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IDAHO PUBLIC
UTILITIES COMMISSION

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Attorney for Clean Energy Opportunities for Idaho

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION) CASE NO. IPC-E-23-11
OF IDAHO POWER COMPANY FOR)
AUTHORITY TO INCREASE ITS RATES) CLEAN ENERGY
AND CHARGES FOR ELECTRIC SERVICE IN) OPPORTUNITIES
THE STATE OF IDAHO AND FOR) for IDAHO
ASSOCIATED REGULATORY TREATMENT)
) FINAL COMMENTS

As a party to this case, Clean Energy Opportunities for Idaho (CEO) signed the Settlement Stipulation and supports its adoption without material change. In CEO's opinion, the Stipulation agreement represents a compromise that is just, fair, reasonable, and in the public interest.

This case represents the first time Idaho Power Company (Company) has requested a general rate case in a dozen years. Given that extensive period between rate cases, this case presented a lot of prudency issues, as well as a review of the current cost of capital. The appropriately heavy focus on review of a lot of historical cost data didn't leave much time to evaluate cost of service methodology nor to carefully look at how the rate structure that comes out of this rate case affects future affordability. In anticipation of future rate cases, the parties agreed to workshops outside of this docket to consider, among other matters, improvements to class cost-of-service study methodology¹.

CEO believes that Company forecasts of heavy future load growth and several billion dollars of associated future capital expenditures implies that future affordability of electric services used by this state's Idaho Power customers is at risk². CEO submits these comments, not to modify the

¹ IPC-E-23-11, Stipulation and Settlement, pages 11 and 12.

² IDACORP 2Q 2023 Earning call transcript page 7 suggested that capital expenditures during the next 5 years will exceed \$3.2 billion, nearly doubling the current total Idaho jurisdictional rate base of \$3.8 billion.

outcome of this rate case, but rather in support of utilizing additional, and thus potentially more informative, cost-of-service analyses in future general rate cases in an effort to serve the public interest and to prevent avoidable increases in energy costs³.

Optimizing costs requires an accurate understanding of costs. CEO has always been focused on opportunities to increase the use of Idaho clean energy resources in ways that improve the affordability of electricity for all customers. One such opportunity involves improvement in the methods used to analyze cost drivers. In anticipation of a future rate case, CEO's comments posit four points:

- 1. Concerns for future affordability of energy in Idaho are warranted.
 - Forecasts call for dramatic increases in system load over the next few years.
 - Costs have grown faster than load over the past few decades.
- 2. The cost to serve load varies substantially by the time of day when that load is served.
- 3. To control cost growth, we need to understand cost drivers at an hourly level, not just at monthly level
- 4. An hourly review of costs is needed, at minimum as a supplement to the traditional "one data point per month" (12CP/4CP) method as a basis for future cost-to-serve analyses.

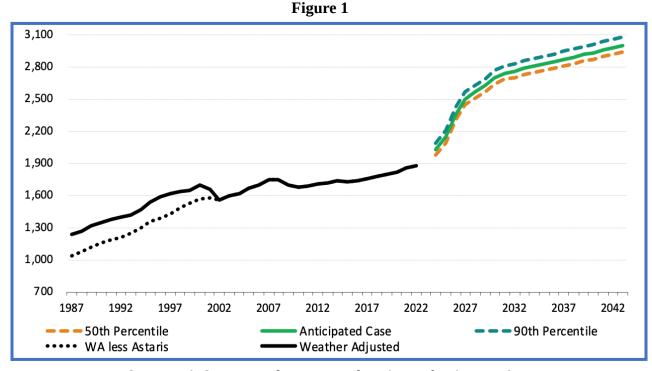
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³ The Commission has in past dockets encouraged stakeholders to work through matters outside of formal proceedings. CEO believes that the complexities of cost-of-service analysis and its importance in the context of a general rate case merit review in an informal venue.

1. FORECAST LOAD GROWTH WARRANTS A CLOSE LOOK AT AFFORDABILITY RISK

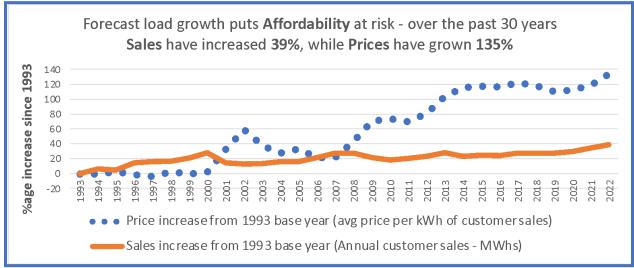
In its recently released 2023 IRP, the Company forecasts its total system load to grow as much in the next five years as it has in the last 35 years (see Figure 1).



Source: 2023 Integrated Resource Plan, Appendix A, page 8

Historically, cost to the customer per kWh of power consumed has risen much faster than load. Figure 2 shows that prices paid by the customer have grown 135% over the last 30 years while load grew 39%.

Figure 2



Source: Idaho Power Company FERC Form One reports, page 304

Given the substantial capital expenditures the Company forecasts as necessary to meet forecasted rapid load growth, careful analysis of how to control cost growth seems more important than ever. Analyzing in which hours the Company faces the highest cost to serve load can be an important tool in maintaining affordable power prices.

2. COST TO SERVE LOAD VARIES SUBSTANTIALLY WITH TIME OF DAY

Figures 3 and 4 below display two different perspectives on how the cost to serve load varies with the time of day when that load occurs. Figure 3 displays market prices for transactions in the EIM market, adjusted to reflect the locational value of power provided within the Company service territory. The data show dramatic differences in the incremental cost of power purchased (or revenue provided for power sold) across the diurnal cycle, with especially low power prices on summer mornings and very high prices on summer early evening hours.

Marginal hourly energy prices - 2022 ELAP data (\$/MWh)
\$150.00
\$90.00
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Figure 3

Source: IPC-E-23-14, Ellsworth testimony Exhibit 2

Non-summer months

• • • • Summer (Jun-Sep) months

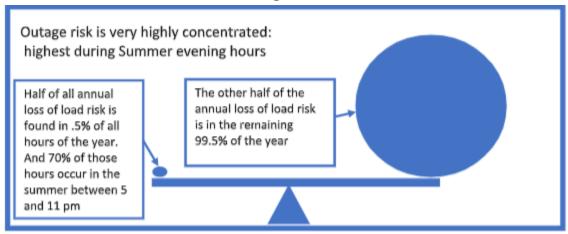
Figure 4 shows a similar temporal pattern is also present in a different cost driver.

Average over all of 2022

Data provided to CEO via a production requests submitted in this docket,⁴ utilizing load patterns from six separate years and hourly loss of load probabilities for each of those hours, shows that the timing of highest loss of load risk (summer season between 5 and 11pm) aligns well with the highest market price hours as displayed in Figure 3.

⁴ CEO submitted the relevant production request before the Company's 2023 IRP was available. Nonetheless, the analysis CEO performed aligns very well with a similar analysis the Company performed regarding the timing of highest risk hours. (See 2023 IRP Appendix C, page 93).

Figure 4



Source: IPC-E-23-11, Response to CEO production request 7.2

3. ANALYZE COSTS BY HOUR, NOT JUST BY MONTH

In IPC-E-23-11 the Company presented a traditional cost of service analysis performed in a manner consistent with advice provided by NARUC in 1992. A lot has changed since 1992, including a much finer temporal resolution on customer usage, more pronounced seasonality in load patterns and dramatic shifts in generation technology. For example:

- Back in the 1990s consumption data was collected by monthly meter readings. One reading per month data was the finest level of resolution that was broadly available. Now the Company has nearly universal customer data collection via automated readings with resolution at an hourly or finer level of detail.
- Load patterns now show much more seasonality compared to the 1990s. Now heating in the winter and cooling and irrigation in the summer drive two distinct seasonal peaks with loads in the spring and fall much less likely to stress system requirements (and thus much less likely to cause a need for new capital expenditures).
- In 1992 (or even in 2011 when the Company filed its most recent general rate case application) Company generating resources were predominantly Hydro powered or fueled by coal or natural gas combustion. Now the Company relies on substantial amounts of solar and wind powered generation. Back then high loads in any hour carried a higher fuel cost associated with dispatch of lower heat rate "peaker" generation. Now we face both higher marginal costs as well as higher loss of load risk during hours later on that system peak summer evening when load has declined some from its peak that day but solar production has fallen off even faster.

The cost of service analysis employed in IPC-E-23-11 utilized a stratified sample size of twelve observations out of the universe of 8,760 available load observations. That sampling method chose the highest system load of the month, not the hour when the highest risk and marginal costs present. That "one hour per month" method also does not give weight to the hours immediately surrounding its highest load reading. Or, for that matter, hours in the days immediately before and/or after that monthly peak where a cold or hot snap could have made those days also have high cost to serve hours. The use of 12 monthly sample readings not only under-weights the higher costs to serve during the multiple high cost hours in the summer and winter months, it over-weights load served during the shoulder spring and fall periods.

We now have the ability to analyze the cost to serve in all hours of the year, rather than rely upon a small, non-random, biased sample size using just .1% of the available data. We should utilize the remaining 99.9% of the data set to inform future decisions.

4. SUPPLEMENT 12CP WITH AN HOURLY REVIEW OF COSTS IN FUTURE RATE CASES

CEO believes that there shouldn't be another rate case filed by the Company that is not informed by a cost to serve analysis reflecting the costs to serve load in all hours of the test year. Recognizing the principle of gradualism as it affects rate design, CEO believes the public interest would be served by the Company including both a traditional 12CP/4CP cost to serve analysis and an hourly (8,760) cost to serve analysis to inform the class cost to serve allocations and rate design proposals in future rate case applications.

To help prepare for such a submittal, CEO has volunteered⁵ to work, outside of this docket, with PUC Staff, the Company and interested parties in leading productive and collaborative workshops reviewing the issues associated with developing an hourly informed class cost of service methodology.

/s/ Michael Heckler

Michael Heckler
Policy Director
Clean Energy Opportunities for Idaho

⁵ IPC-E-23-11, Stipulation and Settlement, pages 11 and 12.

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of November, 2023. I delivered true and correct copies of the foregoing FINAL COMMENTS to the following persons via the method of service noted:

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