RECEIVED
2022 FEB 10 PM 12:52
IDAHO PUBLIC
UTILITIES COMMISSION

Benjamin J. Otto (ISB No. 8292)
Emma E. Sperry
710 N. 6th Street
Boise, ID 83701
Ph: (208) 345-6933 x 112
botto@idahoconservation.org
esperry@idahoconservation.org

Attorneys for the Idaho Conservation League

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER COMPANY'S APPLICATION FOR APPROVAL TO MODIFY ITS DEMAND RESPONSE PROGRAM	))))	**CASE NO. IPC-E-21-32** **IDAHO CONSERVATION LEAGUE COMMENTS**

The Idaho Conservation League submits the following formal comments regarding Idaho Power's proposed demand response (DR) programs. ICL submits these comments pursuant to Rule 203 of the Commission's Rules of Procedure[1] and pursuant to the Notice of Modified Procedure[2] issued in this case by the Commission on December 21, 2021.

ICL appreciates the steps that Idaho Power has taken to ensure that their DR programs better meet ongoing capacity needs. However, we are concerned that Idaho Power has not proposed any expansion of its DR capacity and we urge the Company to develop expanded DR programs that provide benefits to a larger set of customers.

I. Demand Response is a Valuable but Underutilized Resource for Idaho Power.

In its filing, Idaho Power recognized that DR is valuable and cost-effective up to at least 584 MW of capacity, yet it opted not to increase its DR capacity beyond a "conservative estimate" of 300 MW.[3] Based solely on these numbers, Idaho Power is foregoing 284 MW of

[1] IDAPA 31.01.01.203
[2] Notice of Modified Procedure: Order No. 35266, Case No. IPC-E-21-32, 1-2 (Dec. 21, 2021).
[3] Direct Testimony of Jared Ellsworth, Case No. IPC-E-21-32, 23 -24 (Oct. 1, 2021).

clean power capacity that would help the Company cover energy needs during peak hours, provide direct benefits to customers, and realize environmental benefits which would push the Company closer to its own clean energy goals.

In addition, because Idaho Power's modeling for DR did not fully capture that amount of solar that will come on line in the 20-year planning period, 584 MW of cost effective potential DR capacity may be an underestimate. As Mr. Ellsworth's testimony notes, the more solar that enters the system, the more valuable DR becomes because DR can provide capacity in times where solar is not producing power. In their DR modeling, the Company modeled the effectiveness of DR in scenarios with 1) no additional solar (the current IPC solar capacity); 2) 120 MW of additional solar; and 3) 520 MW of additional solar.[4] Because the Company intends to introduce 1,405 MW of solar before 2040,[5] 520 MW of additional solar is not reflective of the Company's 20-year plan. Yet, Idaho Power uses the results from the DR modeling to predict DR potential for the entire 20-year planning period.[6] As a result, it is likely that more than 584 MW of DR is cost effective for the Company during the full 20-year planning period.

Given that Idaho Power does not have immediate plans to expand its DR capacity beyond 300 MW and that it only plans to expand DR by 100 MW during the 2020-2040 planning period,[7] ICL assumes that more DR was not selected in the IRP because, although it is cost effective, it is not as low cost as other supply-side resources. While we recognize the importance of keeping resource costs low in order to provide customers with reasonable rates, Idaho Power

---

[4] Direct Testimony of Jared Ellsworth, *supra* at 6-9. (The 520 MW of additional solar number comes from the model on page 9. The Company modeled 836 MW of solar in its final scenario. With a current solar capacity of 316 MW, this is an additional 520 MW capacity of solar (836 - 316 = 520))
[5] Idaho Power, *2021 Integrated Resource Plan*, 152 (Dec. 2021).
[6] Idaho Power, *supra* at 69. (IPC allowed the IRP model to select from 584 MW of DR capacity, 284 MW more than the 300 MW of DR that is anticipated to result from the DR programs proposed in this proceeding)
[7] *Id.* at 63.

overlooks several DR benefits that would make DR appear more attractive than other supply-side resources.

1. DR can provide transmission and distribution deferral benefits to the Company.[8] In its analysis, Idaho Power only examined the capacity and peak energy savings benefits.
2. DR provides direct benefits to customers that Idaho Power did not capture in their analysis. For example, customers value the ability to control their electricity usage and their bill amount. Customers also value the ability to positively impact the environment by reducing their use of electricity.[9]
3. Even if DR programs are slightly more costly than other supply-side resources such as purchasing power from the wholesale market or manufacturing power in out-of-state gas plants, DR programs keep Idaho dollars in Idaho. Idaho Power customers who participate in DR programs or who pay for them indirectly through their power bills can be confident that their money is spent for the benefit of other Idahoans rather than out-of-state actors.

ICL recognizes that Idaho Power is planning to undertake a more thorough analysis of its DR programs in the coming year.[10] We worry, however, that the assumptions in this filing and the IRP have set an artificially low starting point for DR expansion. In future years, as the full value of DR becomes more apparent, the Company will be forced to scramble to design and implement new DR programs. In the meantime, the Company may invest in resources that are

[8] Ryan Hledik, et al., *The National Potential for Load Flexibility: Value and Market Potential Through 2030,* Brattle Group, 12, https://www.brattle.com/wp-content/uploads/2021/05/16639_national_potential_for_load_flexibility_-_final.pdf (last visited Feb. 9, 2021).
[9] Omar I. Asensio & Magali A. Delmas, *Nonprice Incentives and Energy Conservation*, 112 Proc. of the Nat'l Acad. of Sci. 6, E510 (2015). (In this paper, the authors found that messages about the environmental and health benefits of decreased electricity usage were more effective than messages about monetary savings at incentivizing participants to reduce their use of appliances)
[10] Idaho Power, *supra* at 69.

more costly and less environmentally sound in the long term. Additionally, DR programs take time to implement and may have unexpected participation patterns. Idaho Power should revisit its assumptions about the value provided by DR and begin planning now for how it will expand its DR to accommodate future capacity needs.

II. Idaho Power Should Expand its Demand Response Capacity by Offering a Larger Selection of DR Programs and Increasing its Marketing of DR Programs.

Expanded Programs

Idaho Power should expand its DR programs in order to realize the full potential that DR can provide as well as to provide benefits to a larger number of customers. These new DR programs should prioritize the delivery of benefits to low-income customers who may struggle with high electric bills and who have not been a focus of Idaho Power's previous demand response programs. The following programs are not an exhaustive list of DR programs that Idaho Power should analyze in their upcoming DR study, but rather are programs that have a particularly high potential to provide significant financial and environmental benefits to a large number and variety of customers.

1. Water Heater Program

Idaho Power should implement a smart water heater demand response program in which the utility installs technology that allows it to remotely control water heater energy use. This program can be implemented in both single-family homes and multifamily housing. Idaho Power should cover the cost of the water heater retrofit at least for low-income customers, if not for all customers. In the multifamily housing version of the program, Idaho Power should provide property managers with incentives to purchase compatible water heaters if they do not already

have one and then provide free or low-cost retrofits to the water heater.[11] Idaho Power should also encourage property managers to pass on the electricity savings to their residents in the form of lower rent/utility bills or property upgrades.

As Mr. Ellsworth points out in Exhibit 1 of his testimony, there is an enormous capacity potential for a water heater DR program[12] which means that the up-front costs of the program will quickly be recovered via capacity benefits. This program will also provide significant savings to residential customers, particularly low-income customers, and will not have a large impact on customer comfort.

2. Electric Vehicle Peak Pricing Program

As electric vehicles (EVs) become increasingly common, utilities across the country are designing time of use pricing programs specifically for EV charging. Most of these programs ask customers to voluntarily shift their EV charging to non-peak hours, but some utilities have invested in technology that remotely controls EV chargers and automatically adjusts power usage during peak hours.[13] While Idaho Power encourages EV users to enroll in its Time Of Day pricing program, the program is not tailored to EV customers and their charging needs and will not result in as much savings as a remote control EV program.

Although an EV demand response program that remotely controls EV charging may be more costly to Idaho Power than other types of DR program,[14] robust EV demand response and

---

[11] *See* Application for Deferred Accounting of Costs Associated with the PGE Demand Response Water Heater Pilot, Docket No. UM 1827(3) (Pub. Utilities Comm. of Ore.), 3-4 (Apr. 18, 2017). (The Portland General Electric water heater program provides incentives to property managers to buy compatible water heaters for the DR program and then provides the necessary retrofits for the utility to have control over water heater energy usage. The program also gives coupon books to residents living in participating buildings.)

[12] *See* Direct Testimony of Jared Ellsworth, Exhibit No. 1, Case No. IPC-E-21-32 (Oct. 1, 2021). (A water heater DR program could provide up to 103.1 MW of DR capacity, 22.5% of the total MW capacity for Idaho Power DR based on the NWPP calculations)

[13] *See, e.g.*, CPS Energy, *FlexEV Rewards*, https://www.chargingrewards.com/cpsenergy/ (last visited Feb. 9, 2022).

[14] Ellsworth, Exhibit 1, *supra*. (lists Residential EV demand response program as "High Cost")

incentive programs will increase EV usage among Idaho Power's customers. More EVs will ultimately increase customer electricity usage and provide financial benefit to the Company. More EVs will also provide environmental and financial benefits to ratepayers. ICL urges the Company to conduct a full analysis of these potential benefits of EV programs in its upcoming DR study.

3. Expand AC Program to Multifamily and Small Commercial

Idaho Power's current AC Switch demand response program should be expanded to encourage multifamily customer participation and permit small commercial customer participation.

During the January 31, 2022 technical workshop for this proceeding, Mr. Nesbitt stated that multifamily implementation of the AC program is challenging due to the high turnover rate of tenant participation. Idaho Power can overcome this challenge by encouraging property owners to require tenants in the lease to keep their AC switch installed and developing marketing that informs new tenants about the benefits of remaining in the AC program.

Mr. Nesbitt also identified challenges associated with implementing a small commercial AC switch program including that the Commission denied a similar program in 2009.[15] In that order, the Commission was concerned that the small commercial program would not be cost effective and that there was not sufficient funding from the Energy Efficiency Rider to pay for the up-front costs of the program. Given that it has been 13 years since that order was issued, Idaho Power should revisit its analysis of a small commercial AC program and determine ways to make this program cost effective. Idaho Power has since studied the exact energy savings that result from the AC Switch program and can apply those learnings to the study of a new small

[15] Order 30852, Case No. IPC-E-09-12, 5 (July 1, 2009).

commercial program.[16] In addition, Idaho Power is no longer as constrained by the Energy Efficiency Rider in selecting its DR programs. Rather, the Company can select DR resources that are cost effective and beneficial to ratepayers.[17]

4. New Construction Programs

Finally, Idaho Power should expand its current New Construction energy efficiency incentive program to include demand response upgrades. This program would provide incentives to builders who include DR-enabling technology in new construction such as water heater and AC switches and smart thermostats. The program would also automatically enroll the new homeowners in the DR programs and provide information to the customer about the benefits of remaining enrolled in the DR programs.

Marketing

Idaho Power's residential DR programs are only effective if customers are aware that they exist and if enrolling is easy. After the 2013 Demand Response settlement agreement, Idaho Power stopped marketing DR programs to new customers in all rate classes.[18] Although the application in this current proceeding proposes to remove the limitation on marketing in Schedule 23 (the irrigator DR program), it is unclear whether Idaho Power also officially plans to lift the ban on marketing to residential and commercial customers.[19] As Mr. Nesbitt remarked during the January 31, 2022 technical workshop, Idaho Power's marketing ban for residential DR program has meant that approximately 59,000 new Idaho Power customers did not learn

[16] *See* Idaho Power, *2020 Annual Report: Demand Side Management*, Supplement 2: Evaluation, 335 (Mar. 15, 2021). (A/C Cool Credit 2020 Demand Response Analysis) (Filed in IPC-E-21-04)
[17] *See* Order 34871, Case No. IPC-E-20-33 (December 17, 2020). (increasing the rider level to address underfunding of energy efficiency programs and encouraging the Company to continue to pursue all cost effective demand side management programs)
[18] Motion to Approve Settlement Agreement, Attachment 2, Case No. IPC-E-13-14, 5-7 (Oct. 2, 2013).
[19] Application, Case No. IPC-E-21-32, 13 (Oct. 1, 2021).

about the program.[20] Indeed, participation in the AC Cool Credit program has actually decreased since 2013.[21] ICL fully supports lifting the ban on marketing for residential and commercial customers.

In addition to lifting the ban on marketing, Idaho Power should increase marketing efforts to low-income customers. Low-income customers are the most likely to receive substantial benefit from a DR program that provides a credit to offset some of their monthly electricity bill, yet they are also more likely than wealthier customers to face barriers to participation in these programs. For example, low-income customers may be unable to take the time necessary to learn about and enroll in the program and they may worry that the program comes with hidden fees and up-front costs. Targeted marketing combined with strategies like default enrollment can help low income customers benefit from the energy savings DR programs provide.

Finally, Idaho Power should invest resources in studying effective and innovative marketing and enrollment strategies for the various DR programs that we described above as well as any other DR programs that the Company is considering implementing. Marketing plays a huge role in ensuring that individuals participate fully in a program and a poor marketing strategy can make a DR program appear less cost effective than it would be otherwise. ICL suggests that Idaho Power review science-backed research as well as work closely with customer groups during the design phase of its DR marketing strategies.

---

[20]Idaho Power, *2021 Integrated Resource Plan*, Appendix A, 46-47 (Dec. 2021). (IPC gained around 59,000 customers between 2014 and 2020)

[21] There were 29,642 customers enrolled in the program in 2014, but only 22,536 enrolled in 2020. *See* Idaho Power, *2020 Annual Report: Demand Side Management*, 30 (Mar. 15, 2021); Idaho Power, *2014 Annual Report: Demand-Side Management*, 35 (Mar. 15, 2015).

III. ICL Supports Idaho Power's Demand Response Filing, but Requests that the Company Review its Anticipated Demand Response Capacity and Plan for Robust Future Demand Response Programs and Marketing.

Overall, ICL supports Idaho Power's shift to using the ELCC methodology as well as its changes to the DR programs as long as those changes continue to result in full demand response participation from all customer classes.[22] ICL also supports Idaho Power's lift on any marketing bans for its DR programs.

ICL requests that Idaho Power revisit its calculations for determining DR capacity over the 20-year planning period and ensure that its models accurately reflect the full amount of solar that will come online during that time. ICL also requests that Idaho Power account for the full benefits of DR, such as benefits related to deferring transmission and distribution line costs, direct benefits to customers from lowered bills, and the positive environmental impact of DR. Finally, ICL requests that Idaho Power plan for a robust suite of demand response programs that benefits a wide array of customers, including low income customers, and that is accompanied by high quality marketing strategies.

Respectfully submitted this 10th day of February 2022,

/s/ Emma E. Sperry
Emma E. Sperry
(Assisted by Benjamin Otto)

[22] Given that other intervenors in this proceeding are more closely representing the interests of irrigators, ICL's comments do not address concerns about the changes to the irrigator DR program. It is critical, however, that any changes to the irrigator DR program do not drastically reduce irrigator participation and lower DR capacity. We support other intervenors' comments to the extent that they make this argument.

CERTIFICATE OF SERVICE

I hereby certify that on this 10th day of February, 2022, I delivered true and correct copies of the foregoing COMMENTS to the following persons via the method of service noted:

/s/ Benjamin J. Otto

Electronic mail only (See Order 35058):

Idaho Public Utilities Commission
Jan Noriyuki, Secretary
secretary@puc.idaho.gov

Idaho Power
Lisa D. Nordstrom
Connie Aschenbrenner
lnordstrom@idahopower.com
caschenbrenner@idahopower.com
dockets@idahopower.com

Idaho Irrigation Pumpers Association
Eric L. Olsen
Echo Hawk & Olsen, PLLC
elo@echohawk.com

Lance Kaufman
AEGIS Insight
lance@aegisinsight.com

Industrial Customers of Idaho Power
Peter J. Richardson
Richardson, Adams, PLLC
peter@richardsonadams.com

Dr. Don Reading
dreading@mindspring.net

Micron
Jim Sweir
Micron Technology, Inc
jsweir@micron.com

Austin Rueschhoff
Thorvald A. Nelson
Austin W. Jensen
Holland & Hart, LLP
darueschhoff@hollandhart.com
tnelson@hollandhart.com
awjensen@hollandhart.com
aclee@hollandhart.com
glgarganoamari@hollandhart.com

City of Boise
Ed Jewell
Deputy City Attorney
Boise City Attorney's Office
ejewell@cityofboise.com
boisecityattorney@cityofboise.com