

GREENIDGE GENERATION HOLDINGS INC.'S SUBMISSION IN RESPONSE TO THE LETTER DATED DECEMBER 2, 2021

Thank you for your December 2, 2021 letter requesting information related to our operation in New York State and plans for the future. Greenidge Generation Holdings Inc. (“Greenidge”) appreciates your interest in the company and welcomes this opportunity to share its story of environmental and economic stewardship in New York with you and your staff.

Greenidge’s Dresden facility (the “Dresden facility” or the “Facility”) is an Upstate New York success story. The Facility, located in the Town of Torrey, NY, previously served as a coal-fired power plant commissioned by New York State Electric and Gas Corporation in 1937. For nearly 75 years, coal trains and trucks rumbled through the community. Greenidge changed that. The company converted the Facility into a clean-burning natural gas facility by working with the New York State Department of Environmental Conservation (“NYSDEC”) and the U.S. Environmental Protection Agency (“EPA”). The Facility has never operated on coal under Greenidge’s ownership, and it will never burn coal again.

The Facility is fully compliant with its Title V Air Permit¹ and State Pollutant Discharge Elimination System (“SPDES”) Water Permit² (collectively, the “Permits”). These Permits have all been duly issued pursuant to New York’s Uniform Procedures Act and New York’s State Environmental Quality Review Act (“SEQRA”) based upon formal determinations made by the NYSDEC that Greenidge satisfied any applicable criteria in the various permitting programs. NYSDEC analyzed the full range of potential adverse environmental impacts and found that the Permits would allow the Facility to operate on a full-time (24/7) basis at full capacity without causing significant adverse impacts to surface waters, air, plants or animals, historic or archaeological resources, energy demands, or solid waste management. NYSDEC further found that the limits and conditions in the permits ensure that Seneca Lake will be protected. These findings, made during the SEQRA review, are memorialized in the June 28, 2016 amended Negative Declaration for the Permits.

Despite reports to the contrary, the Facility was *not* restarted as a bitcoin mining operation; rather, following a protective layup, the Facility returned to the wholesale energy market as a merchant power provider, and it continues to send a significant amount of the power it generates to the New York Independent System Operator (the “NYISO”). The NYISO operates the State’s energy grid, thereby supporting the electricity needs of thousands of homes and businesses. The Facility *does not, nor has it ever*, produced electricity solely for the purpose of bitcoin mining. Approximately two years after the Facility’s coal-to-gas conversion was complete, Greenidge began a small cryptocurrency mining project of approximately 1 megawatt (“MW”) drawn from the Facility’s total capacity of 106 MW in 2019. A subsequent project of approximately 20 MW began in 2020. Irrespective of these projects, the Facility sends power to the NYISO energy grid every day that it operates.

¹ See Title V Air Permit ID: 8-5736-00004/00017.

² See SPDES DEC Permit No. 8-5736-00004/00001 (NY-001325).

Importantly, the Facility is not generating *any* air emissions—either from electricity used for bitcoin mining or for delivery to the NYISO energy grid—that are not *already* (a) subject to the strict terms and conditions of its existing Title V Air Permit and (b) fully accounted for by New York State’s federally approved Clean Air Act State Implementation Plan.

When running at full capacity, the Facility is only 106 MW out of approximately 38,000 MW of power generation capacity in the State of New York³—approximately 0.3 percent. And, even if operating at full capacity 24/7, the Facility’s emissions would amount to approximately 0.2 percent of the total greenhouse gas (“GHG”) emissions target set by New York State for 2030.⁴

While the Dresden facility’s operation is comparatively small, we are extremely proud of our environmental record. We are fully committed to doing our part to help New York State achieve its statewide GHG emissions reduction goals under the Climate Leadership and Community Protection Act (“CLCPA”), which seeks to reduce economy-wide GHG emissions 40 percent by 2030 and no less than 85 percent by 2050 compared to 1990 levels. The Facility’s current onsite and upstream *potential* carbon dioxide equivalent emissions are approximately 70 percent lower than the coal-fired power plant’s actual emissions in 1990. The Facility’s *actual* carbon dioxide equivalent (“CO₂e”) emissions for the last twelve months ending November 30, 2021 (the “LTM Period”) were approximately 89 percent below the 1990 emissions. We have also identified several potential new projects that have the potential to reduce aggregate GHG emissions by approximately 40 percent in the coming years.

GHG emissions, naturally, fluctuate depending upon the amount of power generated in any given year and are dependent on several factors, most notably the weather, as the NYISO demand for power generally increases during periods of extreme weather. The 2020 emissions level for the Facility amounted to approximately 36 percent of the allowable level set forth under its existing Title V Air Permit (*i.e.*, 64 percent lower than the permitted level). For the LTM Period, the Facility’s GHG emissions were approximately 43 percent of the permitted level (*i.e.*, 57 percent lower than the permitted level).

With respect to the concerns about the potential impact the Facility may have on water temperatures, please consider the following: to put the maximum allowable water discharge from the Facility into perspective, the equivalent discharge calculation is equal to approximately one *teaspoon* of water in a full bathtub.⁵

³ New York Control Area generating capability for summer 2021 was 37,789 MW. *See* 2021 Load & Capacity Data, NYISO Gold Book (Apr. 2021), available at <https://www.nyiso.com/documents/20142/2226333/2021-Gold-Book-Final-Public.pdf/b08606d7-db88-c04b-b260-ab35c300ed64>.

⁴ Greenidge’s maximum allowable CO₂e emissions under its existing Title V Air Permit are 641,878 tons on a rolling 12-month basis which is approximately 0.2 percent of the total Statewide Emissions Target of approximately 265 million tons of CO₂e for calendar year 2030.

⁵ Seneca Lake is 38 miles long and contains approximately 4.2 trillion gallons of water. The Facility’s SPDES Water Permit allows discharge of 135 million gallons of water per day. 135 million / 4.2 trillion = 0.003 percent. A standard bathtub holds approximately 42 gallons of water. Therefore, 0.003 percent of 42 gallons = 0.00126 gallons, which equals 1.03 teaspoons.

As set forth in response to Request 6 below, the average temperature differential of water intake and outflow at the Facility for the LTM Period has been approximately 9 degrees, which is well below the permissible temperature differential of water intake and outflow under the SPDES Water Permit.

We are equally proud of our positive and growing economic impact in New York State. For decades, upstate New Yorkers have been told they would see new industries and opportunities emerge. Greenidge is making that long-awaited promise a reality by partnering with the International Brotherhood of Electrical Workers (“IBEW”) and several great local companies to bring a piece of the world’s digital future to the Finger Lakes Region. The Facility had two full-time employees in 2014 and currently employs approximately 50 full-time employees. A recent economic impact analysis conducted by New York-based Appleseed, Inc. (“Appleseed”) in 2021 outlines Greenidge’s significant and positive economic impact on the Finger Lakes Region and New York State.⁶ Key jobs and wages findings from that analysis included:

- From 2014 through 2020, Greenidge’s economic investments directly and indirectly supported 183 jobs in New York State in construction and related industries, with nearly \$13.4 million in employee earnings.
- In 2020, full-time employees’ annual salaries and wages at Greenidge averaged \$77,565—more than double the average earnings of all wage-and-salary workers in Yates County in 2019.

For these and other reasons, Greenidge is pleased to enjoy broad support in Upstate New York, including from local government, civic organizations, many Seneca Lake neighbors, and the IBEW, which is working to help Greenidge enhance the Facility.⁷

As you know, bitcoin is becoming ubiquitous around the globe, leveling the financial playing field for millions by enabling more equitable access and cheaper, faster, and more efficient payments compared to traditional methods. As you also know, bitcoin mining is the processing and recording transactions on the bitcoin blockchain. The Facility represents a small fraction of the global bitcoin mining capacity today—roughly 0.8 percent⁸—and represents

⁶ Greenidge Generation LLC: Economic Impact in the Town of Torrey, Yates County and New York State, Appleseed, Inc. (May 2021), available at <https://greenidge.com/wp-content/uploads/2021/09/Greenidge-Economic-Study-Appleseed.pdf>.

⁷ See *IBEW Local 840 to support for Greenidge Generation at hearing*, The Chronicle Express (Oct. 13, 2021), available at <https://www.chronicle-express.com/story/news/2021/10/13/ibew-local-840-support-greenidge-generation-hearing/8439201002/>; see also *Yates Co. Legislature unanimously supports Greenidge*, The Chronicle Express (Oct. 13, 2021), available at <https://www.chronicle-express.com/story/news/2021/10/13/yates-co-legislature-unanimously-supports-greenidge/8439859002/>; *Yates Co. Farm Bureau supports Greenidge*, The Chronicle Express (Dec. 10, 2021), available at <https://www.chronicle-express.com/story/news/2021/12/10/yates-co-farm-bureau-supports-greenidge/6407560001/>.

⁸ Based on our current hashrate of approximately 1.4 EH/s and current global hashrate of approximately 178 EH/s as reported by Coin Metrics on a 14-day rolling basis as of 12/15/2021.

approximately 2 percent of U.S. mining capacity.⁹ For comparison, there are single sites in the U.S. that are ramping up to fifteen or more times the Facility's approximately 50 MW of bitcoin mining capacity. We are proud that our small facility is helping make this new financial reality possible. We are making Upstate New York stronger and we are helping to ensure the security, stability, sustainability, and decentralization of the bitcoin blockchain for millions of users in the U.S. and abroad.

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We are pleased to share more information below in response to your specific requests.

Request 1. How much does Greenidge's Dresden, New York plant currently emit annually in terms of metric tons of carbon dioxide equivalent? What is the current annual energy production of the plant?

Request 2. What is the annual electricity consumption used for Bitcoin mining at the Dresden facility?

In connection with Requests 1 and 2, the Dresden facility is permitted to emit up to 641,878 tons of CO₂e on a rolling twelve month basis. This level was reached following extensive analysis by the NYSDEC during the Title V Air permitting process, which concluded with the issuance of a new permit in 2016. Total permissible emissions are based upon the Facility running at full capacity, 100 percent of the time, twenty-four hours a day, seven days a week, 365 days a year.

For reference, the Facility's nameplate capacity is approximately 930,000 megawatt-hours ("MWh") of electricity production annually.

For the LTM Period, the Facility emitted 273,326 tons of CO₂e (approximately 57 percent below the facility's permitted level). For the LTM Period, the Facility produced 424,841 MWh of electricity, and 272,828 MWh were used for bitcoin mining.

Request 3. Your company is planning to significantly scale both energy production and Bitcoin mining operations in the coming months and years. Please describe your scaling plans.

a. What is your projection for your annual emissions and energy production once the expansion is complete? What is your timeframe for completion?

⁹ According to recent data from the Cambridge Centre for Alternative Finance, 35.4% of bitcoin's global hashrate is domiciled in the United States. Current global hashrate is estimated to be 178 EH/s as reported by Coin Metrics on a 14-day rolling basis of 12/15/2021, resulting in an estimate of 63.0 EH/s for aggregate U.S. hashrate. Greenidge's approximately 1.4 EH/s of capacity represents approximately 2% the 63.0 EH/s of estimated U.S. mining capacity.

- b. What are your specific plans for increasing Bitcoin mining, and what will be the total electricity consumption for this mining once the expansion is complete?**
 - i. What is your projected electricity consumption for Bitcoin production at the Dresden plant for each of the next five years?**
 - ii. What is your projected electricity consumption for Bitcoin production at all over your plants combined over the next five years?**
- c. You recently announced the purchase of 10,000 S19j Pro bitcoin miners representing 1 EH of mining capacity for your anticipated Spartanburg, South Carolina facility. How many bitcoin mining units do you currently have at your Dresden location, and how many will you have in total once your expansion is complete? How many EH/s of mining capacity will that represent? What is your average annual energy consumption per mining unit?**
- d. What specific plans do you have to address the environmental impact of this scaling, outside of the purchasing of carbon offsets?**

Contrary to media reports, Greenidge has *not* announced any plans to expand power generation capacity at the Dresden facility or anywhere else in the State of New York. Greenidge has announced plans to expand its bitcoin mining operations beyond the Dresden facility,¹⁰ but has not announced any plans to expand energy production at the Facility.

The Dresden Facility’s Application for Title V Permit Renewal (the “Renewal Application”)—which governs emissions regardless of how the power is used—did not request any increase in generation capacity or any relief from any of the conditions in its existing Title V Air Permit. The NYSDEC has deemed the Renewal Application complete, stating, “*The renewal application is essentially unchanged from the existing permit. The renewal application and draft permit do not request or allow any additional emissions.*”¹¹ To be clear, the Dresden facility is the only location owned by Greenidge that produces electricity, and therefore, the only location that emits GHG. Greenidge’s GHG emissions are directly correlated to energy production, which supports the State’s energy grid and the electricity needs of thousands of homes and businesses.

Greenidge currently operates approximately 50 MW of bitcoin mining, which represents approximately 1.4 EH/s of mining capacity. Substantially all of this capacity is housed at Greenidge’s Dresden facility. There are approximately 17,000 mining units at the Facility, and

¹⁰ See Press Release, *Greenidge Generation Announces Comprehensive Expansion Plans* (Oct. 21, 2021), available at https://greenidge.com/wp-content/uploads/2021/10/GREE-Expansion_10.21.2021.pdf.

¹¹ NYSDEC Permit Review Report (Sep. 9, 2021), available at https://www.dec.ny.gov/docs/permits_ej_operations_pdf/greenidgepr.pdf.

the average miner at the Facility consumes approximately 2.9 kilowatts of electricity. The amount of energy produced at the Facility is dependent upon the sum of (i) the amount of mining capacity at the site, which is currently approximately 50 MW and (ii) the demand for power from the NYISO energy grid, which is dependent on a number of factors, including but not limited to the weather, as the NYISO demand for power is generally greater during periods of peak heat or cold. But in all events, the total energy produced and GHG emissions generated at the Facility are controlled by the existing Title V Air Permit. Given the uncertainties with predicting such factors, most notably the weather, Greenidge does not maintain the projections requested in connection with this request.

To achieve its planned bitcoin mining expansion, Greenidge has recently ordered a total of 26,500 units from Bitmain. With these orders, Greenidge's total mining capacity will increase to approximately 49,000 miners representing 4.7EH/s and 144 MW of capacity. Greenidge is currently evaluating a pipeline of approximately ten potential sites in North America. Greenidge will evaluate where to deploy its mining equipment based on the sites available, which is expected to change over time. Greenidge has also stated that it expects to have at least 500 MW of mining capacity across multiple locations by 2025.

Regarding its efforts to offset its carbon footprint, Greenidge plans to continue to offset 100 percent of the carbon emissions associated with its mining operations at the Dresden facility and future locations. Beyond this commitment, Greenidge intends to use the next five years allowed by the renewal of the Facility's Title V Air Permit ending in 2026 to assess its ability to further improve efficiency and reduce GHG emissions at the Facility. Specifically, Greenidge has identified several additional GHG mitigation projects that it will carefully evaluate over the next 5-year Title V Air Permit renewal period, including:

- (1) installation of a variable frequency drive on the existing 2,000 horsepower booster exhaust fan;
- (2) redesign of the exhaust gas duct work system;
- (3) creating up to 15 MW of community solar farm capacity;
- (4) the installation of a solar farm on former coal pile area at the site;
- (5) replacement of the catalyst in the Selective Catalytic Reduction ("SCR") system; and
- (6) co-firing hydrogen with natural gas.

In addition, Greenidge will also continue to participate in the Regional Greenhouse Gas Initiative ("RGGI"), a market-based cap-and-invest program in which participating states (such as New York) sell CO₂ allowances through auctions and invest the proceeds in energy efficiency, renewable energy, and other consumer benefit programs to spur innovation in the clean energy economy and create local green jobs. Greenidge purchases RGGI allowances each year to cover 100 percent of its CO₂ emitted from power generation and has done so since it began gas-fired operations in 2017. Through its participation in the RGGI program, 100 percent of the electricity produced by Greenidge, including the amount consumed behind-the-meter for bitcoin mining, is produced pursuant to this cap-and-invest system.

Request 4. Your company’s claim that Greenidge is the first 100% carbon-neutral bitcoin transaction processor in the United States is based on the purchasing of carbon offsets. Please provide information on the company through which you purchased these offsets, the location of the offsets, and any additional information that would support your claim that these offsets are a satisfactory counterbalance to your plant’s emissions and are sufficient in making your overall operations environmentally friendly.

In May 2021, Greenidge announced a policy of voluntarily offsetting its carbon footprint from bitcoin mining. Specifically, Greenidge is voluntarily purchasing carbon offset credits generated by a portfolio of U.S. GHG reduction projects in an amount equal to offset the carbon emissions associated with Greenidge’s bitcoin mining operation, both in New York and other future locations. Each underlying project has been reviewed and certified by one of three well-recognized Offset Project Registries—American Carbon Registry (“ACR”), Climate Action Reserve (“CAR”), or Verra—ensuring that any projects funded by the credits Greenidge purchases have or will reduce emissions and/or increase sequestration of GHG emissions in a manner that is real, permanent, and verifiable.

The offset credits Greenidge has purchased to date, in order to offset the Dresden facility’s emissions for 2021, were purchased through Evolution Markets Inc., acting as a broker. The location of the underlying projects are: Waterloo, NY; Itasca County, MN; St. Louis County, MN; Koochiching County, MN; Atkin County, MN; Clearwater County, MN; Beltrami County, MN; Cass County, MN; Dover, OH; and Gaston County, NC.

This widely recognized process is used by companies and consumers alike to reduce or offset their carbon footprint by funding carbon-reducing projects. Sponsors of carbon-reducing projects use the proceeds of carbon offset credit sales to finance projects that otherwise may not have been economically viable.

Request 5. In order to prevent impingement and entrainment of fish, larvae, and other wildlife through water intake, the federal Clean Water Act requires facilities withdrawing upwards of 2 million gallons a day for cooling purposes to cover intake pipes with protective screens, for which New York’s Department of Environmental Conservation has given Greenidge until late 2022 to comply. I am aware you have recently installed variable speed drives on your facility’s water pumps to slow the speed of water intake.

- a. **What does your data say about fish impingement and entrainment mortality – on both a monthly and annual basis – caused by your plant? How does your impingement data compare to the Environmental Protection Agency’s (EPA) proposed numeric performance standard of limiting fish impingement mortality to no more than 12% on an annual average and 31% on a monthly average, and how does your entrainment data compare to the EPA**

standard for new units of reducing entrainment mortality to the equivalent of 90% of reductions achieved by closed-cycle cooling?

- b. Have you undertaken additional studies on this matter since your 2019 Cylindrical Wedge-Wire Screen Pilot Study in 2019? What measures are you taking to reduce impingement and entrainment, and what other actions are you taking to protect wildlife in the lake?**

Under prior ownership, the coal-fired plant operated for decades without a cooling water intake structure aimed at minimizing fish entrainment. Since purchasing the Dresden facility in 2014, Greenidge has been working with the NYSDEC to upgrade its cooling water intake system in order to meet modern standards for entrainment protection at existing electric generating plants. The total cost to implement this upgrade is currently estimated to be approximately \$5 million.

As background, the NYSDEC has been delegated the authority to issue SPDES permits by the EPA. NYSDEC renewed the SPDES Water Permit for the Facility on October 1, 2017. The NYSDEC implemented Commissioner's Policy #52 ("CP #52") to establish Best Technology Available ("BTA") required to minimize impingement mortality and entrainment at cooling water intake structures. CP #52 requires that existing facilities achieve reductions in impingement mortality and entrainment from a calculation baseline that is 90 percent or greater of that which would be achieved by a wet closed-cycle cooling system.

Pursuant to a NYSDEC-approved plan, the Facility will meet the mandated reduction for entrainment through the combined use of the cylindrical wedgewire screens ("CWWS"), which physically exclude some organisms and allow others to escape due to the low through-slot velocity and small flow field, as well as flow reductions made possible with the use of only two of three pumps, variable frequency drives, and potential periods of non-operation. Both the EPA and the NYSDEC have found that impingement is reduced practically to zero by the low through-slot velocities, which allow healthy fish that are potentially subject to impingement to swim away from the screen. Greenidge installed the variable speed drives at the Facility in June 2019 (ahead of the timeline for implementation established by the NYSDEC) at a cost of approximately \$450,000.

The NYSDEC ensures that the Facility is complying with all requirements of the Clean Water Act ("CWA") and its SPDES Water Permit associated with the installation of CWWS, including meeting established timelines for implementation. Contrary to certain inaccurate public comments, the NYSDEC has not waived any requirements of the CWA, which are included in the Facility's SPDES Water Permit.

The SPDES Water Permit required Greenidge to submit a CWWS pilot study plan and schedule by April 1, 2018. Greenidge submitted this to the NYSDEC on March 29, 2018, which the NYSDEC approved on April 18, 2018. The pilot study was necessary and required because CWWS systems are not off-the-shelf technology. CWWS technology needs to be specifically

designed and engineered for the particular cooling water intake structure to ensure the system is properly sized, located, and constructed to deliver the cooling water needed, while reducing fish entrainment and impingement and biofouling specific to the facility.

The required pilot study was completed consistent with the NYSDEC approved requirements and schedule. It included weekly sampling from April 2019 through September 2019 and bi-weekly sampling through October 2019. The final CWWS pilot study report was submitted to the NYSDEC on April 29, 2020, as required by the NYSDEC-approved schedule. The NYSDEC approved the Pilot Study Report on August 7, 2020, which cleared the way for the submission of a Technology Installation and Operation Plan (“TIOP”).

On November 3, 2020, Greenidge submitted the TIOP to the NYSDEC, which included a full description of, and schedule for installation of, the CWWS system. On December 22, 2020, the NYSDEC approved the TIOP and has allowed Greenidge to move forward with final engineering, permitting, and construction of the approved screen system. Pursuant to the TIOP, Greenidge selected 0.5 mm slot width stainless steel screens to satisfy BTA requirements. The approved CWWS must be operational by September 30, 2022, the expiration date of the Facility’s current SPDES Water Permit. Greenidge is on schedule to meet this requirement.

Request 6. Please provide detailed information regarding the temperature differentials of water intake and outflow from your facility. Specifically, please report the minimum and maximum temperature of intake and outflow for each month in the past year.

The Dresden facility’s SPDES Water Permit, issued by the NYSDEC, allows for a maximum discharge temperature of up to 108 degrees in summer and 86 degrees in winter. It also allows for a maximum difference between the inlet temperature and the discharge temperature of 26 degrees in summer and 31 degrees in winter.

In connection with this request, the table below depicts the following: (i) minimum daily intake water temperature for the month; (ii) maximum daily inlet water temperature for the month; (iii) minimum daily discharge water temperature for the month; (iv) maximum daily discharge water temperature for the month; (v) average daily difference between inlet water temperature and discharge water temperature for the month; (vi) the maximum permitted discharge temperature pursuant to the Facility’s SPDES Water Permit; (vii) the difference between (vi) and (iii) above; (viii) the maximum permitted difference between inlet water temperature and discharge water temperature pursuant to the Facility’s SPDES Water Permit; and (ix) the difference between (viii) and (v) above.

Notably, *both* the discharge temperatures and the temperature differences in the table are well below the fully-permitted levels of the Facility’s SPDES Water Permit. For the LTM Period, the discharge temperature averaged approximately 32 degrees below the permitted level and the difference between the inlet temperature and the discharge temperature averaged approximately 19 degrees below the permitted level.

Month	Inlet			Outlet			Average Temp Difference	Permitted Discharge Temp	Degrees Below Permitted	Permitted Temp Difference	Degrees Below Permitted
	Min	Max	Avg	Min	Max	Avg					
Dec-20	36.6	50.7	45.5	47.0	66.1	53.0	7.4	86.0	33.0	31.0	23.6
Jan-21	36.6	46.5	42.3	45.4	63.3	50.1	7.8	86.0	35.9	31.0	23.2
Feb-21	36.6	45.6	40.6	44.2	59.8	49.0	8.3	86.0	37.0	31.0	22.7
Mar-21	37.0	50.6	41.6	44.6	59.6	48.5	6.8	86.0	37.5	31.0	24.2
Apr-21	39.6	50.8	44.7	47.1	64.9	52.2	7.5	86.0	33.8	31.0	23.5
May-21	42.1	71.3	52.0	50.1	79.0	60.4	8.4	108.0	47.6	26.0	17.6
Jun-21	50.1	71.3	64.1	59.1	88.3	75.2	11.1	108.0	32.8	26.0	14.9
Jul-21	67.3	77.9	72.7	77.3	95.0	84.3	11.5	108.0	23.7	26.0	14.5
Aug-21	69.1	84.1	74.7	79.4	96.6	86.6	11.9	108.0	21.4	26.0	14.1
Sep-21	65.6	79.4	71.0	70.9	90.5	81.9	10.9	108.0	26.1	26.0	15.1
Oct-21	42.7	69.6	64.6	61.8	85.3	73.7	9.1	108.0	34.3	26.0	16.9
Nov-21	45.3	61.6	54.1	57.9	74.5	65.0	10.8	86.0	21.0	31.0	20.2

7. Does Greenidge have any estimates or models regarding the impacts of your facility on energy costs to local families and businesses? If so, what do these estimates or models show? Have residential electricity costs increased since Greenidge began its cryptomining operations? What measures are you taking to ensure that local consumers and small businesses are not bearing the costs of Greenidge’s energy consumption?

Greenidge is not aware of any estimates or models regarding energy costs to local families and businesses. The Dresden facility is different than most other mining facilities in that it does not take power for bitcoin mining from the local energy grid. Rather, the Facility is a power generation operation, and sends a significant amount of the electricity it generates to the NYISO energy grid.

Cryptocurrency mining at the facility in Dresden should therefore not cause local energy electricity costs to increase. To the contrary, in 2020 Greenidge was accepted into NYISO’s Behind-the-Meter Generation program, which was established to “*promote distributed generation, strengthen system resiliency and improve grid reliability.*” Greenidge operates an integrated bitcoin mining operation behind-the-meter while still supplying electricity, capacity, and ancillary services to the NYISO wholesale market—fully consistent with the intent of the NYISO’s Behind-the-Meter Generation program. The Facility no longer receives capacity payments from the NYISO for its behind-the-meter consumption which, in turn, lowers the capacity cost of the Facility to the NYISO energy grid and customers. Despite receiving no capacity payments for its behind-the-meter electrical consumption, the Facility is still capable of idling its bitcoin mining in order to provide 100% of its electrical production to the grid in times of need. This has the effect of providing emergency backup power capacity to the grid at no cost.

Because bitcoin mining allows us to operate 24/7, the Facility is on standby for the NYISO every hour it is operating and can be ramped up to provide maximum power to the NYISO energy grid in approximately one hour, without a start-up charge. This is in contrast to the Facility’s operating model prior to bitcoin mining which required 14 hours of startup time and an associated start-up charge that was ultimately paid for by electricity customers. With the Facility’s new operating model, every MWh the Facility supplies to the NYISO energy grid is guaranteed to be the lowest cost MWh available to the NYISO at that time.

While Greenidge is not aware of any studies regarding the impacts (positive or negative) that the Facility operation has on local electric bills, it is confident the overall economic benefit of Greenidge to jobs and wages is profound and measurable, as previously detailed.

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