Power & Digital Infrastructure Acquisition Corp.

321 North Clark Street, Suite 2440 Chicago, Illinois 60654

VIA EDGAR

November 12, 2021

Attention: Kathryn Jacobson

Robert Littlepage Edwin Kim Kathleen Krebs

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

> Re: Power & Digital Infrastructure Acquisition Corp. Amendment No. 2 to Registration Statement on Form S-4 Filed October 29, 2021 File No. 333-258720

Ladies and Gentlemen:

Set forth below are the responses of Power & Digital Infrastructure Acquisition Corp. (the "Company" or "XPDI") 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 November 9, 2021, with respect to the Company's Amendment No. 2 to Registration Statement on Form S-4, File No. 333-258720, filed with the Commission on October 29, 2021 (the "Preliminary Registration Statement").

In addition, concurrently with the submission of this letter, the Company is filing Amendment No. 3 to the Preliminary Registration Statement on Form S-4 ("Amendment No. 3") in response to the Staff's comments.

For your convenience, each response is prefaced by the exact text of the Staff's corresponding comment in bold, italicized text. Unless otherwise specified, all references to page numbers and captions in the responses below correspond to Amendment No. 3, and capitalized terms used but not otherwise defined in the responses below have the meanings given to them in Amendment No. 3.

Amendment No. 1 to Registration Statement on Form S-4 filed October 29, 2021

Merger Adjustments to Unaudited Pro Forma Condensed Combined Statements of Operations

5. Earnings per Share, page 110

1. We note your response to comment 2 and the revised pro forma note (3) on page 112. Considering that the pro forma presentation is premised on the occurrence of the IPO as of the beginning of the period, and thus, the satisfaction of the RSU performance condition (transaction vesting condition), please make clear why the combined pro forma statements of operations do not reflect the recognition of incremental compensation expense related to RSUs that have met the time-based vesting conditions through the end of the periods presented. Nor does the pro forma balance sheet reflect a charge against retained earnings for compensation cost arising from the requisite service and performance condition satisfied through June 30, 2021. Refer to the pertinent guidance under ASC 718.

RESPONSE:

The Company respectfully advises the Staff that, as indicated in pro forma note (3) on page 112 of Amendment No. 3, the transaction vesting condition has not been satisfied by the merger of XPDI and Core Scientific. Under the terms of the RSUs, which is filed as Exhibit 10.24 to the Preliminary Registration Statement, and the 2018 Omnibus Incentive Plan, as amended (the "Plan"), which is filed as Exhibits 10.13 and 10.21 to the Preliminary Registration Statement, a "Transaction-based Vesting Condition" occurs on the earlier of "Change of Control or the initial Public Offering of equity securities of the Company". This merger constitutes neither.

Under the terms of the Plan, "Public Offering" is defined as "any primary or secondary public offering of any securities pursuant to an effective registration statement (or a qualified Form 1-A) under the Securities Act, other than pursuant to a registration statement on Form S-4 or Form S-8 or any successor or similar form that results in the listing of a class of equity securities of the Company on the New York Stock Exchange or other national exchange or quotation system in the United States." XPDI's merger with Core Scientific does not constitute, nor does it involve, a primary or secondary public offering of securities by Core Scientific (the "Company" for purposes of the Plan). Moreover, the definition of "Public Offering" expressly excludes registered public offerings on Form S-4.

XPDI's merger with Core Scientific similarly does not constitute a "Change of Control" for purposes of the Plan and its transaction-based vesting condition. The definition of that term is set forth below:

"Change in Control" shall mean (i) the sale or disposition, in one or a series of related transactions, of all or substantially all of the assets of the Company and its subsidiaries (taken as a whole) to any "person" or "group" (as such terms are defined in Sections 13(d)(3) and 14(d)(2) of the Exchange Act) other than the Initial Shareholders or (ii) any person or group, other than the Initial Shareholders, is or becomes the "beneficial owner" (as defined in Rules 13d-3 and 13d-5 under the Exchange Act), directly or indirectly, of more than 50% of the total voting power of the voting equity of the Company, including by way of merger, consolidation or otherwise. In determining whether any person or group constitutes a "person" or "group" for purposes of subsections (i) or (ii) above, the Initial Shareholders shall be excluded from such "person" or "group". For purposes of determining whether (i) or (iii) has occurred, an issuance of shares of the Company by the Company (or its successor), whether through an initial public offering, other primary issuance or otherwise, shall be excluded. Notwithstanding the foregoing, a Change in Control shall not occur unless such transaction constitutes a change in the ownership of the Company, a change in effective control of the Company, or a change in the ownership of a substantial portion of the Company's assets under Section 409A. "Initial Shareholders" shall mean each of the shareholders of the Company and their respective affiliates as of August 20, 2018.

As described in the Registration Statement under "The Merger" and "Accounting Treatment", the merger neither constitutes a sale or disposition of all or substantially all of the assets of Core Scientific, nor results in any person or group other than existing Core Scientific stockholders becoming the beneficial owner of more than 50% of the total voting power of the Company.

As a result, the combined pro forma statements of operations do not reflect the recognition of incremental compensation expense related to RSUs that have met the time-based vesting conditions, nor does the pro forma balance sheet reflect a change against retained earnings for compensation cost.

The Company further advises the Staff that it intends to revise its disclosure on page 160 of Amendment No. 3 to clarify that the merger does not constitute a change of control event under the terms of Core Scientific's RSUs.

2. Further explain why the contingently issuable shares underlying the RSUs have not been deemed outstanding (by analogy to ASU 260-10-45-13) for the purpose of calculating pro forma basic loss per share.

RESPONSE:

As discussed in the response to Question 1, since no transaction-based vesting condition has been satisfied, shares underlying RSUs are not deemed outstanding.

If any additional supplemental information is required by the Staff or if you have any questions regarding the foregoing, please contact Debbie Yee of Kirkland & Ellis LLP at (713) 836-3630.

Sincerely,

POWER & DIGITAL INFRASTRUCTURE ACQUISITION CORP.

By: /s/ Patrick C. Eilers
Name: Patrick C. Eilers
Title: Chief Executive Officer