

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

September 9, 2022

Michael Sonnenshein Chief Executive Officer Grayscale Stellar Lumens Trust (XLM) 290 Harbor Drive, 4th Floor Stamford, CT 06902

Re: Grayscale Stellar Lumens Trust (XLM)
Amendment No. 2 to
Registration Statement on Form 10
Filed August 16, 2022
File No. 000-56434

Dear Mr. Sonnenshein:

We have reviewed your filing 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response and any amendment you may file in response to these comments, we may have additional comments.

Exhibit 99.1

General

1. Refer to your response to comment 4. We note that you will transact in XLM, for example selling XLM to raise the funds needed for the payment of any Additional Trust Expenses. Please describe the procedures conducted by the Trust and Sponsor to determine, among other things, whether the counter-party in such transactions is not a sanctioned entity.

Overview, page 4

2. Refer to your response to comment 5. Your revised disclosure on pages 6 and 40 that "[i]f the Sponsor determines that XLM is a security under the federal securities laws . . . , the Sponsor . . . would either dissolve the Trust or potentially seek to operate the Trust

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in a manner that complies with the federal securities laws, including the Investment Company Act of 1940" appears to be inconsistent with your disclosure on page 114 that "the Sponsor would terminate the Trust if some or all of the digital assets held by such Trust were asserted, or ultimately determined, to be securities under the federal securities laws by the SEC or a federal court." Please revise for clarity and consistency.

Introduction to XLM and the Stellar Network, page 51

3. We note your response to comment 1. Please expand your disclosure on the role of Interstellar in the development of and the ongoing support for the Stellar protocol, including a discussion regarding any ability of Interstellar or its founders to influence the progress or direction of the Stellar Network or XLM.

Overview of Stellar Lumens Market Participants, page 62

4. We note your response to comment 7. Please include your disclosure clarifying the role of "watcher" nodes in this section on page 62.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Ben Phippen at 202-551-3697 or Amit Pande, Accounting Branch Chief, at 202-551-3423 if you have questions regarding comments on the financial statements and related matters. Please contact Christopher Wall at 202-551-4162 or Sonia Bednarowski at 202-551-3666 with any other questions.

Sincerely,

Division of Corporation Finance Office of Finance