



DIVISION OF
CORPORATION FINANCE

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

October 17, 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 September 6, 2023 letter.

Amendment No.1 to Registration Statement on Form S-4

Risk Factors

BofA, one of the underwriters in the XPDB IPO, along with Barclays, was to be compensated...
page 48

1. Please tell us whether you are aware of any disagreements with BofA regarding the disclosure in your registration statement. Disclose whether BofA provided you with any reasons for the fee waiver. If there was no dialogue and you did not seek out the reasons why BofA was waiving deferred fees, despite already completing their services, please indicate so in your registration statement. Further, revise the risk factor disclosure to explicitly clarify that BofA has performed all their obligations to obtain the fee and therefore is gratuitously waiving the right to be compensated.

Description of the Business Combination, page 55

2. We note your response to prior comment 7. Please clarify the percentage of Montana's total Class A and Class B shares outstanding prior to the business combination that are held by shareholders who will continue as directors, officers or employees of the post combination company. Further, please clarify how you considered whether there is an in-substance service period with respect to the Earnout Shares payable to Montana Equityholders. That is, tell us how you considered whether these Equityholders are integral to the achievement of the applicable milestones which you describe as "the completion of construction and operational viability (including all permitting, regulatory approvals and necessary or useful inspections) of new production capacity of Montana's key components or assemblies based solely on demand from bona fide customer commitments evidenced by binding contracts with a known price or pricing formula that exceeds a level of production capacity that is expected to generate Annualized EBITDA of more than \$150,000,000." Clarify how these targets are achievable absent the continuing employment of these Equityholders.

Adjustments to Unaudited Pro Forma Condensed Combined Balance Sheet Note (L), page 61
Note (L), page 61

3. Please disclose the number of additional shares that would be issued associated with your estimated fair value of the Earnout shares. Please also disclose the additional shares that would be issued associated with the range of possible outcomes that you disclose.

Unaudited Pro Forma Condensed Combined Financial Statements

Unaudited Pro Forma Condensed Combined Statements of Operations, page 64

4. In your response to prior comment 10 you state that the pro forma financial statements do not give effect to the recognition of post-combination compensation cost relating to Earnout Shares payable to the holders of Montana Options since the vesting of such shares is unpredictable at this point in time. Please clarify how your accounting complies with ASC 718-10-25-20 and how you considered the probable outcomes in determining recognition of compensation expense.

Montana Management's Discussion and Analysis of Financial Condition and Results of Operations

Growth Strategy and Outlook, page 135

5. We note your response to our prior comment 15. It appears that a key assumption underlying the \$100 million in annualized EBITDA per line is that every unit created will be sold. As such, please revise your disclosure to reflect that the \$100 million in annualized EBITDA represents the maximum potential output per line, rather than asserting that it is the approximate dollar amount each line will generate. Alternatively, provide a basis for the belief that each line will generate \$100 million in annualized

EBITDA.

The Business Combination

Recommendation of the XPDB Board and Reasons for the Business Combination, page 157

6. We note your revised disclosure in response to our prior comment 16 states that “XPDB’s management prepared its valuation of Montana, including a sensitivity analysis with various multiples and numbers of production lines, using the potential Annualized EBITDA assuming full construction of manufacturing lines, and did not prepare an analysis of expected revenues or EBITDA on a year-by-year basis.” However, it’s unclear whether the board considered multiple sets of projections other than those referenced in your disclosure. If so, each should be highlighted in your discussion, including the basis for the board’s belief that the selected projections are reasonable, and the dates of each of the financial analyses conducted by XPDB’s management should be disclosed. Please revise or advise.
7. We note your revised disclosure in response to prior comment 19 states that “the XPDB Board believed the illustrative potential Annualized EBITDA was reasonable because the assumptions in sales price and expected production costs of MOF coated contactors underlying the Annualized EBITDA were consistent with components in existing conventional cooling and dehumidification technologies, and the other key components of the AirJoule are used in mature manufacturing processes with costs that are generally known in the HVAC and water harvesting industries.” Please clarify your disclosures to also describe the assumptions used in determining sales volumes in your calculation of Annualized EBITDA and the assumptions used in determining the fraction of the estimated \$455 billion TAM of the HVAC and atmospheric water harvesting sectors that you will capture. Explain how you can account for entry of competitors, technology changes, and cost inflation with limited operating history and why you believe you have a reasonable basis to support your projections. Further, clarify your statement that you “did not prepare an analysis of expected revenues or EBITDA on a year-by-year basis.” Please explain how you can state your valuations are reasonable without such a valuation analysis.
8. You disclose that “The XPDB Board believed the combined lower multiple and implied 67% discount appropriately accounted for the risks and time to commercialize and execute on a new technology.” Explain and disclose why you believe these assumptions are reasonable. Explain how you derived these estimates including confirming that they are not solely subjective.
9. We note your disclosure on page 21 that CATL has informed you that it intends to exit a portion of its equity investment in Montana and that this exit by CATL may have a material and adverse effect on your efforts to raise capital, which in turn could have a material adverse effect on your business and financial condition. Please clarify if you consider this a significant factor that could affect achievement of the potential annualized EBITDA and revise your disclosure accordingly.

Patrick Eilers
Power & Digital Infrastructure Acquisition II Corp.
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Certain Relationships and Related Party Transactions of XPDB
Advisory, Consulting, and Service Fees, page 203

10. We note your response to our prior comment 22. Please revise to disclose whether XMS Capital Partners has provided any of the listed services as of the date of this prospectus.

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