

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

December 14, 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.
Amendment No. 3 to Registration Statement on Form S-4
Filed December 4, 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 November 9, 2023 letter.

Registration Statement on Form S-4

<u>Unaudited Pro Forma Condensed Combined Financial Statements</u>
Adjustments to Unaudited Pro Forma Condensed Combined Balance Sheet, page 62

1. Your disclosure in Note J indicates that the estimated fair value of the Earnout Shares is \$84 million. Please clarify your disclosure to describe how much of this is related to Earnout Shares that will be recognized as contingent consideration and how much of this is related to Options and Earnout shares that will be recognized as post-combination compensation expense.

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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