

NET Power Inc.
320 Roney Street, Suite 200
Durham, North Carolina 27701

November 19, 2024

VIA EDGAR

United States Securities and Exchange Commission
Division of Corporation Finance
Office of Manufacturing
100 F Street, NE
Washington, D.C. 20549

Attention: Bradley Ecker

Re: NET Power Inc.
Registration Statement on Form S-3
File No. 333-283272

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, NET Power Inc. (the "Company") hereby requests that the effective date for the above-referenced Registration Statement be accelerated so that it will become effective at 4:00 p.m., Eastern Time, on November 21, 2024, or as soon thereafter as is practicable.

Please contact Lanchi Huynh of Kirkland & Ellis LLP, the Company's legal counsel, at (214) 972-1673 when the above-referenced Registration Statement has been declared effective or if you have any other questions or concerns regarding this matter.

Sincerely,

NET POWER INC.

By: /s/ Akash Patel

Name: Akash Patel

Title: Chief Financial Officer

cc: Matthew Pacey, P.C. (Kirkland & Ellis LLP)
Lanchi Huynh (Kirkland & Ellis LLP)