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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER COMPANY'S APPLICATION TO COMPLETE THE STUDY REVIEW PHASE OF THE COMPREHENSIVE STUDY OF COSTS AND BENEFITS OF ON-SITE CUSTOMER GENERATION & FOR AUTHORITY TO IMPLEMENT CHANGES TO SCHEDULES 6, 8, AND 84 FOR NON-LEGACY SYSTEMS	**CASE NO. IPC-E-22-22** **IDAHO IRRIGATION PUMPERS ASSOCIATION, INC.'S TESTIMONY/COMMENTS RE: IDAHO POWER'S APPLICATION**

I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME AND OCCUPATION.

A. My name is Lance D. Kaufman. I am a consultant representing utility customers before state public utility commissions in the Northwest and Intermountain West. I have a Ph.D. in economics and have ten years of experience analyzing and testifying on energy and regulatory matters.

Q. PLEASE IDENTIFY THE PARTY ON WHOSE BEHALF YOU ARE TESTIFYING.

A. I am testifying on behalf of the Idaho Irrigation Pumpers Association ("IIPA"). IIPA is an Idaho non-profit corporation trade association representing farm interests in electric utility rate matters affecting farmers in southern and central Idaho who use electricity to pressurize their irrigation systems.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I respond to IPC's request for comment on the following topics: compensation structure, frequency of updates, recovery of export credit expenditures, project cap eligibility, and transitional rates.

Q. WHAT ARE YOUR RECOMMENDATIONS INTENDED TO ACCOMPLISH?

A. My recommendations are intended to establish cost-based rates for self-generating customers and to provide a framework that will allow economic self-generation investment decisions by IPC's customers.

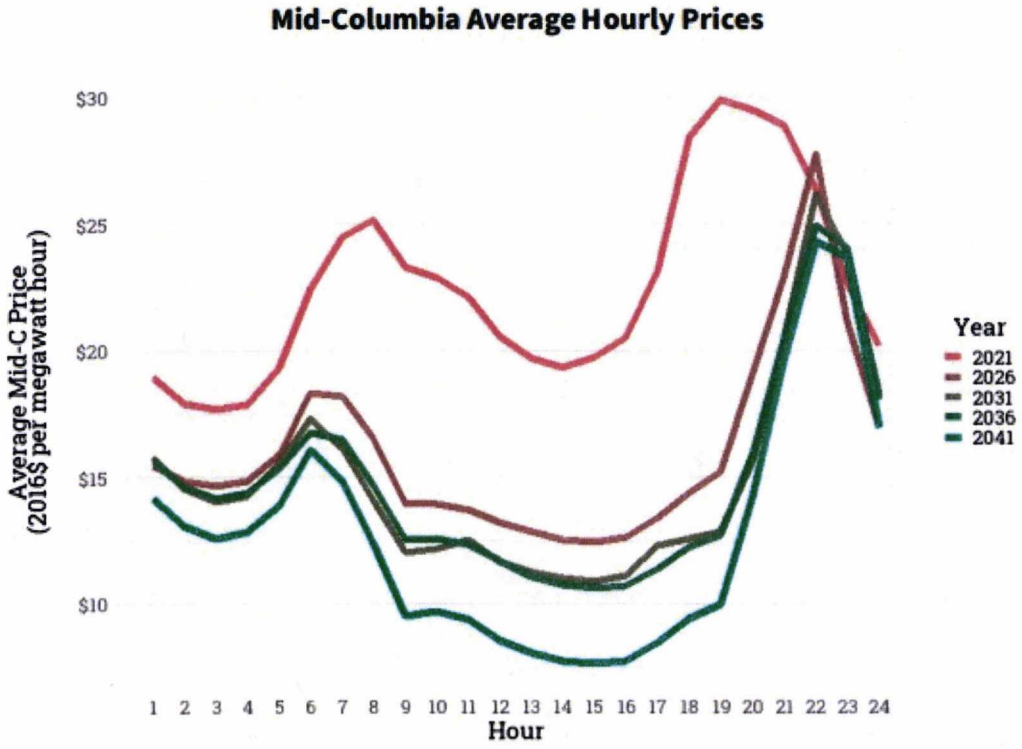
Q. WHY IS IT IMPORTANT TO ESTABLISH COST BASED RATES AND PROVIDE TRANSPARENCY REGARDING LONG TERM EXPECTATIONS ABOUT RATES?

A. Cost based rates are critical to ensuring that customers make economically efficient decisions about investing in self generation. In the short term it is possible to have small programs with rates that are not cost based because the subsidies of small programs can be spread over non-participating customers without tangible impacts. However, as these programs grow subsidization begins to become burdensome and non-participating customers will eventually demand fair treatment. Customers who invested in self-generation under a subsidized rate treatment may find themselves regretting their investment after subsidies have been removed.

Similarly, even with cost-based rates, utility customers may not be sufficiently sophisticated to anticipate how energy markets, and thus net export rates, are expected to evolve. Long term price forecasts in the Pacific Northwest have steeply declining energy prices during hours of solar production. This is because Oregon and Washington state

legislation is expected to lead to 50 GW of regional solar generation by 2030.[1] This massive growth in solar will depress power prices close to zero during periods of high solar generation. This will greatly decrease the export credit of solar self generators. IPC customers should be fully informed about expected decreases in long term export credits prior to investing in self generation.

The figure below illustrates expected annual average hourly shape of energy prices by year. Note the sharp decrease in daytime prices from 2021 to 2026. Under this price forecast the avoided energy cost can reasonably be expected to reduce by more than 50 percent by 2026.



[1] 2021 Northwest Power Plan page 73.

II. COMPENSATION STRUCTURE

Q. PLEASE SUMMERIZE YOUR COMMENTS REGARDING COMPENSATION STRUCTURE.

A. I make the following recommendations regarding compensation structure:

- Use sub-hourly measurement and pricing intervals,
- Use 2021 Idaho IRP or other Idaho specific measure of locational price for measuring avoided energy cost,
- Use Idaho Power specific ELCC when calculating avoided capacity,
- Adopt IPC's method of calculating avoided distribution and transmission,
- Add transmission charge consistent with adopted pricing, and
- Use avoided line loss consistent with adopted pricing.

a. <u>Sub-hourly pricing intervals</u>

Q. WHAT MEASURING AND PRICING INTERVAL DO YOU RECOMMEND?

A. I recommend that exports be measured and priced on the sub-hourly interval. This recommendation is conditional on the use of a rate design that ensures the base rate of exporting customers is sufficient to cover the customer's cost of service.

Q. WHY DO YOU RECOMMEND SUB-HOURLY PRICING?

A. Idaho Power is a participant in the Western Energy Imbalance Market. As a market participant Idaho Power's system is economically dispatched to sub-hourly market based on cost-minimizing algorithms. This means that the sub-hourly pricing and generation provides the most accurate representation of value for exported energy.

Q. WHY IS YOUR RECOMMENDATION CONTINGENT ON APPROPRIATE RATE DESIGN?

A. The recommendations in my testimony assume that the export credit rate only measures the value of exported energy and makes no adjustments or deductions to account for the

cost of the exporting customer in periods when the customer is consuming energy from the utility. The recommendations also assume that none of the costs for the utility infrastructure used to receive and deliver the exported energy are netted against the value of the exported energy. Under these assumptions and calculations, if other rates are not designed to fully collect the cost of serving the customer with energy, or with facilities to receive energy, the exporting customer will be subsidized by non-generating customers.

Q. WHY DO YOU RECOMMEND ASSUMING THAT THE COST OF SERVING CONSUMED ENERGY IS EXCLUDED FROM THE EXPORT RATE?

A. Clearly separating the cost of serving energy from the value of exported energy ensures no double counting or under counting of costs. If some costs of serving energy to the customer were included in the export rate it would be unclear what residual costs remain to be collected through base rates.

b. <u>Idaho Pricing for Avoided Energy Cost</u>

Q. WHAT PRICE DO YOU RECOMMEND BE USED TO VALUE AVOIDED ENERGY COSTS?

A. I recommend that prices be set prospectively using the IPC IRP hourly price forecast and that avoided energy cost be trued up annually based on a sub-hourly locational marginal price from the EIM be used to value avoided energy. This provides an accurate valuation of avoided energy cost that matches the recommended granularity of the measurement interval.

Q. HOW WOULD YOUR RECOMMENDATION BE IMPLEMENTED?

A. As part of IPC's annual power cost update IPC would identify the difference between the forecasted and actual avoided energy cost based on the actual LMP. The next year's export credit would be adjusted by an amount sufficient to recover the difference.

c. Avoided Capacity Contribution

Q. WHAT CAPACITY CONTRIBUTION SHOULD BE USED TO MEASURE AVOIDED CAPACITY COSTS?

A. The sub-hourly ELCC of the exported generation should be used to measure capacity contribution. This methodology is consistent with the treatment of IPC's demand response programs.

Q. WHY DO YOU RECOMMEND USING THE SUB-HOURLY ELCC RATHER THAN THE HOURLY ELCC?

A. The hourly ELCC offsets sub-hourly generation with sub-hourly energy consumption. The use of an hourly ELCC would be inconsistent with the assumption that the cost of serving energy consumption is addressed through base rates.

d. Avoided Transmission and Distribution Investment

Q. WHAT IS YOUR RECOMMENDED TREATMENT OF AVOIDED TRANSMISSION AND DISTRIBUTION INVESTMENT?

A. I support the method presented in the VODER study.

e. Transmission Charge

Q. DOES THE VODER STUDY ADDRESS THE COST TO MOVE EXPORTED ENERGY TO MARKET?

A. No, the VODER study appears to assume that all exported energy is consumed on system. However, in periods when IPC is selling into the market IPC may incur transmission costs to move energy to markets. If a locational marginal price is used transmission constraints and costs should be accounted for. If a price is used that does not account for transmission constraints or costs, a transmission charge should be added to the calculation of the export credit in hours when IPC is selling excess energy into the market.

f. Line loss

Q. WHAT IS YOUR RECOMMENDATION REGARDING LINE LOSS?

A. Line loss treatment should be consistent with pricing and other cost calculations. If a locational marginal price is used, line losses should only be calculated to deliver energy to the location or aggregation point. The line loss rates used in the VODER study appear to include all line losses on IPC's system, including transmission line losses that may already be reflected in the LMP or LAP prices.

III. FREQUENCY OF UPDATES

Q. WHAT IS YOUR RECOMMENDATION REGARDING FREQUENCY OF UPDATES?

A. I recommend avoided energy component of the export credit rate be updated annually and that all other components be updated on Idaho Power's Integrated Resource Plan cycle.

Q. WHY DO YOU RECOMMEND THAT THE AVOIDED ENERGY COMPONENT OF THE EXPORT CREDIT RATE BE UPDATED ANNUALLY?

A. The avoided energy cost is the largest component of the export credit rate, is easily updated, and is expected to vary significantly from year to year. Thus updating this component on a yearly basis keeps costs in line with benefits with minimal administrative burden.

Q. WHY DO YOU RECOMMEND THAT ALL OTHER COMPONENTS BE UPDATED ON IDAHO POWER'S INTEGRATED RESOURCE PLAN CYCLE?

A. The other components of the export credit either directly rely on IRP inputs and results or, as is the case for avoided distribution, implement some form of planning analysis and thus are more administratively complex to update.

IV. RECOVERY OF EXPORT CREDIT EXPENDITURES

Q. HOW DO YOU RECOMMEND THAT EXPORT CREDIT EXPENDITURES BE RECOVERED?

A. I recommend that the export credit expenditures be recovered through the power cost adjustment mechanism.

Q. WHY DO YOU RECOMMEND THAT THE EXPORT CREDIT EXPENDITURES BE RECOVERED THROUGH THE POWER COST ADJUSTMENT MECHANISM?

A. The export credit reflects the purchase of excess power by IPC. Power purchases are appropriately recovered through the power cost adjustment mechanism.

V. PROJECT ELIGIBILITY CAP

Q. WHAT IS YOUR RECOMMENDATION REGARDING THE PROJECT ELIGIBILITY CAP?

A. I recommend softening the project eligibility caps to allow IPC greater discretion in determining project eligibility. However, this recommendation is contingent on both export credit and base rates being designed to minimize subsidization of self-generating customers. In addition, to the extent that IPC makes system investments to accommodate large projects, these investments should be directly charged to the participating customer. If the Commission does not anticipate addressing subsidies of self-generation customers within base rates, the project eligibility cap should not be lifted.

Q. WHY DO YOU RECOMMEND THAT SYSTEM INVESTMENTS MADE TO ACCOMMODATE LARGE PROJECTS BE CHARGED TO THE PARTICIPATING CUSTOMER?

A. IPC indicated in a workshop that accommodating customers above the 100-kW cap introduces additional grid management difficulties that could require distribution or

transmission upgrades to appropriately accommodate the load.[2] If eligibility caps are removed there is greater risk that system investments made to accommodate larger projects could be recovered from non-participating customers. IPC's line extension rules currently protect existing customers from investments made to accommodate new customers. These rules should apply to IPC investment made to accommodate self-generation.

VI. TRANSITIONAL RATES

Q. WHAT IS YOUR RECOMMENDATION REGARDING TRANSITIONAL RATES?

A. No transition period is needed beyond the existing transition allowed under Order No. 34892.

Q. WHY DO YOU RECOMMEND NO ADDITIONAL TRANSITION?

A. Transition rates are appropriate to accommodate customer investments that would be rendered uneconomic by modified policy. In Case No. IPC-E-20-26 the Commission established a transition process for existing customers. That case also provided notice to potential new self generation customers that self-generation rules and rates would be changing in the near future. Because the currently contemplated changes were signaled to customers in IPC-E-20-26, customers not covered by transition rates in Order No. 34892 made investment decisions on a time frame that allowed consideration of the impact of revised rates on the economics of self-generation.

Q. DOES THIS CONCLUDE YOUR RESPONSE TESTIMONY?

A. Yes.

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[2] IPC September 12th Technical Workshop

DATED this 21st day of September, 2022

/s/ Lance Kaufman
LANCE KAUFMAN

ERIC L. OLSEN

CERTIFICATE OF SERVICE

I HEREBY CERTIFIY that on this 21st day of September, 2022, I served a true, correct and complete copy of the Petition of Idaho Irrigation Pumpers Association, Inc. Comments in IPC-E-22-22 to each of the following, via U.S. Mail or private courier, email or hand delivery, as indicated below:

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