

NANO NUCLEAR ENERGY INC.

10 Times Square, 30th Floor
New York, New York 10018

May 2, 2024

VIA EDGAR

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

Attention: Joseph Klinko
Karl Hiller
Cheryl Brown
Karina Dorin

Re: Nano Nuclear Energy Inc.
Registration Statement on Form S-1
Initially filed March 19, 2024, as amended
File No. 333-278076

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, Nano Nuclear Energy Inc., hereby requests acceleration of effectiveness of the above referenced Registration Statement on Form S-1 so that it will become effective at 4:30 p.m., Eastern Daylight Time, on Monday, May 6, 2024, or as soon thereafter as practicable.

Very truly yours,

/s/ James Walker

James Walker
Chief Executive Officer

cc: Ellenoff Grossman & Schole LLP
