

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

September 15, 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
Filed on July 7, 2023
File No. 333-273183**

Ladies and Gentlemen:

Set forth below are the responses of NET Power Inc. (the “Company”) to comments received from the staff of the Division of Corporation Finance (the “Staff”) of the Securities and Exchange Commission (the “Commission”) by letter dated July 31, 2023 with respect to the above referenced Registration Statement on Form S-1.

Concurrently with the submission of this letter, the Company is filing Amendment No. 1 to the Registration Statement on Form S-1 (the “Amended Registration Statement”). All references in this response letter to page numbers and captions correspond to the Amended Registration Statement unless otherwise specified, and capitalized terms used but not defined in this response letter have the meanings given to them in the Amended Registration Statement.

For the Staff’s convenience, each response is prefaced by the exact text of the Staff’s corresponding comment in italicized text.

Form S-1 filed July 7, 2023

Cover Page

1. *Staff’s comment: For each of the shares and warrants being registered for resale, disclose the price that the selling securityholders paid for such shares and warrants.*

Response:

The Company advises the Staff that it has revised the cover page to disclose the price that the selling securityholders paid for the shares and warrants being registered for resale. With respect to the 318,607 shares of Class A Common Stock that are issuable upon redemption of Opco Units issued pursuant to the Amended and Restated JDA, the Company further advises the Staff that the recipient of such Opco Units did not pay any specified price and instead received such Opco Units as compensation for services provided to the Company pursuant to the Amended and Restated JDA. More information on the terms of the Amended and Restated JDA can be found in the Amended Registration Statement under the heading “Certain Relationships and Related Transactions—NET Power’s Related Party Transactions—Baker Hughes Agreements—Amended and Restated JDA,” and a cross-reference to such section has been included on the cover page. In addition, a copy of the Amended and Restated JDA is filed as Exhibit 10.17 to the Amended Registration Statement.

2. *Staff’s comment: We note the significant number of redemptions of your Class A common stock in connection with your business combination and that the shares being registered for resale will constitute a considerable percentage of your public float. We also note that most of the shares being registered for resale were purchased by the selling securityholders for prices considerably below the current market price of the Class A common stock. Highlight the significant negative impact sales of shares on this registration statement could have on the public trading price of the Class A common stock.*

Response:

The Company has revised the cover page as requested.

Risk Factors, page 8

3. *Staff’s comment: Include an additional risk factor highlighting the negative pressure potential sales of shares pursuant to this registration statement could have on the public trading price of the Class A common stock. To illustrate this risk, disclose the purchase price of the securities being registered for resale and the percentage that these shares currently represent of the total number of shares outstanding. Also disclose that the private investors have an incentive to sell because they will still profit on sales because of the lower price that they purchased their shares than the public investors.*

Response:

The Company has revised the disclosure on pages 36 and 37 as requested.

Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 58

4. *Staff’s comment: Please expand your discussion here to reflect the fact that this offering involves the potential sale of a substantial portion of shares for resale and discuss how such sales could impact the market price of the company’s common stock. Your discussion should highlight the fact that Legacy NET Power Holders, a beneficial owner of 64.6% of your outstanding shares, will be able to sell a significant number of its shares for so long as the registration statement of which this prospectus forms a part is available for use and the stock price remains above the \$12.00 per share price.*

Response:

The Company has revised the disclosure on page 64 as requested, including adding disclosure regarding the lock-up restrictions applicable to the shares held by certain of the Legacy NET Power Holders (which lock-up restrictions include early releases therefrom based on certain stock price targets).

General

5. **Staff's comment:** *Revise your prospectus to disclose the price that each selling securityholder paid for the shares and warrants being registered for resale. Highlight any differences in the current trading price, the prices that the Sponsor, private placement investors, PIPE investors, and other selling securityholders acquired their shares and warrants, and the price that the public securityholders acquired their shares and warrants. Disclose that while the Sponsor, private placement investors, PIPE investors, other selling securityholders may experience a positive rate of return based on the current trading price, the public securityholders may not experience a similar rate of return on the securities they purchased due to differences in the purchase prices and the current trading price. Please also disclose the potential profit the selling securityholders will earn based on the current trading price. Lastly, please include appropriate risk factor disclosure.*

Response:

The Company has revised disclosure throughout the Amended Registration Statement as requested.

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Should you have any questions with respect to the foregoing or if any additional information is required, please contact Lanchi Huynh of Kirkland & Ellis LLP at (214) 972-1673 or Matthew Pacey of Kirkland & Ellis LLP at (713) 836-3786.

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)

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