

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

DIVISION OF CORPORATION FINANCE

September 24, 2024

Akash Patel Chief Financial Officer NET Power Inc. 320 Roney St., Suite 200 Durham, NC 27701

> Re: NET Power Inc. Form 10-K for the Year Ended December 31, 2023 Filed March 11, 2024 File No. 001-40503

Dear Akash Patel:

We have completed our review of your filing. We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Sincerely,

Division of Corporation Finance Office of Manufacturing