

**General information:**

- The company's mine in Rockdale, Texas is operating at 450-megawatts.

The Company operates data center infrastructure with a rated capacity of 700 MW; however, the actual utilization rate varies based on several factors the Company considers when evaluating its power strategy, including bitcoin price, cost of power, global hash rate and other factors. The Company's utilization rate is also affected by regular and unscheduled maintenance, environmental factors, participation in ERCOT's ancillary services programs, and other considerations. Accordingly, the Company does not disclose the exact power draw that it is operating at any given time.

- Riot has a 10-year contract with a conventional generation company (TXU Energy).

TXU Energy is an American retail electricity provider headquartered in Irving, Texas, serving residential and business customers in deregulated regions of Texas since the deregulation of the Texas electricity market in 2002. TXU Energy is a subsidiary of Vistra Corp (NYSE:VST), and one of the largest retail electricity providers in Texas.

- Nearly 97 percent of the power added by its operation comes from fossil fuels, causing more than 1,929,000 metric tons of carbon dioxide emissions every year, a WattTime analysis found.

The WattTime analysis is deeply flawed and misleading.

- 1) Regarding the statement, "Nearly 97 percent of the power added by its operation comes from fossil fuels..."

If the intent of the statement is to lead a reader to conclude that the Company's operations are 97% powered by fossil fuels all the time, please note that this statement is practically impossible given (a) the generation mix of the ERCOT grid and (b) the fact that the Company is a base demand load.

The power utilized by the Company is not provided from any sole source, or "behind the meter", and is drawn from the ERCOT grid. The ERCOT grid is powered by generation that contains the highest percentage of renewable generation of any regional or large grid in the USA. A link to ERCOT's real-time generation mix can be found here:

<https://www.ercot.com/gridmktinfo/dashboards/fuelmix>

The Company is a base demand load because it has entered into a Power Supply Agreement with TXU Energy to purchase its electricity 24 hours per day, seven days per week.

Alternatively, if the intent of the statement is to lead a reader to conclude that the Company's "operation" was the only project that caused marginal, fossil fuel-based power generation (such as a gas peaker plant) to come online to service the Company's load, the reader would benefit from understanding that this scenario is contrary to real world market dynamics and actions.

Marginal, fossil fuel-based power generation such as peaker plants are designed to respond to market demand and price signals, powering on when demand and prices are high. The Company also responds to demand and price signals, by enrolling in ERCOT's ancillary services and demand response programs and managing its power consumption. Generally, the Company (through ERCOT's various programs) will sell its power back to its retail electric provider when demand and prices are high because it is incentivized to do so, which is exactly when peaker plants will power on. The additional benefit here is that the Company's contracted power is contributed back to the overall grid at the moment that it is most needed, thereby lessening the time that peaking generation would otherwise be running.

- 2) Regarding the statement, "...causing 1,929,000 metric tons of carbon dioxide emissions every year..."

The Company's ASIC hardware utilized in proof-of-work Bitcoin mining does not produce emissions, in the same way that an electric car, microwave or toaster does not produce emissions.

It is generally understood that computing cryptographic hashes ("Bitcoin mining") does not directly emit any EPA criteria air pollutants or greenhouse gases. From a Scope 1 emissions<sup>[1]</sup> perspective, Bitcoin mining is fully electrified and zero-emissions. Indirectly, Bitcoin mining may reduce electricity grids' greenhouse gas emissions by replacing natural gas and coal peaking power plants<sup>[2]</sup>.

<sup>[1]</sup> "Scope 1 and Scope 2 Inventory Guidance." EPA Center for Corporate Climate Leadership, Environmental Protection Agency, <https://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance>.

<sup>[2]</sup> Ibañez, Juan & Freier, Alexander. (2023). Can Bitcoin Stop Climate Change? Proof of Work, Energy Consumption and Carbon Footprint (SoK), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4347220](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4347220).

- According to investor documents, after accounting for the savings and revenue from demand response programs including RRS and 4CP, Riot's total cost of electricity was 1.9 cents per kilowatt-hour in 2022.
- In 2021, the company earned more than \$184 million from its Bitcoin mining business.
- In 2022, the company earned \$156.9 million from its Bitcoin mining business.

### **June 23 operations**

- During June, Riot was making, on average, \$335,000 per day by mining Bitcoin.

The Company has not publicly disclosed a daily mining figure, but one can extrapolate daily mining revenue based on the Company's regular monthly updates and a basic assumption of any month's average Bitcoin price. This figure would represent gross revenue and does not include the costs of power, any capitalized costs, and any other operating expenses. Therefore, the word "making" might be clarified as "generating revenue of approximately..."

- By 4pm on June 23, Riot had made more than \$42,000 for participating in the Responsive Reserve Service. It was not called on to curtail during that period.

The Company has not disclosed this figure publicly. The Company confirms that it was not called on to curtail during that period.

- Just after 4 p.m. on that date, Riot stopped participating in RRS and curtailed almost completely, to avoid fees by participating in the 4CP program.

The statement "Riot stopped participating in RRS and curtailed almost completely, to avoid fees by participating in the 4CP program" is a misleading statement as the decision to participate in one program does not drive the other, or vice versa.

The Company's decision to manage its load around ERCOT's 4CP parameters is distinct and separate from its decision to participate in other ERCOT ancillary services/programs, such as RRS.

ERCOT has a range of ancillary services and programs that power consumers can participate in. Participation in certain of these ancillary services and programs requires approval from ERCOT, which is a precaution ERCOT takes to ensure that approved consumers will act in a reliable and timely manner. ERCOT incentivizes power consumers to participate in these programs to help ERCOT manage the reliability of its electrical grid.

The purpose of ERCOT's Responsive Reserve Service (RRS) program is to help maintain the security and reliability of the electrical grid. RRS alleviates the potential for blackouts by requiring participants to curtail their power usage on demand for use by other consumers on the grid, thus delivering the real-time capacity resources ERCOT needs to restore, or maintain, the grid when system reliability and reserve margins are at risk. The Company's decision to participate in RRS adds to grid system reliability and ERCOT's reserve margins by ultimately helping to reduce peak power prices and avoid blackouts, which benefits all consumers within ERCOT.

The purpose of ERCOT's 4CP program is to incentivize power consumers to lower consumption at times of peak demand by assigning transmission system costs to distribution utilities at such times. All power consumers within ERCOT can choose to manage their transmission system costs by participating in 4CP. Consumers who participate in 4CP throughout a given calendar year will pay less in transmission system costs in the following calendar year. The Company's decision to actively reduce its load during anticipated times of peak demand adds to grid reliability and ultimately helps to reduce peak power prices, which benefits all consumers within ERCOT.

- The company was back operating by 6:15pm.

The Company chose to provide its purchased power back to its retail electric provider between 3:30 pm and 6:30 pm, the hottest part of the day in the Texas summer, when grid demand is at its highest, during which time it reduced its operations.

- Being able to curtail 450 megawatts by 99% during that time allowed Riot to avoid an estimated \$7 million in fees. Costs that are passed on to others who were unable to reduce their demand in the same way.

The Company has not publicly disclosed how many MWs it curtails, or the percentage that it curtails.

It is unclear what the statement "...avoid an estimated \$7 million in fees" is referring to.

The statement "Costs that are passed on to others who were unable to reduce their demand in the same way" is a misleading statement because it: (1) ignores the significant benefits that accrue to all consumers that is made possible by participation in ERCOT's programs and services, and (2) ignores the significant foregone revenues that the Company does not generate when participating in these programs.

There are time periods when the Company does not consume the full amount of the power it has agreed to purchase, because it is participating in ERCOT's ancillary services, or the Company has decided to sell the unused power back to its retail electric provider. The Company is still required to pay for the power it has agreed to purchase but can receive compensation for the unused portion. By selling power back to its retail electric provider, the Company and other participants in similar ancillary services and programs increase the amount of the electrical supply available to other consumers during times of peak demand, which ultimately has the effect of reducing the cost of electricity to such consumers from the amount it would otherwise cost without the additional supply of electricity.

To encourage participation by consumers, ERCOT provides incentives to participate in these programs to help ERCOT manage the reliability of its electrical grid. It is important to mention that certain of these programs require approval from ERCOT, which is a precaution ERCOT takes to ensure that approved consumers will act in an extremely reliable and timely manner.

### RRS

- The company earned nearly \$9.3 million from the Responsive Reserve program in 2022 and more than \$13 million since 2021.

The Company has not publicly disclosed earnings from its participation in RRS.

- The company participated in the RRS demand response program roughly 85 percent of the time in 2022

It is important to note that enrolling in the RRS demand response program is not the same as curtailing under the program. When enrolled in the RRS demand response program, the Company is obligated to curtail its enrolled power at ERCOT's request.

The Company enrolled at least 1 MW in RRS demand response for more than 80% of the total hours in 2022. Of all the MW hours consumed in 2022, the Company had less than 50% of the total MW hours consumed enrolled in RRS demand response. It is important to note that the Company curtailed operations pursuant to the RRS demand response program for less than 1% of all the MW hours consumed in 2022.

- On average, the company offered up to 101 megawatts on average every hour it participated.

The Company has not disclosed this figure publicly.

#### 4CP

- By reducing power the company avoided fees that would have totaled nearly \$29 million in 2022, had the mine continued operating at its usual power level.

The purpose of ERCOT's 4CP program is to incentivize all power consumers to lower consumption at times of peak demand by assigning transmission system costs to distribution utilities at times of peak load, i.e. demand. All power consumers within ERCOT can choose to manage their transmission system costs by participating in 4CP. Consumers who participate in 4CP throughout a given calendar year will pay less in transmission system costs in the following calendar year. The Company's decision to actively reduce its load during anticipated times of peak demand adds to grid reliability and ultimately helps to reduce peak power prices, which benefits all consumers within ERCOT.

The Company actively seeks to manage its power by participating in a range of ERCOT's ancillary services and programs, which ultimately serve to ensure that ERCOT's electrical grid is reliably managed, less volatile, avoids brownouts, and less expensive during times of peak demand.

The Company has not disclosed the amount of the reduction in its future transmission system costs stemming from the Company's participation in 4CP and therefore cannot corroborate the statement "By reducing power the company avoided fees that would have totaled nearly \$29 million in 2022, had the mine continued operating at its usual power level." Regardless of the number, it is also a misleading statement because it: (1) ignores the significant benefits that accrue to all consumers that is made possible by the Company's participation in the 4CP program and (2) ignores the significant foregone revenues that the Company does not generate when participating in the 4CP program.

- In 2021 and 2022, Riot was able to drop its power usage by more than 99 percent at those moments in both 2021 and again in 2022 (based on stated operating levels of 400MW in 2021 and 450MW in 2022).

ERCOT has a range of ancillary services and programs that power consumers can participate in. Certain of these ancillary services and programs require an approval from ERCOT, which is a precaution ERCOT takes to ensure that approved consumers will act in a reliable and timely manner. ERCOT incentivizes power consumers to participate in these programs to help ERCOT manage the reliability of its electrical grid.

The nature of the Company's business affords it the unique ability to reduce or curtail its operations on demand and return the unused portion of its purchased power back to its retail electric provider. This flexibility allows the Company to participate more frequently in ERCOT's ancillary services and programs, choosing not to consume the full amount of the power it has agreed to purchase, thereby helping to reduce peak power prices and add to grid reliability (which benefits all ERCOT's consumers) more often than other non-interruptible loads.

- For context, we note that at least six other large Bitcoin mines exhibited similar capabilities in 2022.

Bitcoin mining businesses are uniquely positioned to reduce or curtail their operations and return unused power to the grid as any such reduction or curtailment has minimal effect on third parties, e.g., customers, as compared to other types of businesses.

### **Power sales**

- The company earned \$27 million in 2022 by selling power back into the market.

To clarify, the \$27.8 million consists of power sales and ancillary services revenue. It is important to note that the Company commits significant financial resources in order to have the ability to sell its power back to its retail electric provider and participate in ancillary services.

- The company earned \$125 million selling energy back into the market during Winter Storm Uri (this has been previously reported).

To clarify, by participating in economic response to support the ERCOT grid, the Company was entitled to receive \$125 million consisting of \$29 million in cash (net of \$10 million in power management fees owed by the Company), \$59.7 million in future power credits to be credited against future power bills, and \$26.3 million which is contingent upon its retail electric provider remitting this amount to the Company. It is important to note the distinction – future power credits are not revenue or “sales”.

It is also important to note that the Company commits significant financial resources in order to have the ability to provide its power back to its retail electric provider at times when power is most needed. The Company has contractually agreed to purchase a fixed amount of electricity through its retail electric provider, and purchases that amount for the agreed-upon cost each month, whether or not it uses the full amount of power purchased. When the Company does not use the full amount of its purchased power during times of peak demand, all grid customers benefit because the Company is supplying power when it is most needed, which lowers prices at the exact time when prices are elevated.

### **Taxes**

- At the Texas Blockchain summit in November, while discussing the benefits of the Rockdale mine on the nearby town, former COO Chad Harris said "The value is that for the first time ever, Rockdale, Texas, City Council in town was able to promote and say, 'We have collected more sales tax ever in the history of this city.'

Chad Harris was formerly the Company's Chief Commercial Officer or “CCO”.

The Company believes Mr. Harris' statement was based on figures publicly available from the Texas Comptroller of Public Accounts. We have provided a copy of the Rockdale Municipal Development District's Sales Tax History. Note that there is a 36% increase over the 6-month period ending March 31, 2023, over the same period last year.

Public county documents can be accessed here: <https://mycpa.cpa.state.tx.us/allocation/AllocHist>.

Rockdale won a Community Economic Development Award from the Texas Economic Development Council the first year the Company was in Rockdale.

Here is the [link](#) to the Rockdale Municipal Development District acceptance speech.

- The city of Rockdale told The Times that the mine is outside city limits and therefore the city collects no sales tax from the operation.

The Company confirms that it does not operate its data center facility within Rockdale city limits. The Company, to the best of its ability, utilizes vendors and contractors from the City of Rockdale and from the general Milam County area so that Rockdale and the various communities within Milam County would directly benefit from the corresponding positive economic impact.

The Company pays local sales tax on its purchases of electricity, hardware, and all other items.

- Riot receives state tax breaks that exempt it from any sales tax on its purchases of electricity and most hardware.

The Company does not pay state sales tax on its purchases of electricity, hardware and all other items.

If the intent of the statement “Riot receives state tax breaks that exempt it from any sales tax on its purchases of electricity and most hardware” is to draw a reader to conclude that the Company does not contribute to its local economy, it would be helpful to understand the rationale for the breakdown of the Company’s local and sales tax payments.

In discussions with Milam County, the Company agreed not to qualify as a Qualifying Large Data Center but chose instead to qualify under Texas’ Qualifying Data Center exemption. As a result, the Company pays local sales taxes but does not pay state sales tax on its purchases of electricity, hardware, and all other items.

The discussion with Milam County was similar to any negotiation that any company would enter with local constituencies. The Company ultimately decided to qualify under Texas’ Qualifying Data Centers exemption. As such, since the Company pays local sales tax, the Company’s positive economic impact is more likely to be directly observed at the local level versus the state level.

- Riot was granted a property tax exemption by the county where it operates. In 2022 that abatement saved it an estimated \$500,000 in property tax.

If the intent of the statement “Riot was granted a property tax exemption by the county where it operates. In 2022 that abatement saved it an estimated \$500,000 in property tax” is to draw a reader to conclude that the Company does not contribute to its local economy via property tax payments, it would be helpful for a reader to understand that while the Company does receive certain property tax abatements, the Company does pay significant property tax, including 100% of the local school district’s *ad valorem* tax assessment. The Company has not publicly disclosed the breakdown of all the taxes that it pays.

The Company is a significant contributor to its local economy. Employing over 200 people in Rockdale, the Company is the largest employer in Rockdale and a significant employer in Milam County and central Texas.

Public county documents can be accessed here: <https://mycpa.cpa.state.tx.us/allocation/AllocHist>.

### Company history

- As recently as 2017, the company was called BiOptix, Inc
- Over the previous 15years its business included blood tests for appendicitis and hormones that aid in cattle reproduction.
- The company reported \$9,000 in sales in 2016 and announced it would need to find a new line of business.
- The company renamed itself Riot Blockchain, though it had no experience in the industry
- The company entered the Bitcoin mining business in 2017.
- The company opened its first mine in Oklahoma City, then moved its machines to upstate New York
- The company announced a pilot project in Texas, where it told investors it was testing software that would adjust electricity consumption in a way that “potentially unlocks significant power savings.”
- In 2021 the company bought the Whinstone mine.

The Company acquired its Rockdale facility through the acquisition of Whinstone US, Inc. in 2021.