

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

October 4, 2021

Phyllis W. Newhouse Chief Executive Officer Athena Technology Acquisition Corp. 125 Townpark Drive, Suite 300 Kennesaw, GA 30144

Re: Athena Technology Acquisition Corp.

Amendment No. 1 to Registration Statement on Form S-4
Filed September 16, 2021
File No. 333-258606

Dear Ms. Newhouse:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply 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 these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our September 3, 2021 letter.

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

Questions and Answers About the Proposals for Stockholders

Do you have Redemption Rights?, page 20

1. Revise your disclosure to show the potential impact of redemptions on the per share value of the shares owned by non-redeeming shareholders by including a sensitivity analysis showing a range of redemption scenarios, including minimum, maximum and interim redemption levels. Provide disclosure of the impact of each significant source of dilution, including the amount of equity held by founders, convertible securities, including warrants retained by redeeming shareholders, at each of the redemption levels detailed in your sensitivity analysis, including any needed assumptions.

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2. We note your response to prior comment 5. Please also revise your disclosure to disclose the effective underwriting fee on a percentage basis for shares at each redemption level presented in your sensitivity analysis related to dilution.

Summary of the Proxy Statement/Prospectus Related Agreements, page 29

3. We note your response to our prior comment 15 and re-issue it in part. Please disclose here and on page 96 the number of shares subject to the lock-up agreements.

<u>Proposal No. 1 - Approval of the Business Combination</u> <u>Background of the Business Combination, page 132</u>

4. We note your revised disclosure on page 134 in response to our prior comment 23 indicating that Heliogen's counterproposal was based in part on company comparables provided by Barclays and that Athena's management evaluated the company comparables and also reviewed comparables provided by its financial and other advisors. Please revise your disclosure to disclose the methodology and criteria used to select the companies and identify the set of comparable companies that were considered in evaluating Heliogen's enterprise value. In addition, please revise to disclose how such company comparables supported the \$1.85 billion valuation.

Unaudited Prospective Financial Information, page 143

- 5. We note your added disclosures in response to prior comment 24 and re-issue the comment, in part. Considering the significant revenue growth in the six year projections and given Heliogen's limited operating history, please specifically address the following points:
 - Further describe the basis for the basis for the six year period and how it was selected
 and why management believes this is a typical horizon for this scale of deployment of
 your products;
 - Fully describe the material assumptions underlying the projections for revenues for
 each of these six years and why you believe significant growth is sustainable over the
 six year period discussing the factors and the contingencies that would affect such
 growth ultimately materializing with particular attention given to years 3 and
 beyond.

<u>Proposal No. 1 - Approval of the Business Combination</u> <u>Certain U.S. Federal Income Tax Considerations, page 154</u>

6. We note your response to our prior comment 27 and re-issue such comment. Please revise your disclosure, including this section and your Questions and Answers section, to clearly describe the federal income tax consequences of the Business Combination. See Item

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4(a)(6) of Form S-4. In that regard, we note your disclosure that the parties "intend" for the Business Combination to be treated as a "reorganization" for U.S. federal income tax purposes within the meaning of Section 368(a) of the Code, and your disclosure that the Business Combination "has been structured" to qualify as a tax-free "reorganization" for U.S. federal income tax purposes within the meaning of Section 368(a) of the Code. If the merger is not taxable to shareholders, please also file a tax opinion with your registration statement. If there is uncertainty regarding the tax treatment, counsel may issue a "should" or "more likely than not" opinion to make clear that the opinion is subject to a degree of uncertainty, and explain why it cannot give a firm opinion. For guidance, refer to Staff Legal Bulletin No. 19.

You may contact Steve Lo, Staff Accountant, at (202) 551-3394 or Craig Arakawa, Accounting Branch Chief, at (202) 551-3650 if you have questions regarding comments on the financial statements and related matters. Please contact Anuja A. Majmudar, Attorney-Advisor, at (202) 551-3844 or, in her absence, Laura Nicholson, Special Counsel, at (202) 551-3584 with any other questions.

Sincerely,

Division of Corporation Finance Office of Energy & Transportation

cc: Penny J. Minna