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Attorney for the Commission Staff

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

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

STAFF OF the Idaho Public Utilities Commission, by and through its Attorney of record, Riley Newton, Deputy Attorney General, submits the following comments.

BACKGROUND

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. Application at 1. The Company reports that it “has received increased prospective 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 the Company’s ability to serve total system load during the summer season” *Id.*

The Company states that “recent Chinese restrictions on Bitcoin (“BTC”) mining have created a resurgence of interest in Idaho Power’s service area largely due to the Company’s

favorable rates, open parcels of land in the Company’s service area, and high reliance on hydroelectric power that can supply operations with desired clean energy.” *Id.* at 4.

The Company states that attributes of cryptocurrency mining operations are high energy use and load factor, ability to relocate and disaggregate equipment to obtain favorable rates, volatile load growth and load reduction, sensitivity to short-term economic signals or volatility, and lack of demonstrated financial viability. *Id.* at 3.

The Company believes that increasing electricity demand in the Company’s service area coupled with limited capacity will likely constrain the Company’s ability to meet demand during the summer-season peak until at least 2026. The Company is “concerned that it will acquire new resources that may ultimately become stranded when the economics of cryptocurrency change.” *Id.* at 14. The Company proposes to implement a new Schedule 20 “[t]o mitigate that risk while meeting its obligation to reliably serve all customers.” *Id.* at 9.

The proposed Schedule 20, attached to the Company’s Application, incorporates three modifications to Schedule 9 and Schedule 19’s 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 ANALYSIS

Staff supports the Company’s proposal to create a new class—Schedule 20—to provide service for speculative high-density customers, specifically, large-scale cryptocurrency mining operators. However, Staff has several concerns that will need to be addressed after the Company gains actual experience dealing with these customers and notes that the Company will need to ensure that Schedule 20 customer costs and benefits are appropriately allocated in the next general rate case.

The design of Schedule 20 is based on the assumption that Schedule 20 customers exhibit unstable and unpredictable loads and have questionable financial viability making them a high risk for stranded asset costs that core customers may be responsible to cover. Because of these customers’ unpredictable and high-risk nature, it is evident that the Company has designed

Schedule 20 to reside outside of the relatively stable cost structure used to provide service to the Company's core customers, customers whose rates are based on embedded average cost and then allocated by class based on cost of service. Instead, the Company has designed Schedule 20 to address the risk of serving them. The design features that differ from a normal treatment for core customers includes:

- Minimizing the risk of stranded assets by treating them 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;
- Ensuring Schedule 20 customer's 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
- Recovering energy cost using marginal cost energy rates.

However, Staff has several concerns related to the Company's proposal and has concluded the following:

1. There is enough risk with Schedule 20 customers justifying the establishment of a new class;
2. The proposed requirements for non-firm service are reasonable when weighing stranded-asset cost risk with the Company's obligation to serve given alternatives for these customers to acquire non-firm service;
3. The proposed accounting treatment in the Power Cost Adjustment ("PCA") is proper, but details of how Schedule 20 costs, benefits, and loads are incorporated into base rates need to be determined before the next general rate case; and
4. The Company should be required to verify its assumptions regarding the unpredictable and high-risk nature of Schedule 20 customers after gaining first-hand experience and collecting actual customer data.

Cryptocurrency Mining Risk

Staff believes there are risks to the system and to the Company's core customers due to high-density load customers on the Company's system, and it is reasonable for the Company to proactively mitigate these risks by establishing the proposed customer class. Through its

investigation, Staff believes the Company has followed the risk management process of risk identification, evaluation, handling, and controlling in establishing the new customer class.

The characteristics of customers included in Schedule 20 that pose a risk include: the ability to relocate quickly in response to short-term economic signals; have high energy use, density, intensity, and/or high load factor; ability to relocate and/or disaggregate; exhibit volatile load growth or reduction; are sensitive to volatile commodity or asset prices; can rapidly require a large amount of capacity; and may lack credit history or ability to demonstrate financial viability.

Although none of the 17 customer inquiries are currently pursuing service¹ due to the current environment surrounding cryptocurrency mining, Staff believes there is still a high probability that customers qualifying under this classification will still seek to obtain service from the Company. Indeed, cryptocurrency mining operations have increased interest in relocating to the Company's system due to increased global restrictions.

Interruptible/Non-firm Service

Staff supports the proposed interruptible service in Schedule 20 because it minimizes stranded-asset cost risk by minimizing the need for the Company to acquire additional capacity to serve these customers. Requiring 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. Staff reviewed the proposed interruptible service requirements and options for customers to obtain non-interruptible service. Staff concludes that requiring mandatory interruptible service is reasonable when weighing the risk of potential stranded assets against the Company's obligation to serve.² However, Staff believes the parameters for interruptible service should be reviewed after the Company gains experience with actual Schedule 20 customers.

Requiring interruptible service for Schedule 20 customers reduces stranded-asset cost risk by allowing the Company to interrupt service during hours in the summer when the Company's system is constrained for capacity. Since these same hours dictate capacity needs for the system,

¹ See Response to Production Request No. 18.

² In exchange for a utility to provide service as a monopoly, the utility has an obligation to provide service to its customers. From a utility regulatory standpoint, regulations serve as a substitute for competition and must approve the terms of service.

the Company should not require incremental capacity resources for Schedule 20 loads that can be interrupted when determining its capacity needs through its Integrated Resource Plan (“IRP”).

However, Staff is concerned that mandatory interruptible service may run counter to the Company’s obligation to serve. To determine if including interruptible service for Schedule 20 is reasonable, Staff weighed the Company’s obligation to serve with the risk of potential stranded assets given: (1) limits to the number of hours and frequency each customer can be interrupted; and (2) that high density customers can receive non-interruptible service through other alternatives.

First, Staff believes that the proposed parameters determining when, how often, and how much the Company can interrupt service should minimize stranded-asset cost risk based on similar parameters and methods approved by the Commission in Case No. IPC-E-21-32, which defined parameters for curtailment of Demand Response program participants. However, without knowing the actual usage characteristics of Schedule 20 customers, it will be difficult to determine if the interruptible parameters are reasonable or if they should be revised. Staff recommends that the parameters be reviewed in the next general rate case and/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.

Second, Schedule 20 customers that desire non-interruptible service have alternatives for service such as: (1) entering into a special contract requiring stranded-asset mitigation measures by aggregating equipment or expanding to exceed 10 MW of service; (2) reducing capacity needs to meet criteria for a different schedule with lower demand requirements; or (3) taking service in another electric service territory. Other Idaho electric customer classes with interruptible service are either an optional class (Demand Response customers) or have negotiated a special contract. The absence of required interruptible service in other customer classes does not necessarily support or oppose the interruptible service proposed in Schedule 20. However, Staff recommends that the Company consider the potential for high density customers with loads less than 10 MW to be eligible for a special contract after gaining experience with these types of customers.

Pricing and Recovery of Energy-Related Cost

Currently all of the Company's customers' energy rates are based on embedded average costs derived from a test year. However, the Company is proposing to use the Avoided Cost Averages in the Company's IRP as a marginal cost of energy to determine Schedule 20 energy rates. Although Staff agrees in principle to marginal cost rates in this case, Staff has concerns with using an IRP-derived avoided cost in customer rates. Staff recommends utilizing the Avoided Cost Averages in the Company's IRP for Schedule 20 energy rates as proposed, but the Company should evaluate this method against alternative methods including a marginal energy cost rate derived from a test year in preparation of the next general rate case.

By proposing a marginal cost of energy as its Schedule 20 energy rate, the Company is placing these customers outside of its core embedded average cost rate structure used by the Company's other customer classes. Including customers in the embedded cost rate structure requires a level of stability within the class to ensure each customer's cost-of-service allocation remains relatively stable between rate cases. If the assumption holds true that this class lacks stability, Staff agrees that a marginal energy rate is appropriate since it is based on the cost of the next increment of electricity beyond what is needed by the Company's core customers.

However, Staff is concerned with using an avoided cost rate from the IRP used to evaluate the cost-effectiveness of Demand-Side resources as the Schedule 20 marginal energy cost rate since that avoided cost rate is not derived from a test year and is currently not used for any other customer rates. Because no customers are currently eligible for Schedule 20, Staff believes the proposed rate is reasonable, but the Company should evaluate other alternative methods for determining a marginal energy cost rate prior to the next general rate case.

Pricing and Recovery of Demand-Related Cost

The Schedule 9 (Large General Service) and 19 (Large Power Service) rate designs were used as a basis to develop the proposed demand charges for Schedule 20. Schedule 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 supports 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 pay their fair share for usage of the Company's system.

By having an On-Peak Demand charge, Schedule 20 customers could avoid paying their fair share of demand-related costs if Schedule 20 customers are interrupted during On-Peak hours. Reallocating capacity cost from the On-Peak Demand charge to the standard Billing Demand charge ensures that Schedule 20 customers pay their share of the cost relative to the benefits they receive from existing capacity resources throughout the year. Specifically, it will ensure Schedule 20 customers pay for incremental wear and tear and for increased operation and maintenance costs based on their system use.

Accounting Treatment

Staff supports the Company's proposed treatment of Schedule 20 energy costs, revenue, and usage in the PCA. However, the details of how Schedule 20 costs, benefits, and loads are incorporated into base rates needs to be determined. Staff recommends that the Company meet with Staff prior to the next general rate case to examine how Schedule 20 should be incorporated.

As discussed above, the Company is proposing to use a marginal cost of energy for its energy rate. Since using marginal cost differs from an embedded cost rate structure and because the PCA mechanism is a true-up of the Company's actual net power cost ("NPC") to the recovery of NPC embedded in customer base rates, the treatment of Schedule 20 NPC, energy revenue, and sales in the PCA needs to be modified.

The Company proposes that Schedule 20 customers will not be charged the Schedule 55 PCA rate. However, all costs of supplying power to Schedule 20 will be included as actual NPC in the PCA. The revenues received from Schedule 20 energy sales will be treated in the same manner as a surplus sale, which will act as an offset to power supply costs. Finally, energy sales would not be included as an Idaho retail sale but treated in the same manner as an off-system sale. Staff has reviewed the Company's proposal and recommends approval of the proposed PCA accounting treatment.

The Company did not propose treatment of Schedule 20 costs, revenues, and loads in the development of base rates. Because part of the rates differs from the Company's embedded cost rate structure, Staff fully supports the Company's plan to re-evaluate Schedule 20 cost assignment based on usage characteristics and system requirements and assign cost and benefits incorporating the interruption requirement parameters in the next general rate case. Response to

Staff Production Request No. 2. However, to ensure timely processing of the rate case, Staff recommends meeting with the Company prior to the next general rate case to discuss the treatment.

STAFF RECOMMENDATIONS

Staff recommends 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 recommends the Commission order the Company to file conforming tariffs.

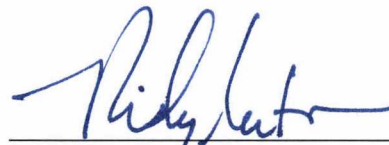
Within five years from the date the Company commences service to customers under Schedule 20, Staff recommends the Company evaluate:

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 recommends 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.

Respectfully submitted this 12th day of April 2022.



Riley Newton
Deputy Attorney General

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 12TH DAY OF APRIL 2022, SERVED THE FOREGOING **COMMENTS OF THE COMMISSION STAFF**, IN CASE NO. IPC-E-21-37, BY E-MAILING A COPY THEREOF, TO THE FOLLOWING:

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