

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

September 11, 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 reviewed your August 27, 2024 response to our comment letter and have the following comment(s).

Please respond to this letter within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe a comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this letter, we may have additional comments. Unless we note otherwise, any references to prior comments are to comments in our August 21, 2024 letter.

Form 10-K for the Year Ended December 31, 2023

<u>Financial Statements</u>
<u>Notes to Consolidated Financial Statements</u>
<u>Note 13 - Leases</u>
<u>Office Lease, page F-31</u>

- 1. We note your response to prior comment 2. You indicate that the lease met the criteria for contract combination according to ASC 842-10-25-19. In this regard, please tell us how the amount of consideration to be paid in the Roney Street lease depends on the price or performance of the Measurement Building lease per ASC 842-10-25-19b. In addition, please demonstrate how the rights to use building represent a single lease component in accordance with ASC 842-10-25-19c and 842-10-15-28.
- 2. In a related matter, you state that you considered ASC 842-10-25-8 to determine whether the Roney Street lease was a separate contract. Please demonstrate how the increase in lease payments of the Roney Street lease was not commensurate with the standalone

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price.

3. We note your conclusion that you accounted for the transaction as a modification that reduces the lease term in accordance with ASC 842-10-25-11(b) rather than as a modification that terminates the lease in accordance with ASC 842-10-25-11(c). Please further explain the factors in determining your conclusion, including how your early exit of the Measurement Building Lease going into effect two months after the amendment was signed versus an immediate exit of the property was a factor.

Please contact Heather Clark at 202-551-3624 or Melissa Gilmore at 202-551-3777 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Division of Corporation Finance Office of Manufacturing