



September 10, 2021

VIA EDGAR

Division of Corporation Finance
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549
Attn: Kathleen Krebs, Special Counsel
Jan Woo, Legal Branch Chief
Office of Technology

**Re: Greenidge Generation Holdings Inc.
Registration Statement on Form S-1
File No. 333-259247**

Dear Ms. Krebs:

Reference is made to the Registration Statement on Form S-1 (File No. 333-259247) (the "Registration Statement") filed by Greenidge Generation Holdings Inc. ("Greenidge") with the U.S. Securities and Exchange Commission (the "Commission") on September 1, 2021.

Greenidge hereby requests that the Registration Statement be declared effective at 4:00 p.m. Eastern Time on September 14, 2021, or as soon as possible thereafter, in accordance with Rule 461 promulgated under the U.S. Securities Act of 1933, as amended.

If you have any questions concerning this letter, or if you require any additional information, please contact Christopher M. Zochowski at (202) 508-8010. Please notify Mr. Zochowski when this request for acceleration of effectiveness of the Registration Statement has been granted.

Very truly yours,

/s/ Jeffrey E. Kirt

Jeffrey E. Kirt

Chief Executive Officer

cc: Christopher M. Zochowski – Shearman & Sterling LLP
Alan Bickerstaff – Shearman & Sterling LLP
David Ingles – Pillsbury Winthrop Shaw Pittman LLP