

Spectral AI, Inc.
2515 McKinney Avenue.
Suite 1000
Dallas, Texas 75201

VIA EDGAR

December 7, 2023

U.S. Securities & Exchange Commission
Division of Corporation Finance
Office of Energy & Transportation
100 F Street, NE
Washington, D.C. 20549
Attn: Juan Grana

Re: Spectral AI, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed November 21, 2023
File No. 333-275218

Dear Mr. Grana:

Spectral AI, Inc., a Delaware corporation (the “**Company**,” “**we**,” “**our**” or “**us**”), hereby transmits the Company’s response to the comment letter received from the staff (the “**Staff**”) of the U.S. Securities and Exchange Commission (the “**Commission**”) dated December 1, 2023, regarding the Company’s Amendment No. 1 to Registration Statement on Form S-1 filed with the Commission on November 21, 2023 (the “**Registration Statement**”). For the Staff’s convenience, we have repeated below each of the Staff’s comments in bold, and have followed such comment with the Company’s response. Concurrently with the transmission of this letter, we are publicly filing Amendment No. 2 to the Company’s Registration Statement with the Commission through EDGAR (the “**Amended Registration Statement**”), which reflects the Company’s responses to the comments received by the Staff and certain updated information. All page references in the responses set forth below refer to page numbers in the Amended Registration Statement.

Registration Statement on Form S-1 Filed October 30, 2023

Cover Page

- 1. Please revise your cover page and elsewhere in the registration statement to disclose the price that the selling securityholders paid for the 566,667 shares of common stock being registered for resale.**

The Company respectfully advises the Staff that it has revised the disclosures on the cover page and pages ii, 7, 52 and 55 of the Amended Registration Statement in response to the Staff’s comment.

- 2. Here and in your risk factor and MD&A sections and elsewhere where you address your recent trading prices as compared to the warrant exercise price, please revise to clarify that your warrants are out the money and it is unlikely that warrant holders would exercise their warrants while the trading price is below the warrant exercise price. Disclose that cash proceeds associated with the exercises of the warrants are dependent on the stock price. As applicable, describe the impact on your liquidity and update the discussion on the ability of your company to fund your operations on a prospective basis with your current cash on hand.**

The Company respectfully advises the Staff that it has revised the disclosures on the cover page and pages ii, 5 and 57 of the Amended Registration Statement in response to the Staff’s comment.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 59

- 3. We note that the projected Spectral revenues for 2023 were \$31.3 million, as set forth in the prospective financial information prepared by Spectral's management and provided to the RCLF Board in connection with the evaluation of the Business Combination. We also note that your actual revenues for the nine months ended September 30, 2023 was approximately \$12.8 million. It appears that you will miss your 2023 revenue projection. Please update your disclosure in Liquidity and Capital Resources, and elsewhere, to provide updated information about your financial position and further risks to your business operations and liquidity in light of these circumstances.**

The Company respectfully advises the Staff that it has revised the disclosures on pages 8, 59, 61, 68 and 72 of the Amended Registration Statement in response to the Staff's comment.

Company Overview, page 70

- 4. In light of the significant number of redemptions and the unlikelihood that the company will receive significant proceeds from exercises of the warrants because of the disparity between the exercise price of the warrants and the current trading price of the common stock, expand your discussion of capital resources to address any changes in the company's liquidity position since the business combination. If the company is likely to have to seek additional capital, discuss the effect of this offering on the company's ability to raise additional capital.**

The Company respectfully advises the Staff that it has revised the disclosure on page 71 of the Amended Registration Statement in response to the Staff's comment.

- 5. Please expand your discussion here to reflect the fact that this offering involves the potential sale of a substantial portion of shares for resale and discuss how such sales could impact the market price of the company's common stock. We refer to your disclosure on page 52.**

The Company respectfully advises the Staff that it has revised the disclosure on page 71 of the Amended Registration Statement in response to the Staff's comment.

We thank the Staff for its review of the foregoing and Amended Registration Statement. If you have further comments, please feel free to contact to our counsel, Lynwood E. Reinhardt, at LReinhardt@reedsmith.com or by telephone at (469) 680-4220.

Sincerely,

/s/ Wensheng Fan

Wensheng Fan
Chief Executive Officer
Spectral AI, Inc.

cc:

Herbert F. Kozlov, Lynwood E. Reinhardt, Reed Smith LLP
