

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION) CASE NO. IPC-E-21-37
OF IDAHO POWER COMPANY FOR)
AUTHORITY TO ESTABLISH A NEW)
SCHEDULE TO SERVE SPECULATIVE) ORDER NO. 35428
HIGH-DENSITY LOAD CUSTOMERS)
)

On November 4, 2021, Idaho Power Company (“Company”) applied to the Commission for authority to establish a new schedule to serve speculative high-density customers—specifically, large-scale cryptocurrency mining operators (“HDL Customers”). Application at 1.

On December 1, 2021, the Commission issued a Notice of the Company’s Application and Notice of an Intervention Deadline. Order No. 35276. The Industrial Customers of Idaho Power (“ICIP”) and 2140 Labs, LLC (“2140 Labs”) intervened. Order No. 35276.

On February 2, 2022, the Commission issued a Notice of Modified Procedure and set public comment and Company reply deadlines. Order No. 35308

On April 12, 2022, Commission Staff (“Staff”) and 2140 Labs filed comments to which the Company replied.

With this Order, we approve the Company’s Application.

APPLICATION

The Company reported that it had recently received increased prospective HDL Customer interest of approximately 1,950 megawatts (“MW”) in the last few months—an additional load that, if interconnected with the Company’s system, would exceed its ability to serve total system load during the summer. In addition, the Company explained that recent restrictions on cryptocurrency mining in China, coupled with the Company’s favorable rates, open parcels of land in its service area, and high reliance on clean, hydroelectric power had created a resurgence of interest in cryptocurrency mining in the Company’s service area. *Id.* at 4. The Company pointed to the drastic rise in the price of bitcoin (a type of cryptocurrency) between mid-2017 and the end of 2019. The Company asserted that from the end of 2017 through 2020, as the price of bitcoin declined from its December 2017 peak, “new market entrants canceled development of large-scale projects or declared bankruptcy with electric service providers listed as creditors and owed multimillions of dollars.” *Id.* at 9.

The Company stated its concern that increasing electricity demand due to cryptocurrency operations coupled with limited capacity would likely constrain its ability to meet peak demand until at least 2026. The Company expressed additional concern that it would acquire new resources to meet demand that would ultimately become stranded when the economics of cryptocurrency changed. *Id.* at 14. Thus, the Company proposed implementing a new Schedule 20 to mitigate risks inherent to HDL Customers while meeting its obligation to reliably serve all customers.

The Company explained that attributes of cryptocurrency mining operations were: (1) high energy use and load factor; (2) the ability to relocate and disaggregate equipment to obtain favorable rates; (3) volatile load growth and load reduction; (4) sensitivity to short-term economic signals or volatility; and (5) lack of demonstrated financial viability. Application at 3.

The proposed Schedule 20 would incorporate three modifications to Schedule 9's (Large General Service) and Schedule 19's (Large Power Service) rate design including: (1) fully interruptible service during the summer peak season between 1:00 p.m. and 11:00 p.m. Monday through Friday; (2) a proposed reallocation of the portion of cost-of-service derived summer generation capacity costs currently collected in an on-peak demand charge; and (3) a proposal to "price energy at a marginal cost in all pricing periods, based on Avoided Cost Averages as listed in . . . the Company's most recently acknowledged Integrated Resource Plan." *Id.* at 14-15.

STAFF COMMENTS

Staff supported the Company's overall proposal. However, Staff recommended that once the Company had experience dealing with HDL Customers under Schedule 20, the Company address Staff's concerns and ensure that HDL Customer costs and benefits were appropriately allocated in the next general rate case. Staff Comments at 2.

Staff noted that Schedule 20 is designed to: (1) minimize the risk of stranded assets by treating HDL Customers' demand as non-firm and requiring interruptible service during summer On-Peak Hours to avoid the need to invest in resources to meet their capacity needs; (2) ensure Schedule 20 customers' share of demand-classified cost is being fully recovered throughout the year, as a result of Schedule 20 requirements for interruptible service during summer On-Peak hours; and (3) recover energy costs using marginal cost energy rates. *Id.*

Staff's comments focused on the following five areas: (1) cryptocurrency mining risk; (2) interruptible/non-firm service; (3) pricing and recovery of energy-related cost; (4) pricing and recovery of demand-related cost; and (5) an accounting treatment for Schedule 20.

1. Cryptocurrency Mining Risk

Staff believed it was reasonable for the Company to proactively mitigate risks inherent to cryptocurrency mining by establishing the proposed customer class. Although Staff noted that no entity is currently pursuing the large-scale cryptocurrency mining operations described in the Company's Application in the Company's service area, Staff believed it was probable that customers who would qualify under Schedule 20 would seek to obtain service from the Company in the future.

2. Interruptible/Non-firm Service

Staff stated the proposed interruptible service in Schedule 20 minimized stranded-asset cost risk by reducing the Company's need to acquire additional capacity to serve HDL Customers. Staff pointed out that "[r]equiring non-firm treatment is a reasonable approach for a customer class whose members are high-risk and whose combined loads may lack the stability necessary to minimize stranded-asset cost risk." *Id.* at 4. After reviewing the proposed interruptible service requirements and available options for obtaining non-interruptible service, Staff concluded that the mandatory interruptible service feature struck a reasonable balance between stranded asset risks and the Company's obligation to meet customer demand.

Staff noted the parameters and methods for determining the scope of interruptible service to minimize stranded-asset cost risk in this case were based on similar parameters and methods recently approved to determine curtailment for demand response participants in Case No. IPC-E-21-32. Staff further noted that HDL Customers who desire non-interruptible service can enter special contracts allowed for customers requiring an excess of 10 Megawatts ("MW"), reduce their capacity to qualify for service under a different schedule, or obtain electric service elsewhere.

Staff believed that, ultimately, the parameters for interruptible service should be carefully reviewed in the next general rate case or after Schedule 20 customers are established and data has been collected to determine the amount, frequency, and timing of interruptions in service that occur. *Id.* at 4. Staff also recommended that after it gains further experience with these

customers, the Company consider the potential for HDL Customers with loads less than 10 MW to be eligible for special contracts.

3. Pricing and Recovery of Energy-Related Cost

Staff noted the Company's current customers' energy rates are based on embedded average costs derived from a test year. *Id.* at 6. To determine the energy rates for Schedule 20 customers, however, the Company proposed using the Avoided Cost Averages ("ACA") in the Company's Integrated Resource Plan ("IRP") as a marginal cost of energy. The Company currently uses an embedded average cost rate structure for its current customer classes. Staff noted there must be a level of stability within each customer class under the embedded cost rate structure to ensure each customer's cost-of-service allocation remains relatively stable between rate cases. If the assumption held true that the Schedule 20 customer class lacks stability, Staff agreed that a marginal energy rate was appropriate since it is based on the cost of the next increment of electricity beyond what is needed by the Company's core customers. *Id.*

That said, Staff was concerned with using an avoided cost rate not derived from a test year and not currently used for any other customer rates. Thus, while Staff agreed in principle to using the ACA in the Company's IRP for Schedule 20 energy rates as proposed, it recommended the Company consider alternative methods, including a marginal energy cost rate derived from a test year in preparation of the next general rate case.

4. Pricing and Recovery of Demand-Related Cost

Staff stated that Schedule 20's demand charges were based on Schedules 9 and 19 rate designs. *Id.* Staff noted that Schedules 9 and 19 both have an On-Peak Demand charge that charges customers for their highest 15 minutes of use during On-Peak hours only during summer months. Staff supported the Company's proposal to reallocate cost of service derived summer generation capacity costs from the On-Peak Demand charge to the standard Billing Demand charge to ensure Schedule 20 customers paid their fair share for use of the Company's system.

5. Accounting Treatment

Staff supported the Company's proposed treatment of Schedule 20 energy costs, revenue, and usage in the Power Cost Adjustment ("PCA"). Staff noted, however, that additional analysis was needed to determine how Schedule 20's costs, benefits, and loads were incorporated into base rates. Staff recommended the Company meet with Staff prior to the next general rate case to examine how Schedule 20 should be incorporated.

STAFF RECOMMENDATIONS

Staff recommended the Commission approve the Schedule 20 customer class as filed and authorize implementation prior to the start of the June 15 to September 15 interruption period. Staff also recommended the Commission order the Company to file conforming tariffs.

Within five years from the date the Company commences service to customers under Schedule 20, Staff recommended the Company evaluate:

1. Assumptions regarding the risks and need for mandatory interruptible service;
2. The need for non-interruptible service through special contracts or other options for customers with loads below 10 MW; and
3. The need for marginal cost-based rates.

Prior to developing the next general rate case filing, Staff recommended the Company:

1. Evaluate and compare other methods for determining a marginal cost of energy in addition to the use of Avoided Cost Averages in the IRP for the Schedule 20 energy rate; and
2. Collaborate with Staff after re-evaluating Schedule 20 cost assignment based on usage characteristics and system requirements and assign cost and benefits incorporating interruption requirement parameters.

2140 LAB COMMENTS

2140 Labs contended there was no need to create a new Schedule as there were no new or existing customers who would qualify under Schedule 20. 2140 Lab's Comments at 1-2. 2140 Labs further contended that the Company's research regarding cryptocurrency was scant and too selective. *Id.* at 2. Specifically, 2140 Labs argued that—when cryptocurrency mining user load was compared to residential user demand and cryptocurrency's price fluctuation was compared to other markets (e.g., Gold, S&P 500, and oil) over a longer time span—the Company's assertions that cryptocurrency load was inconsistent and unpredictable, and that its price was highly volatile were inaccurate. *Id.* at 3. 2140 Labs also argued that cryptocurrency mining operations entailed a host of economic development opportunities.

Based on the above arguments, 2140 Labs requested the Commission consider renaming Schedule 20 as "Emerging Industry" rather than "Speculative High-Density Load." *Id.* at 4. 2140 Labs averred that the word "speculative" had negative connotations and, moreover, did not aptly

describe cryptocurrency operations. In sum, 2140 Labs suggested that renaming Schedule 20 would benefit Idaho by positioning it as a blockchain-friendly state. *Id.* at 4.

COMPANY REPLY COMMENTS

The Company stated it supported Staff's recommendations. The Company pointed to the recent example of a large-scale cryptocurrency mining operation breaking its contract and quickly relocating to a different service area to meet clean energy goals and other corporate goals. Company Reply Comments at 3. The Company stated that cryptocurrency miners' stated interest in using shipping containers which are easily movable to different service areas, and the potential that current technological advances in cryptocurrency could reduce electricity demand by 99.9 percent create a real potential for the incurrence of stranded asset costs.

The Company agreed with 2140 Lab's assessment that cryptocurrency mining load operates at a consistent and predictable load, but that "it cautions the risk of conflating the cryptocurrency miners' high load factor with transitory load and the associated stranded cost risks [the Company] seeks to mitigate." *Id.* at 6.

In conclusion, the Company requested the Commission approve the Company's Application and authorize implementation of Schedule 20 prior to the start of the June 15 to September 15 interruption period.

FINDINGS AND DISCUSSION

The Commission has jurisdiction over this matter under *Idaho Code* §§ 61-502 and 61-503. The Commission is empowered to investigate rates, charges, rules, regulations, practices, and contracts of public utilities and to determine whether they are just, reasonable, preferential, discriminatory, or in violation of any provision of law, and to fix the same by order. *Idaho Code* §§ 61-502 and 61-503.

The Commission has reviewed the record, including the Application, Staff and the intervenor comments, and the Company's reply comments. We find that the Company's creation of a new electric service schedule to provide service to potential HDL Customers is a reasonable approach to proactively mitigate potential stranded asset costs to its core customers. Based on our review, we find it fair, just, and reasonable to approve the Application.

While there are no customers currently seeking service under Schedule 20, we encourage the Company to continue to evaluate assumptions regarding the risks and need for mandatory interruptible service, the need for non-interruptible service through special contracts or other

options for customers with loads below 10 MW, and the need for marginal cost-based rates. Before it develops and files its next general rate case, we direct the Company to evaluate and compare other methods for determining a marginal cost of energy in addition to the use of ACA in the IRP for setting the Schedule 20 energy rate. We further direct the Company to collaborate with Staff after the Company evaluates cost assignments based on usage characteristics and system requirements under Schedule 20 and then assign cost and benefits incorporating interruption requirement parameters.

We appreciate the comments of 2140 Labs and its optimism that cryptocurrency mining operations will bring a host of economic development opportunities to Idaho. However, at this time, we decline to rename Schedule 20 to “emerging industry.”

ORDER

IT IS HEREBY ORDERED that the Company’s Application is approved as filed. We authorize the Company to establish a new customer classification applicable to HDL Customers operating in a speculative industry and approve implementation of Schedule 20—Speculative High-Density Load for HDL Customer effective as of the file stamp of this Order.

THIS IS A FINAL ORDER. Any person interested in this Order may petition for reconsideration within twenty-one (21) days of the service date of this Order with regard to any matter decided in this Order. Within seven (7) days after any person has petitioned for reconsideration, any other person may cross-petition for reconsideration. *See Idaho Code* § 61-626. ///

DONE by Order of the Idaho Public Utilities Commission at Boise, Idaho this 15th day of June 2022.



ERIC ANDERSON, PRESIDENT

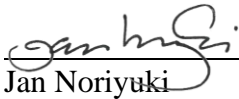


JOHN CHATBURN, COMMISSIONER



JOHN R. HAMMOND JR., COMMISSIONER

ATTEST:



Jan Noriyuki
Commission Secretary

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