S-3 1 d397978ds3.htm FORM S-3

Table of Contents

As filed with the Securities and Exchange Commission on September 19, 2022

Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3 REGISTRATION STATEMENT

Under
THE SECURITIES ACT OF 1933

GREENIDGE GENERATION HOLDINGS INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 86-1746728 (I.R.S. Employer Identification Number)

135 Rennell Drive, 3rd Floor Fairfield, CT 06890 (315) 536-2359

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Jeffrey E. Kirt Chief Executive Officer 135 Rennell Drive, 3rd Floor Fairfield, CT 06890 (315) 536-2359

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Chris Zochowski Richard Alsop Taylor Landry Shearman & Sterling LLP 401 9th Street, NW Suite 800 Washington, DC 20004 (202) 508-8000

Approximate date of commencement of proposed sale to the public: From time to time after this registration s	tatement becomes effective.	
If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.		
Fany of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:		
f this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list he Securities Act registration statement number of the earlier effective registration statement for the same offering.		
If this Form is a post-effective amendment filed pursuant to Rule $462(c)$ under the Securities Act, check the followin registration statement number of the earlier effective registration statement for the same offering. \Box	g box and list the Securities Act	
If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that with the Commission pursuant to Rule $462(e)$ under the Securities Act, check the following box. \Box	t shall become effective upon fili	ng
If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. \Box	to register additional securities or	
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting concompany" in Rule 12b-2 of the Exchange Act.		ın
Large accelerated filer	Accelerated filer	
Non-accelerated filer	Smaller reporting company	×
	Emerging growth company	×
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition revised financial accounting standards provided pursuant to Section $7(a)(2)(B)$ of the Securities Act. \Box	n period for complying with any	new o
The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay shall file a further amendment which specifically states that this registration statement shall thereafter become Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date Commission acting pursuant to said Section 8(a), may determine.	e effective in accordance with	

Table of Contents

EXPLANATORY NOTE

This registration statement consists of two prospectuses:

- a base prospectus, which covers the offering, issuance and sale by us of up to \$100,000,000 of shares of class A common stock of Greenidge Generation Holdings Inc.; and
- sales agreement prospectus supplement covering the offering, issuance and sale of up to a maximum aggregate offering price of \$22,800,000 of class A common stock of Greenidge Generation Holdings Inc. that may be issued and sold under an at market issuance sales agreement dated, September 19, 2022 (the "sales agreement"), with B. Riley Securities, Inc. and Northland Securities, Inc.

The base prospectus immediately follows this explanatory note. The specific terms of the class A common stock to be offered pursuant to the base prospectus will be specified in a prospectus supplement to the base prospectus.

The sales agreement prospectus supplement immediately follows the base prospectus. The class A common stock that may be offered, issued and sold by us under the sales agreement prospectus supplement is included in the \$100,000,000 of class A common stock that may be offered, issued and sold by us under the base prospectus. Upon termination of the sales agreement, any portion of the \$22,800,000 included in the sales agreement prospectus supplement that is not sold pursuant to the sales agreement will be available for sale in other offerings pursuant to the base prospectus and a corresponding prospectus supplement, and if no shares are sold under the sales agreement prospectus supplement, the full \$22,800,000, of class A common stock may be sold in other offerings pursuant to the base prospectus and a corresponding prospectus supplement.

Table of Contents

The information contained in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not a solicitation of offers to buy these securities in any jurisdiction where such offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED September 19, 2022

PRELIMINARY PROSPECTUS



GREENIDGE GENERATION HOLDINGS INC.

\$100,000,000

Class A Common Stock

From time to time, we may offer and sell shares of our class A common stock, par value \$0.0001 per share. The aggregate initial offering price of all shares of class A common stock sold by us pursuant to this prospectus will not exceed \$100,000,000.

We may offer and sell these securities to or through one or more underwriters, dealers and agents, or directly to purchasers, on a continuous or delayed basis.

This prospectus describes some of the general terms that may apply to these securities and the general manner in which they may be offered. The specific terms of any securities to be offered, and the specific manner in which they may be offered, will be described in a supplement to this prospectus. You should read this prospectus and any applicable prospectus supplement carefully before you invest.

Our class A common stock is listed on the Nasdaq Global Select Market and trades under the symbol "GREE."

As of September 16, 2022, the aggregate market value of our class A and class B common stock (our "common stock") held by our non-affiliates was approximately \$68.6 million, based upon 14,752,141 shares of our outstanding common stock held by non-affiliates at the per share price of \$4.65, the closing sale price of our class A common stock on the Nasdaq Global Select Market on August 15, 2022. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities in a public offering with a value exceeding more than one third of our "public float" (i.e., the aggregate market value of our common stock held by our non-affiliates) in any 12-month period so long as our public float remains below \$75.0 million (the "I.B.6 Limitation"). We have not sold any securities in reliance on General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act of 1933, as amended (the "Securities Act") and a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K, and are subject to reduced public company reporting requirements.

We are also a "controlled company" under the rules of The Nasdaq Stock Market LLC ("Nasdaq") and may take advantage of certain corporate governance exemptions afforded to a "controlled company" under the rules of Nasdaq.

You should carefully read this prospectus, the documents incorporated by reference in this prospectus and any prospectus supplement before you invest. See "Risk Factors" beginning on page 8 of this prospectus, our filings with the Securities and Exchange Commission (the "SEC") and the applicable prospectus supplement for information on certain risks related to the purchase of our securities.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or

complete. Any representation to the contrary is a criminal offense.		
	-	
	The date of this prospectus is	, 2022.

Table of Contents

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS	1
WHERE YOU CAN FIND MORE INFORMATION	2
DOCUMENTS INCORPORATED BY REFERENCE	3
CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS	4
ABOUT GREENIDGE GENERATION HOLDINGS INC.	5
RISK FACTORS	8
<u>USE OF PROCEEDS</u>	9
PLAN OF DISTRIBUTION	10
<u>LEGAL MATTERS</u>	12
<u>EXPERTS</u>	13

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC using a "shelf" registration process. Under this shelf registration process, we may offer and sell from time to time the securities described in this prospectus in one or more offerings in amounts that we will determine from time to time, up to a total dollar amount of \$100,000,000, subject to the I.B.6 Limitation.

This prospectus provides you with a general description of the securities we may offer. Each time we offer the securities described in this prospectus we will provide you with a prospectus supplement that will describe, among other things, the specific amounts and prices of the securities being offered and the terms of the offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings and securities. This prospectus, together with applicable prospectus supplements, any information incorporated by reference, and any related free writing prospectuses we file with the SEC, includes all material information relating to these offerings and securities. We may also add, update or change in the prospectus supplement any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus, including without limitation, a discussion of any risk factors or other special considerations that apply to these offerings or securities or the specific plan of distribution. The information in this prospectus is accurate as of its date. If there is any inconsistency between the information in this prospectus and a prospectus supplement or information incorporated by reference having a later date, you should rely on the information in that prospectus supplement or incorporated information having a later date. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the headings "Where You Can Find More Information" and "Documents Incorporated by Reference," before buying any of the securities being offered.

You should rely only on the information contained in or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. Neither we nor anyone acting on our behalf is making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information incorporated by reference or provided in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under "Where You Can Find More Information."

Unless the context otherwise requires, throughout this prospectus and any applicable prospectus supplement, the words "we," "us," the "registrant," the "Company," or "Greenidge" refer to Greenidge Generation Holdings Inc. and the term "securities" refers to the shares of our class A common stock registered hereunder.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act, with respect to the securities covered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some of which is contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our class A common stock, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. You may obtain copies of this information by mail from the public reference room of the SEC at 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC also maintains an Internet website that contains reports, proxy and information statements and other information regarding issuers, like us, that file electronically with the SEC. The address of that website is http://www.sec.gov.

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and, in accordance with the Exchange Act, file reports, proxy and information statements and other information with the SEC. Such annual, quarterly and special reports, proxy and information statements and other information can be inspected and copied at the locations set forth above. We make available free of charge on or through our website, www.greenidge.com, our filings with the SEC pursuant to Sections 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. We make our website content available for information purposes only. Information contained on, or accessible through, our website is not incorporated by reference into this prospectus and does not constitute a part of this prospectus.

Table of Contents

DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" certain of the information that we file with it after the date of the filing of the registration statement of which this prospectus forms a part, which means that we can disclose important information to you by referring you to the documents containing that information. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information.

The documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (excluding any information furnished pursuant to Item 2.02 or Item 7.01 on any Current Report on Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary), including all such documents we may file with the SEC after the date on which the registration statement that includes this prospectus was initially filed with the SEC and prior to the effectiveness of the registration statement and all such documents we may file with the SEC after the effectiveness of the registration statement, are incorporated by reference in this prospectus until the termination of the offering under this registration statement:

- our Annual Report on Form 10-K for the year ended December 31, 2021, filed on March 31, 2022;
- our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2022 and June 30, 2022, filed on May 16, 2022 and August 15, 2022, respectively;
- Unaudited Pro Forma Consolidated Statements of Operations of the Company for the year ended December 31, 2021, and the notes thereto, contained in our Current Report on Form 8-K/A filed on April 1, 2022 and our Current Reports on Form 8-K filed on March 24, 2022, April 8, 2022, April 14, 2022 and September 7, 2022;
- the description of our class A common stock set forth under the heading "Description of Securities" in our prospectus filed pursuant to <u>Rule 424(b)</u> under the Securities Act on August 10, 2021; and
- Financial Statements of Support.com, Inc. contained in Exhibit 99.2 to our Current Report on Form 8-K filed on September 15, 2021 (Acc-no: 0001193125-21-273493).

We will provide a copy of these filings (including certain exhibits that are specifically incorporated by reference therein) to each person, including any beneficial owner, to whom a prospectus is delivered. You may request a copy of any or all of these filings at no cost, by writing or calling us at:

Greenidge Generation Holdings Inc. Attention: Investor Relations 135 Rennell Drive, 3rd Floor Fairfield, CT 06890 (315) 536-2359

Copies of certain information filed by us with the SEC, including our Annual Report and Quarterly Reports, are also available on our website at www.greenidge.com. Information contained on our website or accessible through our website is not incorporated by reference herein.

You should read the information relating to us in this prospectus together with the information in the documents incorporated by reference. Nothing contained herein shall be deemed to incorporate information furnished, but not filed, with the SEC.

Table of Contents

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated or deemed to be incorporated by reference herein include certain statements that may constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act, Section 21E of the Exchange Act and Private Securities Litigation Reform Act of 1995 (the "PSLRA"). All statements other than statements of historical fact are forward-looking statements for purposes of federal and state securities laws. These forward-looking statements involve uncertainties that could significantly affect our financial or operating results. These forward-looking statements may be identified by terms such as "anticipate," "believe," "continue," "foresee," "expect," "intend," "plan," "may," "will," "would," "could" and "should" and the negative of these terms or other similar expressions. Forward-looking statements are based on current beliefs and assumptions that are subject to risks and uncertainties and are not guarantees of future performance. Forward-looking statements in this document include, among other things, statements regarding our business plan, business strategy and operations in the future. In addition, all statements that address operating performance and future performance, events or developments that are expected or anticipated to occur in the future, including statements relating to creating value for stockholders, are forward-looking statements. As used herein, "we," "us," "our" and "Greenidge" and the "Company" refer to Greenidge Generation Holdings Inc. together with its consolidated subsidiaries.

Consequently, all of the forward-looking statements made in this prospectus are qualified by the information contained herein, including the information contained under this caption and the information under the section "Risk Factors" in our most recent Annual Report on Form 10-K filed with the SEC, as supplemented by our Quarterly Reports on Form 10-Q, and discussed elsewhere in this prospectus, each prospectus supplement and in the documents incorporated by reference in this prospectus and each prospectus supplement. No assurance can be given that these are all of the factors that could cause actual results to vary materially from the forward-looking statements, whether written or oral, that may be made from time to time, whether as a result of new information, future events or otherwise, except as may be required by law.

You should not put undue reliance on forward-looking statements. No assurances can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do occur, what impact they will have on the results of our operations, financial condition or cash flows. Actual results may differ materially from those discussed in this prospectus. All forward-looking statements speak only as of the date of this prospectus and we do not assume any duty to update or revise forward-looking statements, whether as a result of new information, future events, uncertainties or otherwise, as of any future date.

Table of Contents

ABOUT GREENIDGE GENERATION HOLDINGS INC.

Cryptocurrency Datacenter and Power Generation Segment

We are a vertically integrated cryptocurrency datacenter and power generation company with cryptocurrency datacenter operations in the Town of Torrey, New York (the "New York Facility") and in Spartanburg, South Carolina (the "South Carolina Facility" and, together with the New York Facility, the "facilities"). The New York Facility is a vertically integrated cryptocurrency datacenter and power generation facility with an approximately 106 megawatt ("MW") natural gas power generation facility. We generate all the power we require for our cryptocurrency datacenter operations in the New York Facility, where we enjoy relatively lower market prices for natural gas due to our access to the Millennium Gas Pipeline price hub. At the South Carolina Facility, we purchase power from a supplier of approximately 60% zero-carbon sourced energy. We believe our competitive advantages include relatively low fixed costs, an efficient mining fleet and in-house operational expertise. We are currently mining bitcoin and contributing to the security and transactability of the bitcoin ecosystem while concurrently supplying power to assist in meeting the power needs of homes and businesses in the region served by our New York Facility.

As of June 30, 2022, we powered approximately 83 MW of mining capacity capable of producing an estimated aggregate hash rate of 2.5 EH/s at our facilities, substantially all of which is dedicated to bitcoin mining. Our Cryptocurrency Datacenter and Power Generation segment generates revenue i) through the exchange of bitcoins earned by application-specific integrated circuit computers ("ASICs" or "miners") as rewards and transaction fees for U.S. dollars and, to a much lesser extent, through revenue earned from third parties for hosting ASICs owned by third parties and providing operations, maintenance and other blockchain related services to third parties and ii) through the sale of electricity generated by our power plant, and not consumed in cryptocurrency datacenter operations, to New York State's power grid at prices set on a daily basis through the New York Independent System Operator ("NYISO") wholesale market. We opportunistically increase or decrease the total amount of electricity sold by the power plant based on prevailing prices in the wholesale electricity market.

We believe that, over the long-term, behind-the-meter power generation capability provides a stable, cost-effective source of power for cryptocurrency datacenter activities. Our behind-the-meter power generation capability provides us with stable delivery due to the absence of any contract negotiation risk with third-party power suppliers, the absence of transmission and distribution cost risk and the firm delivery of natural gas for our New York Facility via our captive pipeline. Furthermore, our New York Facility has operated with minimal downtime for maintenance and repairs over recent years. Notwithstanding the structural stability of our behind-the-meter capabilities, we do however procure natural gas at our New York Facility through a third-party energy manager which schedules delivery of our natural gas needs from the wholesale market which is subject to price volatility. We procure the majority of our natural gas at spot prices and enter into fixed price forward contracts from time to time for the purchase of a portion of anticipated natural gas purchases based on prevailing market conditions to partially mitigate the financial impacts of natural gas price volatility and to manage commodity risk.

Support Services Segment

On September 14, 2021, GGH Merger Sub, Inc. ("Merger Sub"), a wholly owned subsidiary of Greenidge, merged with and into Support.com, Inc. ("Support.com"), with Support.com continuing as the surviving corporation (the "Merger") and a wholly owned subsidiary of Greenidge, pursuant to the Agreement and Plan of Merger, dated March 19, 2021 (the "Merger Agreement"), among Greenidge, Support.com and Merger Sub.

Our Support Services segment provides solutions and technical programs to customers delivered by home-based employees. The Support Services segment provides customer service, sales support, and technical support primarily to large corporations, businesses and professional services organizations. The Support Services segment also earns revenues for end-user software products provided through direct customer downloads and sale via partners. The Support Services segment operates primarily in the United States, but also has employees located in Philippines, India, Mexico, Columbia and Canada, including staff providing support services.

Table of Contents

Implications of Being an Emerging Growth Company and Smaller Reporting Company

We qualify as an "emerging growth company" under the Jumpstart our Business Startups Act ("JOBS Act"). As a result, we are permitted to, and intend to, rely on exemptions from certain disclosure requirements. For so long as we are an emerging growth company, we will not be required to:

- have an auditor report on our internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act;
- comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (i.e., an auditor discussion and analysis):
- submit certain executive compensation matters to shareholder advisory votes, such as "say-on-pay," "say-on-frequency" and pay ratio; and
- disclose certain executive compensation related items such as the correlation between executive compensation and performance and comparisons of the CEO's compensation to median employee compensation.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards.

In other words, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to take advantage of the benefits of this extended transition period. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards.

We will remain an "emerging growth company" for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our total annual gross revenues exceed \$1.07 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three year period.

Additionally, we are a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of the fiscal year in which (1) the market value of our common stock held by non-affiliates equals or exceeds \$250 million as of the end of that year's second fiscal quarter, or (2) our annual revenues equaled or exceeded \$100 million during such completed fiscal year and the market value of our common stock held by non-affiliates equals or exceeds \$700 million as of the end of that year's second fiscal quarter.

Controlled Company Exemption

Atlas Capital Resources L.P. ("Atlas") and its affiliates currently control approximately 90% of the voting power of our outstanding capital stock and have the power to elect a majority of our directors. Pursuant to Nasdaq listing standards, a company of which more than 50% of the voting power for the election of directors is held by an individual, a group or another company qualifies as a "controlled company." As a controlled company, we are exempt from certain Nasdaq corporate governance requirements, including the requirements to have (i) a board comprised of a majority of independent directors; (ii) compensation of executive officers determined by a majority of the independent directors or a compensation committee comprised solely of independent directors, and (iii) director nominees selected or recommended for our board either by a majority of the independent directors or a nominating committee comprised solely of independent directors. If we cease to be a "controlled company" and our shares continue to be listed on the Nasdaq Global Select Market, we will be required to comply with these standards and, depending on the independence-determination with respect to our then-current directors, we may be required to add additional directors to our board in order to achieve such compliance within the applicable transition periods.

Table of Contents

Corporate Information

Our principal executive offices are located at 135 Rennell Drive, 3rd Floor Fairfield, CT 06890, and our telephone number is (203) 718-5960. We maintain a website at www.greenidge.com. Information on our website, or accessible through our website, is not incorporated by reference into or otherwise part of this prospectus.

Table of Contents

RISK FACTORS

An investment in our securities involves a significant degree of risk. Before you invest in our securities, you should carefully consider those risk factors included in our most recent Annual Report on Form 10-K, any subsequently filed Quarterly Reports on Form 10-Q and any subsequently filed Current Reports on Form 8-K, each of which is incorporated herein by reference, and those risk factors that may be included in any applicable prospectus supplement and any related free writing prospectus, together with all of the other information included in this prospectus, any prospectus supplement, any free writing prospectus and the documents we incorporate by reference herein or therein, in evaluating an investment in our securities. If any of these risks were actually to occur, our business, financial condition or results of operations could be materially adversely affected. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations and financial condition. When we offer and sell any securities pursuant to a prospectus supplement, we may include additional risk factors relevant to such securities in the prospectus supplement. Please read "Cautionary Statement Regarding Forward-Looking Statements."

Table of Contents

USE OF PROCEEDS

Unless otherwise specified in an accompanying prospectus supplement, we will use the net proceeds we receive from the sale of the securities covered by this prospectus for general corporate purposes, which may include, among other things, paying or refinancing all or a portion of our indebtedness at the time, and funding acquisitions, capital expenditures and working capital.

The actual application of the net proceeds from the sale of any particular offering of securities using this prospectus will be described in the applicable prospectus supplement relating to such offering.

9

Table of Contents

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus in any one or more of the following ways from time to time:

- to or through one or more underwriters, initial purchasers, brokers, or dealers;
- through agents to investors or the public;
- in short or long transactions;
- through put or call option transactions relating to our class A common stock;
- directly to agents or other purchasers;
- in "at the market offerings" within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- though a combination of any such methods of sale; or
- through any other method described in the applicable prospectus supplement.

The applicable prospectus supplement will set forth the terms of the offering and the method of distribution and will identify any firms acting as underwriters, initial purchasers, dealers, or agents in connection with the offering, including:

- the terms of the offering;
- the names of any underwriters, dealers, or agents;
- the name or names of any managing underwriter or underwriters;
- the purchase price of the securities and the proceeds to us from the sale;
- any options (whether or not for over-allotments) under which the underwriters may purchase additional shares of class A common stock from us;
- any underwriting discounts, concessions, commissions, or agency fees and other items constituting compensation to underwriters, dealers, or agents;
- any delayed delivery arrangements;
- any public offering price;
- · any discounts or concessions allowed or re-allowed or paid by underwriters or dealers to other dealers; or
- any securities exchange or market on which the class A common stock offered in the prospectus supplement may be listed.

If we use underwriters for a sale of securities, the underwriters will acquire the securities for their own account for resale to the public, either on a firm commitment basis or a best efforts basis. The underwriters may resell the securities in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer the securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. If an underwriter or underwriters are used in the sale of securities hereunder, an underwriting agreement will be executed with the underwriter or underwriters at the time an agreement for sale is reached. Unless we inform you otherwise in the applicable prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions. We may change from time to time any public offering price and any discounts or concessions the underwriters allow or pay to dealers.

Table of Contents

During and after an offering through underwriters, the underwriters may purchase and sell the securities in the open market. These transactions may include overallotment and stabilizing transactions and purchases to cover syndicate short positions created in connection with the offering. The underwriters may also impose a penalty bid, which means that selling concessions allowed to syndicate members or other broker-dealers for the offered securities sold for their account may be reclaimed by the syndicate if the offered securities are repurchased by the syndicate in stabilizing or covering transactions. These activities may stabilize, maintain, or otherwise affect the market price of the offered securities, which may be higher than the price that might otherwise prevail in the open market. If commenced, the underwriters may discontinue these activities at any time.

Some or all of the securities that we offer though this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell our securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

If dealers are used for the sale of securities, we, or an underwriter, will sell the securities to them as principals. The dealers may then resell those securities to the public at varying prices determined by the dealers at the time of resale. We will include in the applicable prospectus supplement the names of the dealers and the terms of the transaction.

We may also sell the securities through agents designated from time to time. In the applicable prospectus supplement, we will name any agent involved in the offer or sale of the offered securities, and we will describe any commissions payable to the agent. Unless we inform you otherwise in the applicable prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly in transactions not involving underwriters, dealers, or agents.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. We will describe the terms of any such sales in the prospectus supplement.

Underwriters, dealers, and agents that participate in the distribution of the securities may be underwriters as defined in the applicable securities laws and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the applicable securities laws. We will identify in the applicable prospectus supplement any underwriters, dealers, or agents and will describe their compensation. We may have agreements with the underwriters, dealers, and agents to indemnify them against specified civil liabilities, including liabilities under the applicable securities laws.

Underwriters, dealers, and agents may engage in transactions with or perform services for us in the ordinary course of their businesses for which they may receive customary fees and reimbursement of expenses.

We may use underwriters with whom we have a material relationship. We will describe the nature of such relationship in the applicable prospectus supplement.

Under the securities laws of some states, the securities offered by this prospectus may be sold in those states only through registered or licensed brokers or dealers.

We may enter into hedging transactions with broker-dealers and the broker-dealers may engage in short sales of the securities in the course of hedging the positions they assume with us, including, without limitation, in connection with distributions of the securities by those broker-dealers. We may enter into option or other transactions with broker-dealers that involve the delivery of the securities offered hereby to the broker-dealers, who may then resell or otherwise transfer those securities. We may also loan or pledge the securities offered hereby to a broker-dealer and the broker-dealer may sell the securities offered hereby so loaned or upon a default may sell or otherwise transfer the pledged securities offered hereby.

Table of Contents

LEGAL MATTERS

The validity of the issuance of the securities offered in this prospectus will be passed upon for us by Shearman & Sterling LLP. An investment vehicle comprised of certain partners of Shearman & Sterling LLP, members of their families and other related persons has an interest in us representing less than 0.25% of our aggregate capital stock. If certain legal matters in connection with an offering of the securities made by this prospectus and a related prospectus supplement are passed upon by counsel for the underwriters of such offering, that counsel will be named in the applicable prospectus supplement related to that offering.

Table of Contents

EXPERTS

Our consolidated financial statements as of and for the years ended December 31, 2021 and 2020 incorporated by reference herein, have been audited by Armanino, LLP, an independent registered public accounting firm, as set forth in their report, incorporated by reference herein, and are included in reliance upon the report given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Support.com as of and for the years ended December 31, 2020 and 2019 incorporated by reference herein, have been audited by Plante & Moran, PLLC, an independent registered public accounting firm, as set forth in their report, which is incorporated by reference herein, and are included in reliance upon the report given on the authority of such firm as experts in accounting and auditing.

Table of Contents

The information in this prospectus supplement is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus supplement is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED September 19, 2022

PROSPECTUS SUPPLEMENT (To Prospectus dated September 19, 2022)



Greenidge Generation Holdings Inc.

Up to \$22,800,000

Class A Common Stock

We have entered into an at market issuance sales agreement, dated September 19, 2022 (the "sales agreement"), with B. Riley Securities, Inc. ("B. Riley" or "sales agent") and Northland Securities, Inc. ("Northland"), relating to shares of our class A common stock offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the sales agreement, we may offer and sell shares of our class A common stock having an aggregate offering price of \$22,800,000.

Shares of our class A common stock trade on the Nasdaq Global Select Market, under the symbol "GREE." On September 16, 2022, the last sale price of the shares as reported on the Nasdaq Global Select Market was \$2.15 per share.

Sales of our class A common stock, if any, pursuant to this prospectus supplement and the accompanying prospectus will be made in any method permitted by law deemed to be an "at the market offering" as defined in Rule 415 under the Securities Act. Subject to the terms of the sales agreement, the sales agent is not required to sell any specific number or dollar amount of our class A common stock but will make all sales using commercially reasonable efforts consistent with its normal sales and trading practices on terms mutually agreed upon between the sales agents and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

As of September 16, 2022, the aggregate market value of our class A and class B common stock (our "common stock") held by our non-affiliates was approximately \$68.6 million, based upon 14,752,141 shares of our outstanding common stock held by non-affiliates at the per share price of \$4.65, the closing sale price of our class A common stock on the Nasdaq Global Select Market on August 15, 2022. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities in a public offering with a value exceeding more than one third of our "public float" (i.e., the aggregate market value of our common stock held by our non-affiliates) in any 12-month period so long as our public float remains below \$75.0 million. We have not sold any securities in reliance on General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus.

The compensation payable to B. Riley for sales of our class A common stock pursuant to the sales agreement will be an amount equal to up to 3.0% of the gross sales price of all class A common stock sold thereunder. In connection with the sale of the class A common stock on our behalf, B. Riley will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation of B. Riley will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to B. Riley with respect to certain liabilities, including liabilities under the Securities Act or the Exchange Act.

We are an "emerging growth company" as that term is used in the Jumpstart Our Business Startups Act of 2012 ("JOBS Act") and a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K, and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus supplement and future filings. Please see "Summary—Implications of Being an Emerging Growth Company and Smaller Reporting Company."

Investing in our class A common stock involves risks. See "<u>Risk Factors</u>" beginning on page S-9 of this prospectus supplement and the risk factors that are incorporated by reference into this prospectus supplement and the accompanying prospectus from our filings made with the Securities and Exchange Commission (the "SEC") pursuant to the Exchange Act for a discussion of the factors you should carefully consider before deciding to invest in our class A common stock.

Neither the SEC nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

B. Riley Securities	Northland Capital Markets
The date of this prospectus	s supplement is , 2022

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

ABOUT THIS PROSPECTUS SUPPLEMENT	S-1
CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS	S-2
<u>SUMMARY</u>	S-4
THE OFFERING	S-7
RISK FACTORS	S-9
USE OF PROCEEDS	S-11
PLAN OF DISTRIBUTION (CONFLICT OF INTEREST)	S-12
MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS	S-14
<u>LEGAL MATTERS</u>	S-18
<u>EXPERTS</u>	S-19
WHERE YOU CAN FIND MORE INFORMATION	S-20

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement relates to the offering of shares of our class A common stock having an aggregate offering price of up to \$22,800,000 from time to time pursuant to the sales agreement among the Company, B. Riley and Northland. Before buying any of the shares of class A common stock that we are offering, we urge you to carefully read this prospectus supplement, together with the information incorporated by reference as described under the headings "Where You Can Find More Information" and "Documents Incorporated by Reference" in this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering. These documents contain important information that you should consider when making your investment decision. In general, when we refer to the prospectus, we are referring to both the prospectus supplement and the accompanying prospectus combined.

This prospectus supplement describes the terms of this offering of shares of class A common stock and also adds to and updates information contained in the documents incorporated by reference into this prospectus supplement. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in any document incorporated by reference into this prospectus supplement that was filed with the SEC before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference into this prospectus supplement—the statement in the document having the later date modifies or supersedes the earlier statement.

We have not, and the sales agent has not, authorized any other person to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement, along with the information contained in any permitted free writing prospectuses we have authorized for use in connection with this offering. Neither we nor the sales agent take any responsibility for, or can provide any assurance as to the reliability of, any information other than the information contained or incorporated by reference in this prospectus supplement or any permitted free writing prospectuses we have authorized for use in connection with this offering. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus, and in any free writing prospectus that we may authorize for use in connection with this offering, is accurate only as of the date of those respective documents or any earlier date specified for such information unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus, and any free writing prospectus that we may authorize for use in connection with this offering, in their entirety before making an investment decision.

Information contained on, or accessible through, our website is not part of this prospectus supplement. We and the sales agent are offering to sell, and seeking offers to buy, shares of our class A common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the offering of our class A common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement must inform themselves about, and observe any restrictions relating to, the offering of our class A common stock and the distribution of this prospectus supplement outside the United States. This prospectus supplement does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Unless the context otherwise requires, throughout this prospectus supplement, the words "we," "us," the "registrant," the "Company" or "Greenidge" refer to Greenidge Generation Holdings Inc. together with its consolidated subsidiaries and the term "securities" refers to the shares of our class A common stock registered hereunder.

Table of Contents

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the documents incorporated or deemed to be incorporated by reference herein include certain statements that may constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act, Section 21E of the Exchange Act and Private Securities Litigation Reform Act of 1995 (the "PSLRA"). All statements other than statements of historical fact are forward-looking statements for purposes of federal and state securities laws. These forward-looking statements involve uncertainties that could significantly affect our financial or operating results. These forward-looking statements may be identified by terms such as "anticipate," "believe," "continue," "foresee," "expect," "intend," "plan," "may," "will," "would," "could" and "should" and the negative of these terms or other similar expressions. Forward-looking statements are based on current beliefs and assumptions that are subject to risks and uncertainties and are not guarantees of future performance. Forward-looking statements in this document include, among other things, statements regarding our business plan, business strategy and operations in the future. In addition, all statements that address operating performance and future performance, events or developments that are expected or anticipated to occur in the future, including statements relating to creating value for stockholders, are forward-looking statements. Factors which may cause actual results to differ materially from current expectations include, but are not limited to:

- the ability to recognize the anticipated objectives and benefits of an expansion into multiple data centers in Texas;
- the ability to negotiate or execute definitive documentation with respect to potential expansion sites on terms and conditions that are acceptable to Greenidge, whether on a timely basis or at all;
- changes in applicable laws, regulations or permits affecting our operations or the industries in which we operate, including regulation regarding power generation, cryptocurrency usage and/or cryptocurrency mining;
- any failure by us to obtain acceptable financing with regard to our growth strategies or operations;
- substantial levels of indebtedness and current liquidity constraints;
- fluctuations and volatility in the price of bitcoin and other cryptocurrencies;
- loss of public confidence in, or use cases of, bitcoin and other cryptocurrencies;
- the potential of cryptocurrency market manipulation;
- our ability to maintain a carbon neutral datacenter operation;
- the economics of mining cryptocurrency, including as to variables or factors affecting the cost, efficiency and profitability of datacenter operations;
- the availability, delivery schedule and cost of equipment necessary to maintain and grow our business and operations, including datacenter equipment and equipment meeting the technical or other specifications required to achieve our growth strategy;
- the time-consuming and costly nature of obtaining and complying with required government permits:
- the possibility that we may be adversely affected by other economic, business or competitive factors, including factors affecting the industries in which we operate or upon which we rely and are dependent and factors currently affecting or that may affect our economy, such as the outbreak of hostilities between Russia and Ukraine:
- the ability to expand successfully to other facilities, mine other cryptocurrencies or otherwise expand our business;
- changes in tax regulations applicable to us, our assets or cryptocurrencies, including bitcoin;
- any litigation involving us, including governmental investigations, relating to our products or services;
- costs and expenses relating to cryptocurrency transaction fees and fluctuation in cryptocurrency transaction fees;
- the condition of our physical assets, including that our operating facility may realize material, if not total, loss and interference as a result of equipment malfunction or break-down, physical disaster, data security breach, computer malfunction or sabotage; and
- the actual and potential impact of the COVID-19 pandemic.

Table of Contents

Consequently, all of the forward-looking statements made in this prospectus supplement are qualified by the information contained herein, including the information contained under this caption and the information under the section "Risk Factors" contained in this prospectus supplement and the accompanying prospectus, our most recent Annual Report on Form 10-K filed with the SEC, as supplemented by our Quarterly Reports on Form 10-Q, and discussed elsewhere in this prospectus supplement and in the documents incorporated by reference in this prospectus supplement. No assurance can be given that these are all of the factors that could cause actual results to vary materially from the forward-looking statements, whether written or oral, that may be made from time to time, whether as a result of new information, future events or otherwise, except as may be required by law.

You should not put undue reliance on forward-looking statements. No assurances can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do occur, what impact they will have on the results of our operations, financial condition or cash flows. Actual results may differ materially from those discussed in this prospectus supplement. All forward-looking statements speak only as of the date of this prospectus supplement and we do not assume any duty to update or revise forward-looking statements, whether as a result of new information, future events, uncertainties or otherwise, as of any future date.

Table of Contents

SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and does not contain all the information that you need to consider in making your investment decision. You should carefully read this entire prospectus supplement and the accompanying prospectus, as well as the information to which we refer you and the information incorporated by reference herein, before deciding whether to invest in our class A common stock.

Greenidge Generation Holdings Inc.

Overview

Cryptocurrency Datacenter and Power Generation Segment

We are a vertically integrated cryptocurrency datacenter and power generation company. We own cryptocurrency datacenter operations in the Town of Torrey, New York (the "New York Facility") and in Spartanburg, South Carolina (the "South Carolina Facility" and, together with the New York Facility, the "facilities"). The New York Facility is a vertically integrated cryptocurrency datacenter and power generation facility with an approximately 106 megawatt ("MW") natural gas power generation facility. We generate all the power we require for our cryptocurrency datacenter operations in the New York Facility, where we enjoy relatively lower market prices for natural gas due to our access to the Millennium Gas Pipeline price hub. At the South Carolina Facility, we purchase power from a supplier of approximately 60% zero-carbon sourced energy. We believe our competitive advantages include relatively low fixed costs, an efficient mining fleet and in-house operational expertise. We are currently mining bitcoin and contributing to the security and transactability of the bitcoin ecosystem while concurrently supplying power to assist in meeting the power needs of homes and businesses in the region served by our New York Facility.

As of June 30, 2022, we powered approximately 83 MW of mining capacity capable of producing an estimated aggregate hash rate of 2.5 EH/s at our facilities, substantially all of which is dedicated to bitcoin mining. Our Cryptocurrency Datacenter and Power Generation segment generates revenue i) through the exchange of bitcoins earned by application-specific integrated circuit computers ("ASICs" or "miners") as rewards and transaction fees for U.S. dollars and, to a much lesser extent, through revenue earned from third parties for hosting ASICs owned by third parties and providing operations, maintenance and other blockchain related services to third parties and ii) through the sale of electricity generated by our power plant, and not consumed in cryptocurrency datacenter operations, to New York State's power grid at prices set on a daily basis through the New York Independent System Operator ("NYISO") wholesale market. We opportunistically increase or decrease the total amount of electricity sold by the power plant based on prevailing prices in the wholesale electricity market.

We believe that, over the long-term, behind-the-meter power generation capability provides a stable, cost-effective source of power for cryptocurrency datacenter activities. Our behind-the-meter power generation capability provides us with stable delivery due to the absence of any contract negotiation risk with third-party power suppliers, the absence of transmission and distribution cost risk and the firm delivery of natural gas for our New York Facility via our captive pipeline. Furthermore, our New York Facility has operated with minimal downtime for maintenance and repairs over recent years. Notwithstanding the structural stability of our behind-the-meter capabilities, we do however procure natural gas at our New York Facility through a third-party energy manager which schedules delivery of our natural gas needs from the wholesale market which is subject to price volatility. We procure the majority of our natural gas at spot prices and enter into fixed price forward contracts from time to time for the purchase of a portion of anticipated natural gas purchases based on prevailing market conditions to partially mitigate the financial impacts of natural gas price volatility and to manage commodity risk. These forward contracts qualify for the normal purchases and sales exception under Accounting Standards Codification ("ASC") 815, Derivatives and Hedging, as it is probable that these contracts will result in physical delivery.

Table of Contents

Support Services Segment

On September 14, 2021, GGH Merger Sub, Inc. ("Merger Sub"), a wholly owned subsidiary of Greenidge, merged with and into Support.com, Inc. ("Support.com"), with Support.com continuing as the surviving corporation (the "Merger") and a wholly owned subsidiary of Greenidge, pursuant to the Agreement and Plan of Merger, dated March 19, 2021 (the "Merger Agreement"), among Greenidge, Support.com and Merger Sub.

Our Support Services segment provides solutions and technical programs to customers delivered by home-based employees. The Support Services segment provides customer service, sales support, and technical support primarily to large corporations, businesses and professional services organizations. The Support Services segment also earns revenues for end-user software products provided through direct customer downloads and sale via partners. The Support Services segment operates primarily in the United States, but also has employees located in Philippines, India, Mexico, Columbia and Canada, including staff providing support services.

Corporate Information

Our principal executive offices are located at 135 Rennell Drive, 3rd Floor, Fairfield, CT 06890, and our telephone number is (203) 718-5960. We maintain a website at www.greenidge.com. Information on our website, or accessible through our website, is not incorporated by reference into or otherwise part of this prospectus supplement.

Implications of Being an Emerging Growth Company and Smaller Reporting Company

We qualify as an "emerging growth company" under the JOBS Act. As a result, we are permitted to, and intend to, rely on exemptions from certain disclosure requirements. For so long as we are an emerging growth company, we will not be required to:

- have an auditor report on our internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act;
- comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (i.e., an auditor discussion and analysis);
- submit certain executive compensation matters to shareholder advisory votes, such as "say-on-pay," "say-on-frequency" and pay ratio; and
- disclose certain executive compensation related items such as the correlation between executive compensation and performance and comparisons of the CEO's compensation to median employee compensation.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards.

In other words, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to take advantage of the benefits of this extended transition period. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards.

We will remain an "emerging growth company" for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our total annual gross revenues exceed \$1.07 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter, or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three year period.

Table of Contents

Additionally, we are a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of the fiscal year in which (1) the market value of our common stock held by non-affiliates equals or exceeds \$250 million as of the end of that year's second fiscal quarter, or (2) our annual revenues equaled or exceeded \$100 million during such completed fiscal year and the market value of our common stock held by non-affiliates equals or exceeds \$700 million as of the end of that year's second fiscal quarter.

Controlled Company Exemption

Atlas Capital Resources L.P. ("Atlas") and its affiliates currently control approximately 90% of the voting power of our outstanding capital stock and have the power to elect a majority of our directors. Pursuant to Nasdaq listing standards, a company of which more than 50% of the voting power for the election of directors is held by an individual, a group or another company qualifies as a "controlled company." As a controlled company, we are exempt from certain Nasdaq corporate governance requirements, including the requirements to have (i) a board comprised of a majority of independent directors; (ii) compensation of executive officers determined by a majority of the independent directors or a compensation committee comprised solely of independent directors, and (iii) director nominees selected or recommended for our board either by a majority of the independent directors or a nominating committee comprised solely of independent directors. If we cease to be a "controlled company" and our shares continue to be listed on the Nasdaq Global Select Market, we will be required to comply with these standards and, depending on the independence-determination with respect to our then-current directors, we may be required to add additional directors to our board in order to achieve such compliance within the applicable transition periods.

Table of Contents

THE OFFERING

Issuer: Greenidge Generation Holdings Inc.

Class A common stock offered by us: Shares of our class A common stock having an aggregate offering price of up to \$22,800,000.

Manner of offering: "At the market offering" that may be made from time to time through our sales agent. Please read "Plan

of Distribution" in this prospectus supplement for more information.

Use of proceeds: We currently plan to use the net proceeds from this offering, after deducting B. Riley's commissions and

offering expenses payable by us, for general corporate purposes, which may include, among other things, paying or refinancing all or a portion of our indebtedness at the time, and funding acquisitions, capital expenditures and working capital. Please read "*Use of Proceeds*" in this prospectus supplement for more

information.

Conflict of Interest: On March 18, 2022, we issued a secured promissory note, as borrower, in favor of B. Riley Commercial

Capital, LLC, an affiliate of B. Riley. With respect to any portion of the net proceeds from this offering we use to repay borrowings outstanding under such secured promissory note, B. Riley Principal Capital, LLC will receive any amount of the secured promissory note that is repaid with the net proceeds from this offering, and as such, B. Riley will have a "conflict of interest" in this offering of class A common stock within the meaning of FINRA Rule 5121. Consequently, this offering of class A common stock will be conducted in compliance with the provisions of FINRA Rule 5121. Due to this conflict of interest, Northland is acting as a "qualified independent underwriter" in accordance with FINRA Rule 5121, which requires, among other things, that a qualified independent underwriter participate in the preparation of, and exercise the usual standards of "due diligence" with respect to the registration statement and this prospectus supplement and accompanying prospectus. Northland will not receive any additional compensation for acting as a qualified independent underwriter. We have agreed to indemnify Northland for acting as a qualified independent underwriter against certain liabilities under the Securities Act and to

contribute to payments that Northland may be required to make for these liabilities. In addition, B. Riley will not make sales of shares in this offering to any of its discretionary accounts without receiving the specific prior written approval of the account holder and retaining such approval in its records.

Exchange listing and symbol: Our class A common stock is listed on the Nasdaq Global Select Market under the symbol "GREE."

Table of Contents

Material U.S. federal income tax considerations for non-U.S. holders:

The material U.S. federal income tax considerations generally applicable to the ownership and disposition of our class A common stock acquired in this offering by a non-U.S. Holder are described in "Material U.S. Federal Income Tax Considerations for Non-U.S. Holders." Each non-U.S. holder is urged to consult its tax advisors regarding the U.S. federal, state, local, and non-U.S. income and other tax consequences to it of owning and disposing of our class A common stock.

Risk factors:

Investing in our class A common stock involves risks. Please read "*Risk Factors*" on page S-9 of this prospectus supplement, page 8 of the accompanying prospectus and in the documents that we have incorporated by reference, as well as the other cautionary statements throughout this prospectus supplement and the accompanying prospectus, for a discussion of factors you should carefully consider before deciding to invest in our class A common stock.

Table of Contents

RISK FACTORS

You should carefully consider the risks described below together with the risk factors described in reports we file with the SEC and incorporated by reference into the accompanying prospectus, as well as all of the other information in, and incorporated by reference into, this prospectus supplement and the accompanying prospectus, including in our Annual Report on Form 10-K for the year ended December 31, 2021, as supplemented by our Quarterly Reports on Form 10-Q. If any of the risks actually occur, our business, financial condition or results of operations could suffer. In that event, you may lose all or part of your investment in our class A common stock.

Risks Related to this Offering

It is not possible to predict the actual number of shares we will sell under the sales agreement, or the actual gross proceeds resulting from those sales.

Subject to certain limitations in the sales agreement and compliance with applicable law, we have the discretion to deliver a placement notice to B. Riley at any time throughout the term of the sales agreement. The number of shares that are sold through B. Riley after delivering a placement notice will fluctuate based on a number of factors, including the market price of our class A common stock during the sales period, the limits we set with B. Riley in any applicable placement notice, and the demand for our class A common stock during the sales period. Actual gross proceeds may be less than \$22,800,000, which may impact our future liquidity. Because the price per share of each share sold will fluctuate during the sales period, it is not currently possible to predict the number of shares that will be sold or the actual gross proceeds to be raised in connection with those sales.

Our class A common stock offered hereby will be sold in "at the market offerings," and investors who buy shares at different times will likely pay different prices.

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different levels of dilution and different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold in this offering. In addition, there is no minimum sales price above par value or maximum sales price for shares to be sold in this offering. Investors may experience a decline in the value of the shares they purchase in this offering as a result of sales made at prices lower than the prices they paid.

Investors may experience dilution as a result of this offering and future offerings of our class A common stock, preferred stock or other equity securities, which may adversely affect the per-share trading price of our class A common stock.

This offering may have a dilutive effect on our earnings per share and funds from operations per share after giving effect to the issuance of our class A common stock in this offering and the receipt of the expected net proceeds. Our board of directors may authorize the issuance of additional authorized but unissued shares of common stock or other securities at any time, including pursuant to equity incentive plans. The actual amount of dilution from this offering, or from any future offering of common or preferred stock or other equity securities, will be based on numerous factors, particularly the use of proceeds and the return generated by such investment, and cannot be determined at this time. The per-share trading price of our class A common stock could decline as a result of sales of a large number of shares of our class A common stock in the market pursuant to this offering, or otherwise, or as a result of the perception or expectation that such sales could occur.

Future issuances of debt securities, which would be senior to our class A common stock upon liquidation, or preferred equity securities, which would be senior to our class A common stock for purposes of dividend distributions and upon liquidation, may adversely affect the per-share trading price of our class A common stock.

We may in the future attempt to increase our capital resources by issuing additional debt securities and/or additional classes or series of preferred stock. Upon liquidation, holders of our debt securities and lenders with respect to our borrowings, and holders of our preferred stock, will be entitled to receive our available assets prior to distribution to the holders of our class A common stock. Additionally, any convertible or exchangeable securities that we issue in

Table of Contents

the future may have rights, preferences and privileges more favorable than those of our class A common stock. Because our decision to issue securities senior to our class A common stock in the future will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of future issuances. As a result, holders of our class A common stock bear the risk of our future securities issuances reducing the per-share trading price of our class A common stock.

An affiliate of B. Riley may receive benefits in connection with this offering.

On March 18, 2022, we issued a secured promissory note, as borrower, in favor of B. Riley Commercial Capital, LLC, an affiliate of B. Riley. To the extent that we elect to use a portion of the net proceeds from this offering to repay borrowings outstanding under secured promissory note, B. Riley Principal Capital, LLC will receive any amount of the secured promissory note that is repaid with the net proceeds from this offering. These transactions create potential conflicts of interest because B. Riley Principal Capital, LLC has an interest in the successful completion of this offering beyond the sales commissions its affiliate, B. Riley, will receive. These interests may influence the decision regarding the terms and circumstances under which the offering is completed.

Future sales of substantial amounts of our class A common stock, or the possibility that such sales could occur, could adversely affect the market price of our class A common stock.

In order to raise additional capital, we may in the future offer additional shares of our class A common stock or other securities convertible into or exchangeable for our class A common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our class A common stock, or securities convertible or exchangeable into class A common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

Management will have broad discretion as to the use of the proceeds from this offering, and such uses may not improve our financial condition or market value.

Because we have not designated the amount of net proceeds from this offering to be used for any particular purpose, our management will have broad discretion as to the application of the net proceeds from this offering and could use such proceeds for purposes other than those contemplated at the time of the offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not improve our financial condition or the market value of our class A common stock. Our failure to apply these funds effectively could have a material adverse effect on our business, financial condition and results of operations. See "Use of Proceeds."

Table of Contents

USE OF PROCEEDS

The amount of proceeds from this offering will depend upon the number of shares of our class A common stock sold and the market price at which they are sold. There can be no assurance that we will be able to sell any shares under or fully utilize the sales agreement with the sales agent.

We currently plan to use the net proceeds from this offering, after deducting B. Riley's commissions and offering expenses payable by us, for general corporate purposes, which may include, among other things, paying or refinancing all or a portion of our indebtedness at the time, and funding acquisitions, capital expenditures and working capital.

S-11

Table of Contents

PLAN OF DISTRIBUTION (CONFLICT OF INTEREST)

We have entered into a sales agreement with B. Riley and Northland. This prospectus supplement relates to the offering of shares of our class A common stock having an aggregate offering price of up to \$22,800,000 from time to time. B. Riley will use its commercially reasonable efforts to sell on our behalf the shares of our class A common stock requested to be sold by us, consistent with its normal trading and sales practices, under the terms and subject to the conditions set forth in the sales agreement. We have no obligation to sell any shares of our class A common stock under the sales agreement. We may instruct B. Riley not to sell our class A common stock if the sales cannot be effected at or above the price designated by us in any instruction to B. Riley. We or B. Riley may suspend the offering of our class A common stock upon proper notice and subject to other conditions, as specified in the sales agreement.

B. Riley may sell our class A common stock by any method permitted by law deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act. B. Riley will provide written confirmation of a sale to us as soon as practicable after the closing of the trading day on Nasdaq on which it has made sales of the class A common stock pursuant to the sales agreement. Each confirmation will include the number of shares of class A common stock sold on such day, the net proceeds to us and the compensation payable by us to B. Riley in connection with the sales.

Under the terms of the sales agreement, we may also sell shares of class A common stock to B. Riley as principal for its own account at a price agreed upon at the time of sale. If we sell class A common stock to B. Riley as principal, we will enter into a separate terms agreement with B. Riley, and we will describe that agreement in a separate prospectus supplement or pricing supplement.

We will pay B. Riley commissions for its services in acting as sales agent in the sale of our class A common stock. B. Riley will be entitled to compensation in an amount equal to up to 3.0% of the gross proceeds of all class A common stock sold through it as sales agent under the sales agreement. We have also agreed to reimburse B. Riley for actual outside legal expenses incurred by B. Riley in connection with this offering, including B. Riley's counsel fees initially in an amount up to \$60,000, plus an additional amount of \$10,000 for each quarterly period thereafter. We estimate that the total expenses for this offering, excluding compensation payable to B. Riley under the terms of the sales agreement, will be approximately \$500,000.

Settlement for sales of our class A common stock will occur on the second trading day following the date on which any sales are made, or on some other date that is agreed upon by us and B. Riley in connection with a particular transaction, in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

We will report at least quarterly the number of shares of our class A common stock sold through B. Riley, as sales agent, under the sales agreement, the net proceeds to us and the compensation paid by us to B. Riley in connection with any sales.

In connection with the sale of our class A common stock on our behalf, B. Riley will be deemed to be an "underwriter" within the meaning of the Securities Act, and the compensation paid by us to B. Riley will be deemed to be underwriting commissions or discounts. We have agreed to indemnify B. Riley against specified liabilities, including liabilities under the Securities Act and the Exchange Act, and to contribute to payments that B. Riley may be required to make because of such liabilities.

The offering of the shares of class A common stock pursuant to the sales agreement will terminate upon the earlier of (i) the sale of the dollar amount of shares of class A common stock subject to the sales agreement or (ii) the termination of the sales agreement as permitted therein.

Table of Contents

Other Relationships

B. Riley and its affiliates have from time to time provided, and may in the future provide, various investment banking, commercial banking, fiduciary and advisory services for us for which they have received, and may in the future receive, customary fees and expenses. B. Riley and its affiliates may from time to time engage in other transactions with and perform services for us in the ordinary course of their business.

In the ordinary course of its various business activities, B. Riley and certain of its affiliates actively trade debt and equity securities (or related derivative securities) and financial instruments for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of the Company or our affiliates. B. Riley and certain of its affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

The principal business address of B. Riley is 299 Park Avenue, 21st Floor, New York, New York 10171.

Conflict of Interest

On March 18, 2022, we issued a secured promissory note, as borrower, in favor of B. Riley Commercial Capital, LLC, an affiliate of B. Riley. With respect to any portion of the net proceeds from this offering we use to repay borrowings outstanding under such secured promissory note, B. Riley. Principal Capital, LLC will receive any amount of the secured promissory note that is repaid with the net proceeds from this offering, and as such, B. Riley will have a "conflict of interest" in this offering of class A common stock within the meaning of FINRA Rule 5121. Consequently, this offering of class A common stock will be conducted in compliance with the provisions of FINRA Rule 5121. Due to this conflict of interest, Northland is acting as a "qualified independent underwriter" in accordance with FINRA Rule 5121, which requires, among other things, that a qualified independent underwriter participate in the preparation of, and exercise the usual standards of "due diligence" with respect to the registration statement and this prospectus supplement and the accompanying prospectus. Northland will not receive any additional compensation for acting as a qualified independent underwriter. We have agreed to indemnify Northland for acting as a qualified independent underwriter against certain liabilities, including liabilities under the Securities Act and to contribute to payments that Northland may be required to make for these liabilities. In addition, B. Riley will not make sales of shares in this offering to any of its discretionary accounts without receiving the specific prior written approval of the account holder and retaining such approval in its records.

Table of Contents

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a summary of the material U.S. federal income and estate tax consequences of the ownership and disposition of our class A common stock. This summary is limited to Non-U.S. Holders (as defined below) that hold our class A common stock as a capital asset (generally, property held for investment) for U.S. federal income tax purposes. This summary does not discuss all of the aspects of U.S. federal income and estate taxation that may be relevant to a Non-U.S. Holder in light of the Non-U.S. Holder's particular investment or other circumstances. Accordingly, all prospective Non-U.S. Holders should consult their own tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our class A common stock.

This summary is based on provisions of the Internal Revenue Code of 1986, as amended (the "Code"), applicable U.S. Treasury regulations and administrative and judicial interpretations, all as in effect or in existence on the date of this prospectus supplement. Subsequent developments in U.S. federal income or estate tax law, including changes in law or differing interpretations, which may be applied retroactively, could alter the U.S. federal income and estate tax consequences of owning and disposing of our class A common stock as described in this summary. There can be no assurance that Internal Revenue Service (the "IRS") will not take a contrary position with respect to one or more of the tax consequences described herein and we have not obtained, nor do we intend to obtain, a ruling from the IRS with respect to the U.S. federal income or estate tax consequences of the purchase, ownership or disposition of our class A common stock.

As used in this summary, the term "Non-U.S. Holder" means a beneficial owner of our class A common stock that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia;
- an estate whose income is includible in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust, if (1) a U.S. court is able to exercise primary supervision over the trust's administration and one or more "United States persons" (within the meaning of the Code) has the authority to control all of the trust's substantial decisions, or (2) the trust has a valid election in effect under applicable U.S. Treasury regulations to be treated as a United States person.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds our class A common stock, the tax treatment of a partner in such a partnership generally will depend upon the status of the partner, the activities of the partnership and certain determinations made at the partner level. Partnerships, and partners in partnerships, that hold class A common stock should consult their own tax advisors as to the particular U.S. federal income and estate tax consequences of purchasing, owning and disposing of our class A common stock that are applicable to them.

This summary does not consider any specific facts or circumstances that may apply to a Non-U.S. Holder and does not address any special tax rules that may apply to particular Non-U.S. Holders, such as:

- a Non-U.S. Holder that is a financial institution, insurance company, regulated investment company, tax-exempt organization, pension plan, broker, dealer or trader in stocks, securities or currencies, U.S. expatriate, controlled foreign corporation or passive foreign investment company;
- a Non-U.S. Holder holding class A common stock as part of a conversion, constructive sale, wash sale or other integrated transaction or a hedge, straddle or synthetic security;
- a Non-U.S. Holder whose functional currency is not the U.S. dollar;
- a Non-U.S. Holder that holds or receives class A common stock pursuant to the exercise of any employee stock option or otherwise as compensation; or
- a Non-U.S. Holder that at any time owns, directly, indirectly or constructively, 5% or more of our outstanding class A common stock.

Table of Contents

In addition, this summary does not address any U.S. state or local, or non-U.S. or other tax consequences, or any U.S. federal income or estate tax consequences for beneficial owners of a Non-U.S. Holder, including stockholders of a controlled foreign corporation or passive foreign investment company that holds class A common stock.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS, AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP, AND DISPOSITION OF OUR CLASS A COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Distributions on Our Class A Common Stock

If we make distributions of cash or property (other than certain pro rata distributions of class A common stock) with respect to our class A common stock, any such distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles and will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. A Non-U.S. Holder who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements. A Non-U.S. Holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may generally obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim with the IRS. Non-U.S. Holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

Dividends that are treated as effectively connected with a trade or business conducted by a Non-U.S. Holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the Non-U.S. Holder within the United States are generally exempt from the 30% withholding tax if the Non-U.S. Holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income is taxed on a net income basis at the same U.S. federal income tax rates applicable to United States persons (as defined in the Code). Any U.S. effectively connected income received by a Non-U.S. Holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

If the amount of a distribution exceeds our current and accumulated earnings and profits, such excess first will be treated as a tax-free return of capital to the extent of a Non-U.S. Holder's adjusted tax basis in its shares of our class A common stock, and thereafter will be treated as capital gain from a disposition of class A common stock subject to the tax treatment described below in "—Dispositions of Our class A common stock."

The foregoing discussion is subject to the discussions below under "—Backup Withholding and Information Reporting" and "—FATCA Withholding."

Disposition of Our Class A Common Stock

We believe that we may be a "United States real property holding corporation." Generally, a corporation is a United States real property holding corporation if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests and its other assets used or held for use in a trade or business. Notwithstanding our potential status as a "United States real property holding corporation," a Non-U.S. Holder generally will not be subject to U.S. federal income tax (including U.S. withholding tax) on gain recognized on any sale or other disposition of our class A common stock unless:

Table of Contents

• the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business in the United States and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by the Non-U.S. Holder in the United States; in these cases, the Non-U.S. Holder will be taxed on a net income basis at the same U.S. federal income tax rates applicable to United States persons (as defined in the Code), and if the Non-U.S. Holder is a foreign corporation, an additional branch profits tax at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty, may also apply;

- the Non-U.S. Holder is a nonresident alien present in the United States for 183 days or more in the taxable year of the disposition and certain other requirements are met, in which case the Non-U.S. Holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the net gain derived from the disposition, which may be offset by U.S.-source capital losses of the Non-U.S. Holder, if any; provided the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses; or
- if we were a "United States real property holding corporation," the Non-U.S. Holder actually or constructively owns more than five percent of our class A common stock at any time during the shorter of the five-year period ending on the date of disposition or the period that the Non-U.S. Holder held our class A common stock, provided that our class A common stock is "regularly traded on an established securities market," within the meaning of Section 897 of the Code and applicable Treasury Regulations, during the calendar year in which the sale or other disposition occurs.

The foregoing discussion is subject to the discussions below under "—Backup Withholding and Information Reporting" and "—FATCA Withholding."

Federal Estate Tax

Our class A common stock that is owned (or treated as owned) by an individual who is not a U.S. citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) at the time of death will be included in the individual's gross estate for U.S. federal estate tax purposes, unless an applicable estate tax or other treaty provides otherwise and, therefore, may be subject to U.S. federal estate tax.

Backup Withholding and Information Reporting

Generally, distributions in respect of our class A common stock to a Non-U.S. Holder and the amount of any tax withheld from such payments must be reported annually to the IRS and to the Non-U.S. Holder. Copies of these information returns may be made available by the IRS to the tax authorities of the country in which the Non-U.S. Holder is a resident under the provisions of an applicable income tax treaty. Under certain circumstances, backup withholding of U.S. federal income tax may apply to distributions in respect of our class A common stock to a Non-U.S. Holder if the Non-U.S. Holder fails to certify under penalties of perjury that it is not a United States person.

Payments of the proceeds of the sale or other disposition of our class A common stock to or through a foreign office of a U.S. broker or of a foreign broker with certain specified U.S. connections will be subject to information reporting requirements, but generally not backup withholding, unless (i) the broker has evidence in its records that the payee is not a United States person, and the broker has no actual knowledge or reason to know to the contrary or (ii) the payee otherwise establishes an exemption. Payments of the proceeds of a sale or other disposition of our class A common stock to or through the U.S. office of a broker will be subject to information reporting and backup withholding unless the payee certifies under penalties of perjury that it is not a United States person (and the payor has no actual knowledge or reason to know to the contrary) or otherwise establishes an exemption.

Any amount withheld under the backup withholding rules generally will be allowed as a refund or credit against a Non-U.S. Holder's U.S. federal income tax liability (if any); provided that the required information is timely furnished to the IRS. Non-U.S. Holders should consult their tax advisors about the filing of a U.S. federal income tax return in order to obtain a refund.

Table of Contents

FATCA Withholding

Non-U.S. Holders should be aware that, under Sections 1471 through 1474 of the Code ("FATCA"), a 30% withholding tax will be imposed on certain payments (which could include distributions in respect of our class A common stock) to a foreign entity if such entity fails to satisfy certain disclosure and reporting rules that in general require that (i) in the case of a foreign financial entity, the entity or a related entity register with the IRS and identify and provide information in respect of financial accounts with such entity held (directly or indirectly) by United States persons and United States owned foreign entities, and (ii) in the case of a non-financial foreign entity, the entity identify and provide information in respect of substantial United States owners of such entity. Foreign entities that hold our class A common stock generally will be subject to this tax unless they certify on an applicable IRS Form W-8 (generally, IRS Form W-8BEN-E) that they comply with, or are deemed to comply with, or are exempted from the application of, these rules.

Various requirements and exceptions are provided under FATCA and additional requirements and exceptions may be provided in subsequent guidance. Further, the United States has entered into many intergovernmental agreements ("IGAs") with foreign governments relating to the implementation of, and information sharing under, FATCA and such IGAs may alter one or more of the FATCA information reporting rules.

Under certain circumstances, a Non-U.S. Holder might be eligible for refunds or credits of such taxes. Holders are encouraged to consult with their tax advisors regarding the possible implications of FATCA on their investment in our class A common stock.

Table of Contents

LEGAL MATTERS

Shearman & Sterling LLP, New York, New York will issue opinions about the validity of the class A common stock and various legal matters in connection with the offering on our behalf. An investment vehicle comprised of certain partners of Shearman & Sterling LLP, members of their families and other related persons has an interest in us representing less than 0.25% of our aggregate capital stock. Certain legal matters in connection with the class A common stock offered hereby will be passed upon for the sales agent by Duane Morris LLP, New York, New York.

S-18

Table of Contents

EXPERTS

Our consolidated financial statements as of and for the years ended December 31, 2021 and 2020 incorporated by reference herein, have been audited by Armanino, LLP, an independent registered public accounting firm, as set forth in their report, incorporated by reference herein, and are included in reliance upon the report given on the authority of such firm as experts in accounting and auditing.

The consolidated financial statements of Support.com as of and for the years ended December 31, 2020 and 2019 incorporated by reference herein, have been audited by Plante & Moran, PLLC, an independent registered public accounting firm, as set forth in their report, which is incorporated by reference herein, and are included in reliance upon the report given on the authority of such firm as experts in accounting and auditing.

S-19

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act, with respect to the securities covered by this prospectus supplement. This prospectus supplement, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some of which is contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our class A common stock, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus supplement concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus supplement relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. You may obtain copies of this information by mail from the public reference room of the SEC at 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC also maintains an Internet website that contains reports, proxy and information statements and other information regarding issuers, like us, that file electronically with the SEC. The address of that website is http://www.sec.gov.

We are subject to the informational requirements of the Exchange Act, and, in accordance with the Exchange Act, file reports, proxy and information statements and other information with the SEC. Such annual, quarterly and special reports, proxy and information statements and other information can be inspected and copied at the locations set forth above. We make available free of charge on or through our website, www.greenidge.com, our filings with the SEC pursuant to Sections 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. We make our website content available for information purposes only. Information contained on, or accessible through, our website is not incorporated by reference into this prospectus supplement and does not constitute a part of this prospectus supplement.

Table of Contents

DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" certain of the information that we file with it after the date of the filing of the registration statement of which this prospectus supplement forms a part, which means that we can disclose important information to you by referring you to the documents containing that information. The information incorporated by reference is considered to be part of this prospectus supplement, and later information that we file with the SEC will automatically update and supersede this information.

The documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (excluding any information furnished pursuant to Item 2.02 or Item 7.01 on any Current Report on Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary), including all such documents we may file with the SEC after the date on which the registration statement that includes this prospectus supplement was initially filed with the SEC and prior to the effectiveness of the registration statement and all such documents we may file with the SEC after the effectiveness of the registration statement, are incorporated by reference in this prospectus supplement until the termination of the offering under this registration statement:

- our Annual Report on Form 10-K for the year ended December 31, 2021, filed on March 31, 2022;
- our Quarterly Reports on Form 10-Q for the quarterly periods ended March 31, 2022 and June 30, 2022, filed on May 16, 2022 and August 15, 2022, respectively;
- Unaudited Pro Forma Consolidated Statements of Operations of the Company for the year ended December 31, 2021, and the notes thereto, contained in our Current Report on <u>Form 8-K/A</u> filed on April 1, 2022 and our Current Reports on Form 8-K filed on <u>March 24, 2022</u>, <u>April 8, 2022</u>, <u>April 14, 2022</u> and <u>September 7, 2022</u>;
- the description of our class A common stock set forth under the heading "Description of Securities" in our prospectus filed pursuant to Rule 424(b) under the Securities Act of 1933 on August 10, 2021; and
- Financial Statements of Support.com, Inc. contained in <u>Exhibit 99.2</u> to our Current Report on Form 8-K filed on September 15, 2021 (Acc-no: 0001193125-21-273493).

We will provide a copy of these filings (including certain exhibits that are specifically incorporated by reference therein) to each person, including any beneficial owner, to whom a prospectus supplement is delivered. You may request a copy of any or all of these filings at no cost, by writing or calling us at:

Greenidge Generation Holdings Inc. Attention: Investor Relations 135 Rennell Drive, 3rd Floor Fairfield, CT 06890 (315) 536-2359

Copies of certain information filed by us with the SEC, including our Annual Report and Quarterly Reports, are also available on our website at www.greenidge.com. Information contained on our website or accessible through our website is not incorporated by reference herein.

You should read the information relating to us in this prospectus supplement together with the information in the documents incorporated by reference. Nothing contained herein shall be deemed to incorporate information furnished, but not filed, with the SEC.

Table of Contents

Up to \$22,800,000



Class A Common Stock
PROSPECTUS

B. Riley Securities

Northland Capital Markets

, 2022

Table of Contents

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

Set forth below are the expenses (other than underwriting discounts and commissions) expected to be incurred in connection with the offering of the securities registered hereby.

SEC registration fee	\$ 9,2	270
Accounting fees and expenses		*
Legal fees and expenses		*
Miscellaneous fees and expenses		*
Total	\$	*

^{*} These fees are calculated based on the number of issuances and amount of securities offered and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers.

Section 145 of the DGCL provides that a corporation may indemnify directors and officers as well as other employees and individuals against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement in connection with specified actions, suits and proceedings whether civil, criminal, administrative, or investigative, other than a derivative action by or in the right of the corporation, if they acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe their conduct was unlawful. A similar standard is applicable in the case of derivative actions, except that indemnification extends only to expenses, including attorneys' fees, incurred in connection with the defense or settlement of such action and the statute requires court approval before there can be any indemnification where the person seeking indemnification has been found liable to the corporation. The statute provides that it is not exclusive of other indemnification that may be granted by a corporation's certificate of incorporation, bylaws, disinterested director vote, stockholder vote, agreement or otherwise.

Our amended and restated certificate of incorporation and bylaws provide for indemnification of directors and officers to the fullest extent permitted by law, including payment of expenses in advance of resolution of any such matter.

We have entered into indemnification agreements with each of our directors and executive officers. These agreements, among other things, require us to indemnify each director and executive officer to the fullest extent permitted by Delaware law, including indemnification expenses such as attorneys' fees, judgments, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person's services as a director or executive officer.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling Greenidge under the foregoing provisions, we have been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Greenidge may enter into one or more underwriting agreements which provide that the underwriters will be obligated, under some circumstances, to indemnify our directors, officers and controlling persons against specified liabilities, including liabilities under the Securities Act.

Table of Contents

Item 16. Exhibits.

The following documents are filed as exhibits to this registration statement, including those exhibits incorporated herein by reference to a prior filing of Greenidge Generation Holdings Inc. under the Securities Act or the Exchange Act as indicated in parentheses:

Exhibit Number	Exhibits
1.1**	At Market Issuance Sales Agreement, dated September 19, 2022, by and among Greenidge Generation Holdings Inc., B. Riley Securities, Inc. and Northland Securities, Inc.
2.1+	Agreement and Plan of Merger, dated as of March 19, 2021, among Greenidge Generation Holdings Inc., Support.com, Inc. and GGH Merger Sub, Inc. (incorporated by reference to Annex A to the proxy statement/prospectus forming part of the Registration Statement on Form S-4 filed on May 4, 2021)
4.1	Form of Registration Rights Agreement, dated January 29, 2021 (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-4 filed on May 4, 2021)
4.2	Form of Right of First Refusal and Co-Sale Agreement, dated January 29, 2021 (incorporated by reference to Exhibit 4.2 to the Registration Statement on Form S-4 filed on May 4, 2021)
4.3	Form of Registration Compliance Agreement dated September 1, 2021 (incorporated by reference to Exhibit 4.4 to the Company's Registration Statement on Form S-1 filed on September 1, 2021)
4.4	Investor Agreement by and between 210 Capital, LLC and Greenidge Generation Holdings Inc. filed on September 9, 2021 (incorporated by reference to Exhibit 4.5 to the Company's Registration Statement on Form S-1 filed on September 14, 2021)
5.1**	Opinion of Shearman & Sterling LLP as to the legality of the securities being registered
23.1**	Consent of Armanino LLP
23.2**	Consent of Plante & Moran PLLC
23.3**	Consent of Shearman & Sterling LLP (included in Exhibit 5.1)
24.1**	Powers of Attorney (included on signature pages of this registration statement)
107**	Filing Fee Table

^{**} Filed herewith.

⁺ Certain schedules and exhibits have been omitted pursuant to Item 601(a)(5) or Item 601(b)(2) of Regulation S-K. We hereby undertake to furnish copies of the omitted schedule or exhibit upon request by the Securities and Exchange Commission.

Table of Contents

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

(a) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(i), (a)(ii) and (a)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (b) That, for the purpose of determining any liability under the Securities Act of 1933, as amended, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (d) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

Table of Contents

(e) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, as amended, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Fairfield, Connecticut on September 19, 2022.

GREENIDGE GENERATION HOLDINGS INC.

By: /s/ Jeffrey E. Kirt Jeffrev E. Kirt Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Jeffrey E. Kirt, Robert Loughran and Terence A. Burke, and each of them, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments, including post-effective amendments, to this registration statement, and any registration statement relating to the offering covered by this registration statement and filed pursuant to Rule 462(b) under the Securities Act of 1933, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that each of said attorneys in fact and agents or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities indicated below as of September 19, 2022.

Signature	Title
/s/ Jeffrey E. Kirt	Chief Executive Officer (Principal
Jeffrey E. Kirt	Executive Officer) and Director
/s/ Robert Loughran	Chief Financial Officer (Principal Financial and Principal
Robert Loughran	Accounting Officer)
/s/ George (Ted) Rogers	Vice Chairman of the Board of Directors
George (Ted) Rogers	
/s/ Timothy Fazio	Chairman of the Board of Directors
Timothy Fazio	
/s/ Jerome Lay	Director
Jerome Lay	
/s/ Andrew M. Bursky	Director
Andrew M. Bursky	
/s/ Timothy Lowe	Director
Timothy Lowe	

Table of Contents

/s/ Daniel Rothaupt	Director
Daniel Rothaupt	
/s/ David Filippelli	Director
David Filippelli	
/s/ Michael Neuscheler	Director
Michael Neuscheler	

II-6