

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

November 10, 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. 3 to Registration Statement on Form S-4
Filed November 9, 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 November 5, 2021 letter.

Amendment No. 3 to Registration Statement on Form S-4

<u>Proposal No. 1 - Approval of the Business Combination</u> <u>Material U.S. Federal Income Tax Considerations, page 158</u>

1. We note your response to prior comment 1, and reissue such comment in part. In that regard, we note your revised disclosure that the parties intend for the Business Combination contemplated by the Business Combination Agreement to be treated as a "reorganization" for U.S. federal income tax purposes within the meaning of Section 368(a) of the Code, and that DLA Piper (US) LLP has delivered an opinion to Athena to the effect that, under the U.S. federal income tax laws in effect as of the date of such opinion, the Business Combination "should" so qualify. Please obtain and file a revised opinion that explains why counsel cannot give a firm opinion and the degree of

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uncertainty, and provide related disclosure in your prospectus, including risk factor disclosure. For guidance, refer to Section III.C of Staff Legal Bulletin No. 19.

Exhibits

2. Please file the consents for the individuals who will serve as directors of New Heliogen upon consummation of the Business Combination and have not signed the registration statement. Refer to Rule 438 of Regulation C under the Securities Act.

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