

Via EDGAR

Division of Corporation Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Attention: Kyle Wiley, Staff Attorney
Jan Woo, Legal Branch Chief
Office of Technology

**RE: Greenidge Generation Holdings Inc.
Registration Statement on Form S-3
File No. 333-267506
Request for Acceleration**

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended (the "Securities Act"), Greenidge Generation Holdings Inc. (the "Company") hereby requests that the effective date of the Company's above-referenced Registration Statement on Form S-3 (the "Registration Statement") be accelerated by the Securities and Exchange Commission so that the Registration Statement, as then amended, will be declared effective under the Securities Act at 4:00 p.m. Eastern Daylight Time on October 3, 2022, or as soon thereafter as is practicable, or such other time as the Company or its outside counsel, Shearman & Sterling LLP, may request by telephone that such Registration Statement be declared effective.

We request that we be notified of such effectiveness by a telephone call to Taylor Landry of Shearman & Sterling LLP at (713) 354-4893 and that such effectiveness also be confirmed in writing.

Very truly yours,

By: /s/ Jeffrey E. Kirt

Name: Jeffrey E. Kirt

Title: Chief Executive Officer

cc: Richard Alsop, Esq.
Taylor Landry, Esq.
Shearman & Sterling LLP