

DIVISION OF CORPORATION FINANCE UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

May 1, 2024

James Walker Chief Executive Officer Nano Nuclear Energy Inc. 10 Times Square, 30th Floor New York, NY 10018

> Re: Nano Nuclear Energy Inc. Registration Statement on Form S-1 Exhibit Nos. 10.13, 10.16, 10.17 and 10.19 Filed March 19, 2024 File No. 333-278076

Dear Mr. Walker:

We have concluded our assessment of your redacted exhibits for compliance with applicable form requirements and will process your supplemental response and related materials in accordance with your request.

Sincerely,

Division of Corporation Finance Office of Energy and Transportation