

**NET Power Inc.**  
404 Hunt Street, Suite 410  
Durham, North Carolina 27701

September 21, 2023

**VIA EDGAR**

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

Attention: Alex King  
Erin Purnell

**Re: NET Power Inc.**  
**Registration Statement on Form S-1, as amended**  
**File No. 333-273183**

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 September 25, 2023, 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)