August 25, 2023

Bob Loughran Chief Financial Officer Greenidge Generation Holdings Inc. 135 Rennell Drive, 3rd Floor Fairfield, CT 06890

Re: Greenidge Generation Holdings Inc. Fiscal Year Ended December 31, 2022 2023 Period ending March 31, 2023 Filed March 31, 2023 Filed May 15, 2023 File No. 001-40808

Dear Bob Loughran:

We have reviewed your August 3, 2023 response to our comment letter 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 to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our

July 6, 2023 letter.

Form 10-K for the Years Ended December 31, 2022 and 2021

Consolidated Statements of Cash Flows, page F-6

1. We note your response to prior comment 4, specifically your assertion that you "generally convert the cryptocurrency earned into U.S. dollars in a relatively short period of time." We also note from your response to prior comment 7 that 1) you receive your compensation in the form of bitcoin the day following the one-day contract and or one day from the date earned, 2) the significant majority of crypto currency received (bitcoin) from pool operators is sold within minutes of receipt and 3) that the remaining bitcoin received from pool operators is liquidated utilizing a standard bitcoin reference price from the day subsequent to the date earned. Please address the following: Bob Loughran Greenidge Generation Holdings Inc. August 25, 2023 Page 2 Confirm to us and clarify in future filings that all crytocurrency earned is received the day following the one-day contract and or one day from when it is earned; For cryptocurrency received from mining not sold within minutes of receipt, confirm the remaining crytocurrency received is sold within one day of receipt and or one day from earned: Tell us if you have a set time daily for which the remaining

crytocurrency is sold and your average holding period for the periods presented; and Confirm that you only receive crytocurrency revenue from your mining pool operations. Notes to Consolidated Financial Statements Summary of Significant Accounting Policies, page F-7 2. We note your response to prior comment 9 and your determination of CoinMarketCap as your principal market for valuing your digital assets. As CoinMarketCap is not a market where digital assets can be traded but instead is a website where exchange/trading platform market information is aggregated, its aggregated information cannot be the principal market, or most advantageous market in the absence of a principal market, under ASC 820-10-35-5. As CoinMarketCap also separately displays pricing information from individual exchanges/trading platforms, please tell us whether one of the individual exchanges/trading platforms displayed on CoinMarketCap is your principal or most advantageous market. If so revise your disclosure to identify this specific market. If not, revise your accounting and disclosure to identify the single exchange/trading platform that is your principal or most advantageous market for each digital asset you hold or held. Regardless, tell us how you identified these single markets for each digital asset as your principal or most advantageous markets and reference the for us the authoritative literature you relied upon to support your position. You may contact Dave Irving at 202-551-3321 or Michelle Miller at 202-551-3368 if you have questions.

FirstName LastNameBob Loughran Sincerely, Comapany NameGreenidge Generation Holdings Inc. Division of Corporation Finance August 25, 2023 Page 2 Office of Crypto Assets FirstName LastName