

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

June 23, 2023

Christiana Obiaya Chief Executive Officer Heliogen, Inc. 130 West Union Street Pasadena, CA 91103

Re: Heliogen, Inc.

Amendment No. 2 to Registration Statement on Form S-3

Filed June 9, 2023 File No. 333-271170

Dear Christiana Obiaya:

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.

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Selling Securityholders, page 30

1. We note in this amendment the addition of shares of common stock to be resold by Idealab Holdings, LLC. However, it does not appear that such shares have been reflected in the total number of shares that may be resold under this registration statement. Please revise.

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General

2. Please revise to clarify in the section "Statement Pursuant to Rule 429" the transactions being registered pursuant to this registration statement. In that regard, the statement regarding the securities and transactions to be registered in this registration statement does not appear to be consistent with the description on your prospectus cover page regarding the transactions to be registered.

Please contact Anuja A. Majmudar, Attorney-Advisor, at (202) 551-3844 or Laura Nicholson, Special Counsel, at (202) 551-3584 with any questions.

Sincerely,

Division of Corporation Finance Office of Energy & Transportation

cc: John-Paul Motley