April 26, 2024

Jordan Kovler Chief Executive Officer Greenidge Generation Holdings Inc. 135 Rennell Drive, 3rd Floor Fairfield, CT 06890

Re: Greenidge

Generation Holdings Inc.

Registration

Statement on Form S-3

Filed April 10,

2024

File No. 333-278600

Dear Jordan Kovler:

We have conducted a limited review of your registration statement and have the

following comments.

Please respond to this letter by amending your registration statement and providing the

requested information. If you do not believe a comment applies 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 this letter, we may have additional comments.

Form S-3 filed April 10, 2024

Selling Stockholder, page 8

1. Please tell us whether the Selling Stockholder is a broker-dealer or an affiliate of a brokerdealer. If the Selling Stockholder is a broker-dealer or an affiliate of a brokerdealer, please revise your disclosure to state that the Selling Stockholder is an underwriter, unless the Selling Stockholder received its securities as compensation for investment banking services. In addition, in connection with a Selling Stockholder who is an affiliate of a broker-dealer, please disclose if true, that:

the Selling Stockholder purchased the shares being registered for resale in the ordinary course of

business; and

at the time of the

purchase, the Selling Stockholder had no agreements or

understandings,

directly or indirectly, with any person to distribute the securities.

If you are unable to

make these representations, please disclose that the Selling

Stockholder is an

underwriter.

Jordan Kovler

Greenidge Generation Holdings Inc.

April 26, 2024

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Documents Incorporated By Reference, page 23

We note that you have incorporated by reference your Form 10-K for the fiscal year ended

December 31, 2023 and that your Form 10-K incorporates by reference to vour definitive

proxy statement. However, you have not filed your definitive proxy statement on

Schedule 14A. Please amend your Form 10-K to include the Part III

information or file

your proxy statement prior to effectiveness.

3. We note that page 60 of your Form 10-K for the fiscal year ended December 31, 2023

included key metrics regarding revenue and costs. Please revise your disclosure to include $% \left(1\right) =\left(1\right) +\left(1\right)$

a breakeven analysis for your mining operations that compares the cost to $\operatorname{earn/mine}$

bitcoin with the value of bitcoin. Please also revise to provide more information on your $% \left(1\right) =\left(1\right) +\left(1\right) +$

mining equipment, including the age of your mining equipment.

 $$\operatorname{\textsc{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.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Austin Stanton at 202-551-2197 or Lulu Cheng at 202-551-3811 with any other questions.

FirstName LastNameJordan Kovler Comapany NameGreenidge Generation Holdings Inc.

Sincerely,

Division of

Corporation Finance April 26, 2024 Page 2 Assets FirstName LastName

Office of Crypto