

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

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES
PURSUANT TO SECTION 12(b) OR 12(g) OF THE
SECURITIES EXCHANGE ACT OF 1934

Nano Nuclear Energy Inc.
(Exact name of registrant as specified in its charter)

<p style="margin: 0;">Nevada (State or other jurisdiction of incorporation or organization)</p>	<p style="margin: 0;">88-0861977 (I.R.S. Employer Identification No.)</p>
<p style="margin: 0;">10 Times Square, 30th Floor, New York, New York (Address of principal executive offices)</p>	<p style="margin: 0;">10018 (Zip Code)</p>

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

Title of each class to be registered	Name of each exchange on which each class is to be registered
Common Stock, \$0.0001 par value per share	The Nasdaq Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c) or (e), check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d) or (e), check the following box.

If this form relates to the registration of a class of securities concurrently with a Regulation A offering, check the following box.

Securities Act Registration Statement or Regulation A offering statement file number to which this form relates: 333-278076

Securities to be registered pursuant to Section 12(g) of the Act: None.

Item 1. Description of Registrant's Securities to be Registered.

The securities to be registered hereby are the shares of the common stock, par value \$0.0001 per share (the "**Common Stock**") of Nano Nuclear Energy Inc. (the "**Company**"). The description of the Common Stock contained in the section entitled "Description of Capital Stock" in the prospectus included in the Company's Registration Statement on Form S-1 (File No. 333-278076) filed with the U.S. Securities and Exchange Commission on March 19, 2024, as amended from time to time (the "**Registration Statement**"), to which this Form 8-A relates, is incorporated herein by reference. Any form of prospectus or prospectus supplement to the Registration Statement that includes such descriptions and that is subsequently filed is also incorporated by reference herein.

Item 2. Exhibits.

Pursuant to the instructions for Form 8-A, no exhibits are required to be filed as part of this registration statement because no other securities of the Company are registered on the Nasdaq Stock Market LLC, and the securities registered hereby are not being registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Company has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereto duly authorized.

Nano Nuclear Energy Inc.

By: */s/ James Walker*

James Walker
Chief Executive Officer

Dated: May 6, 2024
