Chief Financial Officer

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**CERTIFICATION****Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002****(18 U.S.C. 1350)**

Pursuant to Section 906 of the Sarbanes-Oxley Act of (18 U.S.C. 1350), the undersigned officer of Nano Nuclear Energy Inc., a Delaware corporation (the "Company"), does hereby certify, to the best of such officer's knowledge and belief, that:

(1) The Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2024 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Form 10-Q fairly presents, in all materials respects, the financial condition and results of operations of the Company.

Date: June 20, 2024

*/s/ James Walker*

James Walker

Chief Executive Officer

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act, or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act or the Securities Exchange Act.

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**CERTIFICATION**

**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

**(18 U.S.C. 1350)**

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350), the undersigned officer of Nano Nuclear Energy Inc., a Delaware corporation (the "Company"), does hereby certify, to the best of such officer's knowledge and belief, that:

(1) The Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2024 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Form 10-Q fairly presents, in all materials respects, the financial condition and results of operations of the Company.

Date: June 20, 2024

*/s/ Jaisun Garcha*

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Jaisun Garcha  
Chief Financial Officer

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act, or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act or the Securities Exchange Act.

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