



DIVISION OF
CORPORATION FINANCE

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

November 9, 2023

Patrick Eilers
Chief Executive Officer
Power & Digital Infrastructure Acquisition II Corp.
321 North Clark Street, Suite 2440
Chicago, IL 60654

**Re: Power & Digital Infrastructure Acquisition II Corp.
Registration Statement on Form S-4
Filed August 9, 2023
File No. 333-273821**

Dear Patrick Eilers:

We have reviewed your amended registration statement and have the following comments.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe a comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to this letter, we may have additional comments. Unless we note otherwise, any references to prior comments are to comments in our October 17, 2023 letter.

Registration Statement on Form S-4

Unaudited Pro Forma Condensed Combined Financial Statements

Description of the Business Combination, page 56

1. In your response to prior comment two you state that while you believe the continued service of the applicable holders of Montana Class A Common Units and Montana Class B Common Units as directors, officers or employees of the Post-Combination Company is integral to the achievement of the milestones that will determine whether Earnout Shares are payable, you do not view the requirement that holders of Montana Options Earnout Shares continue providing services to the Post-Combination Company in order to receive Earnout Shares as an in-substance service period. Clarify how you considered whether there is an in-substance service period with respect to the Earnout Shares payable to the holders of Montana Common Units and how you considered whether these shares should be accounted for as post combination compensation expense in accordance with ASC 718.

Patrick Eilers
Power & Digital Infrastructure Acquisition II Corp.
November 9, 2023
Page 2

Tell us how you considered all the factors in ASC 805-10-55-25. Revise your disclosures to clarify the factors you considered in making this determination.

The Business Combination

Recommendation of the XPDB Board and Reasons for the Business Combination, page 163

2. We note your revised disclosure indicates that although Montana does not have contractual revenue arrangements in place, the XPDB Board believed the illustrative potential Annualized EBITDA contained in the financial analysis was reasonable because the illustrative average sales volume of contactors provided by Montana was based on estimates provided to Montana by global suppliers. Please revise your disclosures to clarify this statement, including the specific suppliers that provided the estimates and how they estimated sales volumes solely attributable to your company. Clarify the specific assumptions they used and how they are objectively determinable.

Please contact Laura Veator at 202-551-3716 or Stephen Krikorian at 202-551-3488 if you have questions regarding comments on the financial statements and related matters. Please contact Austin Pattan at 202-551-6756 or Jan Woo at 202-551-3453 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Technology

cc: Debbie Yee