The Benchmark Company, LLC

150 E. 58th Street, 17th Floor New York, NY 10155

October 22, 2024

VIA EDGAR

Securities and Exchange Commission Division of Corporation Finance Office of Energy & Transportation 100 F Street, N.E. Washington, D.C. 20549

Re: Nano Nuclear Energy Inc. Registration Statement on Form S-1 File No. 333-282750

REQUEST FOR ACCELERATION OF EFFECTIVENESS

Dear Michael Purcell:

Pursuant to Rule 461 of the General Rules and Regulations under the Securities Act of 1933, as amended (the "Securities Act"), The Benchmark Company, LLC ("Benchmark"), as representative of the underwriters of the offering, hereby joins the request of Nano Nuclear Energy Inc. that the effective date of the above-referenced Registration Statement on Form S-1 be accelerated so that it may become effective at 4:30 p.m., Eastern Time, on Wednesday, October 23, 2024, or as soon thereafter as practicable.

Pursuant to Rule 460 of the General Rules and Regulations under the Securities Act, please be advised that there will be distributed to each underwriter or dealer, who is reasonably anticipated to participate in the distribution of the security, as many copies of the proposed form of preliminary prospectus as appears to be reasonable to secure adequate distribution of the preliminary prospectus.

The undersigned confirms that it has complied with and will continue to comply with, and it has been informed or will be informed by participating dealers that they have complied with or will comply with, Rule 15c2-8 promulgated under the Securities Exchange Act of 1934, as amended.

Best Regards,

The Benchmark Company, LLC

/s/ Michael Jacobs

Michael Jacobs Managing Director, Head of Equity Capital Markets