

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

Attorney for the Idaho Conservation League

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF)	CASE NO. AVU-E-19-01
AVISTA CORPORATION’S)	
2020 INTEGRATED RESOURCE)	COMMENTS OF THE
PLAN)	IDAHO CONSERVATION
)	LEAGUE

The Idaho Conservation League (“ICL”), in response to the Notice of Modified Procedure issued in Order No. 34666, submits the following comments regarding Avista’s 2020 Integrated Resource Plan.

BACKGROUND

Avista Corporation dba Avista Utilities (“Avista” or “Company”) is an electrical corporation and public utility company as defined in *Idaho Code* §§ 61-119 and -129, and the Idaho Public Utilities Commission (“Commission”) has jurisdiction over it and the issues in this case under Title 61 of the Idaho Code, including *Idaho Code* §§ 61-501, 61-515, and 61-302. Avista is one of three major public electric utilities in Idaho and serves over 100,000 Idaho electric customers in the Panhandle from Lewiston to Sandpoint.

On February 28, 2020, Avista filed its 2020 Integrated Resource Plan (“IRP”). The IRP outlines and analyzes the Company’s strategy for meeting its customers’ projected energy needs over the next 20 years. In Idaho, IRPs must contain a range of subjects required by prior Commission orders, including a load forecast, effects of potential changes to existing resources, consideration of demand and supply side resource options, and an assessment of expected costs, reliability, and risks of alternative resource strategies over a 20-year period. *See Order No. 33971*. For this 2020 IRP, Avista’s Preferred Resource Strategy plans to exit Cosltrip by 2025 and continue the clean energy transition in order to maintain reliable and affordable energy service for Idahoans.

Public interest and participation in Avista's IRP has grown rapidly in just the past five years. Notably, during the Commission's review of Avista's 2015 IRP, only two public comments were filed and no workshops or hearings were held. During the Commission's review of Avista's 2017 IRP, 23 Idahoans submitted written comments and 18 Idahoans testified during a telephonic public hearing. In 2020, approximately 80 Idahoans filed written comments and 35 Idahoans testified during the telephonic public hearing. For 2020, public engagement increased as organizations, municipalities, businesses and individuals requested the Commission hold a public hearing on the IRP, including the Idaho Conservation League, the City of Sandpoint, the Idaho Forest Group, Embodied Virtue, and many residential customers in Idaho.

Following these hearing requests, on July 9, 2020, the Commission Staff ("Staff") held a virtual public workshop on Avista's IRP, where the Staff provided the public an opportunity to learn about Staff's analysis of Avista's IRP and an opportunity for the public to raise concerns and questions about the IRP and Staff's analysis. During this public workshop, Staff received and answered public questions on Avista's IRP for over an hour and a half.

Following the public workshop, Idaho Avista customers continued to file requests with the Commission, calling for the Commission to hold a public hearing on Avista's IRP. On August 5, 2020, the Commission held a telephonic public hearing on Avista's IRP. During the hearing, the Commission received three hours of public testimony on a variety of topics related to Avista's IRP and electric service in North Idaho. A theme common to the vast majority, if not all of this testimony, included requests that both the Commission and Avista use their authority to address the costs and risks of climate change and support, implement, and accelerate Avista's transition to 100% clean energy.

In addition to the hearing and workshop, at the time ICL submitted these comments, over 80 Idaho Avista customers had submitted written comments on Avista's IRP, similarly calling for the Commission and Avista to address climate change and support the transition to 100% clean energy. The Commission's facilitation of different venues for Idaho Avista customers to communicate the public interest has been appreciated and should continue into the future. The consistent message in all of the comments is that Idahoans are concerned that fossil fuel pollution is harming the local and global environment while proving more expensive than clean alternatives. Accordingly, Idahoans expect this Commission to encourage Avista to plan for a clean energy system that protects the public health and safety.

ICL COMMENTS

After reviewing Avista's IRP, and through our participation in Avista's IRP Technical Advisory Committee, ICL identified four significant deficiencies in this IRP that do not meet the Commission's IRP standards described in prior Order Nos. 22299, 25260, and 33971. While these deficiencies warrant an order from the Commission to improve future analysis, ICL supports the result and general direction of this IRP -- Avista's Preferred Resource Strategy identifies Colstrip as uneconomic for Idaho customers no later than 2025 and the addition of 300 MW of wind in the next three years with future renewable energy paired with battery storage as the least cost replacement portfolio. To refine this general direction with a more specific plan to replace the failing Colstrip plant, ICL requests the Commission consider the following process improvements that would rectify the deficiencies in this IRP:

1. Encourage Avista to apply the social cost of carbon in its analysis of energy resources for Idaho customers as a proxy for valuing the public health and safety impacts of resource options;
2. Require more detailed information and analysis on how Avista plans to protect its Idaho customers from uncertain and volatile circumstances surrounding Colstrip Units 3 and 4;
3. Order Avista to use publicly available gas price forecasts so that customers and the Commission can vigorously test this major assumption that drives the IRP process; and
4. Direct Avista to fully explain and account for how the utility treats Renewable Energy Credits created by Idaho resources.

ICL recommends the Commission issue an order directing Avista to improve its 2021 IRP according to these recommendations, which we describe in more detail below.

Social Cost of Carbon

To determine how Avista will meet resource needs over the 20-year IRP planning period, Avista uses two key models, and the results of these models are inherently tied to the inputs and baseline data Avista chooses to feed the models. For Avista's Idaho customers, Avista chose not to input a forecasted social cost of carbon into these models, which is contrary to the Commission's prior orders requiring IRPs describe the utility's plan for meeting all potential jurisdictional load over the 20-year planning period, with references to "expected costs, reliability, and risks inherent in the range of credible future scenarios." Order No. 33971.

Avista's decision to limit the IRP analysis for its Idaho customers in this way is also contrary to the Commission's obligation to ensure utilities provide resources that "promote the safety, health, and conveniences" of the public. *Idaho Code* § 61-302.

Avista's Preferred Resource Strategy ("PRS") is the Company's plan to meet resource needs over the 20-year IRP planning period. The PRS is developed by first calculating the operating costs of existing resources and new potential resources using the AURORA model, which Avista runs by inputting forecasted resource characteristics, including: fuel costs, customer load, and hydro conditions. After running the AURORA model and obtaining the different operating costs of existing and new potential resources, Avista then inputs those costs into the Company's internally-developed PRiSM model to create an "Efficient Frontier" of resources, or least-cost portfolios, given a certain level of risk and constraint. The inputs Avista chooses to include in these modeling processes determine, in part, to what extent Avista's IRP informs its Idaho customers of expected costs, reliability, and risks. In its 2020 IRP, Avista chose not to apply a social cost of carbon when assessing the resources costs and risks for the Company's Idaho customers. By excluding a carbon cost from this analysis Avista did not assess all the potential costs and risks inherent in a range of credible future scenarios, as required by Order No. 33971.

The social cost of carbon is a valid, well-accepted method of calculating the costs of greenhouse gas emissions and understanding the potential significance of such emissions. The social cost of carbon "estimate[s] the economic damages associated with a small increase in carbon dioxide (CO₂) emissions, conventionally one metric ton, in a given year [which] represents the value of damages avoided for a small emission reduction (i.e. the benefit of a CO₂ reduction)."¹ The social cost of carbon is not a tax, as Avista implies in the IRP,² but rather an input to the IRP modeling process that internalizes the otherwise externalized costs associated with pollution that Avista's facilities emit into the atmosphere. There is no one exact science for measuring the social cost of carbon, but this is no different than many of the other uncertain values Avista incorporates into its IRPs, such as Avista's forecasts and estimates of the market price of energy and the price of gas fuel. In February 2017, the Proceedings of the National

¹ U.S. Environmental Protection Agency ("EPA"), "Fact Sheet: Social Cost of Carbon" (Nov. 2013) at 1, formerly available online at <https://www.epa.gov/climatechange/social-cost-carbon>.

² See Avista 2020 IRP at p. 10-24.

Academy of Sciences of the United States of America acknowledged in a peer-reviewed article that the social cost of carbon analysis is “[t]he most important single economic concept in the economics of climate change.”³

The Commission must ensure Avista maintains facilities “as shall promote the safety, health, comfort, and convenience” of the public. *Idaho Code* § 61-302. Applying a carbon cost to resources during the IRP modeling process satisfies this mandate by applying a proxy value to measure whether a resource promotes or degrades the public health and safety.

As indicated by the public testimony of Idahoans from across the Panhandle, Avista’s carbon emissions not only contribute to financial and health costs the Company’s Idaho electric customers are paying for now. These carbon emissions will increasingly contribute to financial and health costs that Avista’s future Idaho electric customers, many of whom are only children now, will have to pay for decades to come. During the public hearing, the Commission heard several of the financial costs to Idahoans from Avista’s emissions, which included reductions in farmland production in the Moscow area, exacerbated water quality conditions in Lake Coeur d’Alene and surrounding waterbodies, and increasing wildfire risk and wildfire smoke in Bonner County, all of which have financial and health implications for local businesses, the regional economy, and particularly for the most vulnerable Idahoans like children, the elderly, or those with compromised respiratory systems. When Avista operates or plans to invest in electric generating resources, each resource has costs and risks that Avista must estimate and evaluate in its IRPs for the benefit of its Idaho customers, who ultimately bear the consequences of Avista’s decisions. The social cost of carbon is another cost and risk, just like market electric prices or uncertain gas prices, on which Avista must also base its modeling and decision making.

Under Idaho Code, the Commission is charged with assessing new utility service and safety issues as they arise over time with the development of new technologies and as they are identified due to advancements in scientific understanding. Specifically, it is the Commission’s duty to ensure that:

“[e]very public utility shall furnish, provide and maintain such service, instrumentalities, equipment and facilities as shall promote the safety, health,

³ William D. Nordhaus, Revisiting the Social Cost of Carbon, PNAS, Feb. 14, 2017, <http://www.pnas.org/content/114/7/1518.full.pdf>

comfort and convenience of its patrons, employees and the public, and as shall be in all respects adequate, efficient, just and reasonable.” *I.C. § 61-302.*

Idaho Code grants the Commission the authority to carry out this duty, stating:

“The commission shall have the power, after a hearing had upon its own motion or upon complaint, by general or special orders, or regulations, or otherwise, to require every public utility to maintain and operate its line, plant, system, equipment, apparatus and premises in such manner as to promote and safeguard the health and safety of its employees, customers and the public, and to this end to end to prescribe the installation, use, maintenance and operation of appropriate safety or other devices or appliances, to establish uniform or other standards of equipment, and to require the performance of any other act which the health or safety of its employees, customers or the public may demand.” *I.C. § 61-515.*

As we mentioned above, the social cost of carbon is a valid and credible cost and risk that Avista must be required to incorporate in its IRP process, just like other costs and risks that impact its Idaho customers. Accordingly, we recommend the Commission to order Avista to evaluate and incorporate the social cost of carbon in the 2021 IRP and all future IRPs.

Colstrip

In just three years, the economics of Avista’s ownership in Units 3 and 4 of the Colstrip coal-fired power plant have dramatically changed and are an alarming indicator of the risk Avista’s Idaho customers bear as a consequence of Avista’s continued interest in this facility. Avista’s determination in the PRS to exit the Colstrip plant by 2025 is the primary reason ICL supports this IRP. After reassessing the Colstrip costs since 2017, Avista now concludes:

“This IRP analysis determines Colstrip is best to shut down after 2025 compared to alternative scenarios, such as 2035 closure and operating a single unit through 2035.”⁴

The declining economics of Colstrip is due to several factors: increasing plant costs, declining costs for alternative resources, the growing environmental liability at the plant and

⁴ IRP at 13-5.

mine, and more. For these reasons, Avista explains that the economics of Colstrip have the same bearing for Avista's Idaho customers as they do for Avista's Washington customers.

“Avista's analysis of Colstrip in this IRP indicates retiring the plant for Idaho customers would also be the economic choice rather than continuing its operation...”⁵

Avista also explains that the economics of Colstrip that suggest a much earlier retirement are independent of the effects of Washington State's most recent energy legislation.⁶

As the IRP describes, the circumstances surrounding Colstrip are changing rapidly and, in some cases, with little public notice. For example, Colstrip Units 1 and 2 were shut down in January 2020 -- two years earlier than planned -- and the closure notice was shared with the public in June 2019 -- just six months ahead of the closure.

Last summer, Units 3 and 4 had to be unexpectedly shut down for months due to violating air toxics standards.⁷ As costs and risks rise, it's no surprise that three co-owners announced plans to exit the plant by 2025. PacifiCorp accelerated plans to exit their share of Units 3 and 4 by 2023.⁸ Portland General Electric's 2020 Colstrip Enabling Study concluded exiting Colstrip in 2025 is the least cost and least risk option for its customers.⁹ Puget Sound has been planning to exit Colstrip for years as expenses and risks continue to rise and expects to save customers \$24-\$47 million by exiting the plant.¹⁰

Recently, Puget Sound Energy proposed to sell its stake in Colstrip Unit 4 to Northwestern Energy. While this sale is under review by the Washington State and Montana Commissions, the rapidly changing ownership of Colstrip Units 3 and 4 could impact Avista customers. Northwestern is the only entity interested in extending the life of Colstrip. But under the current operating agreement, as Northwestern acquires more voting shares in the Colstrip Units, they can force other owners to take required minimum output levels despite market

⁵ IRP at 11-3.

⁶ See IRP at 12-17 and 12-20.

⁷https://billingsgazette.com/news/state-and-regional/montana/air-pollution-problems-continue-to-plague-colstrip-as-2-largest-generators-remain-shut-down/article_84be43e8-74de-58f4-a4df-8b0f0daa8d69.html

⁸https://billingsgazette.com/news/state-and-regional/colstrip-owner-accelerates-exit-plans-again/article_9d722c23-6ff7-5269-adca-f893b77a802c.html

⁹ PGE, 2020 Colstrip Enabling Study, available at: <https://www.portlandgeneral.com/our-company/energy-strategy/resource-planning/integrated-resource-planning>

¹⁰https://billingsgazette.com/news/colstrips-largest-owner-has-been-planning-an-exit-for-years/article_b936fdcf-2586-52b1-814b-0ab03567c81d.html

conditions, and potentially impose capital and operating costs to prolong operations that Avista may ultimately attempt to pass on to its Idaho customers.¹¹

With these dynamic and potentially costly circumstances surrounding Colstrip, ICL was surprised during the virtual public workshop, when, on the topic of Colstrip, Commission Staff stated: “A lot of information was largely missing about Colstrip in the 2020 IRP.”¹²

During the virtual public workshop, Staff also indicated that Avista had assured Staff that the 2021 IRP would include more information on Colstrip, but it is important that the Commission be clear and specific in its order with regard to requiring Avista provide the information and analysis necessary for the Commission and Idaho customers to understand how Avista is planning to exit the Colstrip plant and limit Idaho customers from financial exposure.

ICL recommends the Commission direct Avista to continue planning to meet customer needs without the Colstrip plant after 2025 or earlier. The IRP analysis shows this resource strategy is the least cost and least risk option for Idahoans. Because the replacement date of 2025 looms near, ICL recommends the Commission encourage Avista to use the 2021 IRP to develop an exit plan, similar to the plan negotiated by Idaho Power to exit the Valmy plant,¹³ detailing how Avista will protect its Idaho customers from costs caused by plant co-owners beyond 2025.

Gas Price Forecast

The gas price forecast is a major input to the IRP process. According to Avista, “historically, natural gas processes were the greatest indicator of electric market price forecasts.”¹⁴ Avista’s IRP process uses the electric market price forecast as the benchmark for assessing the costs of future resource options. The gas forecast is also a major input in the risk assessment for any resource options. Because it influences the basic assessment of both costs and risks, the gas price forecast has the greatest influence on the determination of the least cost and least risk resource strategy of any IRP assumption.

Forecasting natural gas prices is as much an art as a science. For example, the U.S Energy Information Administration process makes assumptions about pipeline capacity, gas

¹¹ See IRP at 4-21.

¹² See July 9, 2020 Public Workshop Recording at 38:48.

¹³ See Order No. 34349, IPC-E-19-08 (approving Idaho Power framework agreement regarding exiting the Valmy coal units before plant co-owner NV Energy).

¹⁴ IRP at 10-7.

supplies, customer demands, competing suppliers, and even international politics and infrastructure development.¹⁵ The gas market is notoriously volatile in response to changes in all of these complex, fast-moving dynamics. Current events make this clear with a surge of bankruptcy filings in the gas exploration and production sector due to cratering oil prices.¹⁶ Because no forecast is completely accurate, understanding these assumptions is essential to assessing the credibility of this major IRP input. Credible assumptions drive public understanding of the IRP outcomes: “The Commission thus expects a utility to have vigorously tested the IRP’s assumptions to ensure the IRP accurately reflects changing markets and customer demand.” Order No. 33971. The gas price forecast is the most important assumption for the utility to vigorously test.

Unfortunately, Avista’s IRP process makes it impossible to vigorously test the gas price assumptions. Avista begins with a few months of forward market prices, but then switches to “two consultants with the capability to follow supply and demand changes of the industry.”¹⁷ Avista does not describe these consultants’ assumptions, much less vigorously test them. Avista does not benchmark these secret forecasts with a publicly available source. Avista does not even identify the consultants so that customers could at least assess the reputation of their prior work. ICL recommends the Commission reject the use of secret price forecasts that neither the Commission nor anyone else can vigorously test, and instead use publicly available gas prices in the IRP.

Renewable Energy Credits

Despite raising concerns about Avista’s accounting of Renewable Energy Credits or Certificates (“RECs”) during Avista’s Technical Advisory Committee meetings, ICL was disappointed Avista did not include in the IRP a clearer, more robust discussion of Idaho’s share of the RECs from Avista’s energy system. For example, as Avista sells and transfers Idaho’s share of RECs to its Washington State customers and others, this affects how carbon-intensive the energy is that Avista’s Idaho customers ultimately receive. But, Avista failed to discuss by

¹⁵ See US. Energy Information Administration, Assumptions to the Annual Energy Forecast: 2020 Natural Gas Market Module, (available at: <https://www.eia.gov/outlooks/aeo/assumptions/pdf/natgas.pdf>).

¹⁶<https://www.reuters.com/article/us-north-america-oil-bankruptcy/wave-of-north-american-oil-and-gas-bankruptcies-to-continue-at-40-bbl-crude-report-idUSKBN24A2U1>.

¹⁷ IRP at 10-8.

what metrics or method Avista adjusts Idaho's energy fuel mix based on the transfer of Idaho RECs. In other words, when Avista sells an Idaho REC, what level of carbon emissions is then assigned to the quantity of energy that no longer has a REC bundled with it? Avista does not say.

As the Commission heard through public testimony, North Idahoans value and care that the electricity they receive is produced from clean energy, but Avista's IRP and public facing information on its webpage make it all but impossible for Idahoans to understand how Avista accounts for Idaho's share of RECs and what it means when Avista sells and transfers those RECs to other parties.

ICL requests that the Commission require Avista to develop a standalone section regarding Idaho's RECs in Avista's 2021 IRP. The Commission should require Avista discuss the following components of its REC accounting:

- Identify Avista's existing facilities that produce RECs and the number of RECs each facility produces annually;
- Identify potential future facilities that may produce RECs and the quantity each may produce;
- Explain the methodology Avista uses to adjust its accounting of carbon emissions, when Avista sells Idaho RECs to others;
- Report the quantity and sale price of Idaho RECs Avista has sold and/or retired over the past 10 years and the associated carbon emissions that were either emitted or avoided based on Avista sales and/or retirements of Idaho RECs over that period;
- Report the quantity of Idaho RECs Avista currently maintains in its accounts that have not yet been sold or retired;
- Explain the timing and process Avista applies to determine whether it sells or retires Idaho RECs; and
- Present a range of scenarios in which Avista would maintain, increase, or end the sale of Idaho RECs and analyze how this would affect carbon emissions for Avista's Idaho customers.

ICL notes that Idaho Avista customers provided testimony in this docket that they were unaware that Avista sold Idaho's portion of RECs and that they would like to see Idaho's share of RECs retired rather than sold. ICL supports this public testimony.

CONCLUSION

Having reviewed Avista's IRP and the record in this case, the IRP is deficient in at least four significant ways, as we discussed above, and, therefore, fails to satisfy the requirements of the Commission's prior orders. However, despite these deficiencies ICL supports Avista's IRP process, generally, because the process is guiding Avista in a direction that will ensure its Idaho customers receive low-cost, reliable, and 100% clean energy that supports and protects the public interest in Idaho. That being said, it is important that, if the Commission acknowledges Avista's IRP, that the Commission require Avista make specific improvements in its 2021 IRP that ensure Avista's compliance with the Commission's prior orders, including requiring Avista incorporate the costs and risks of its carbon emissions and better support the best interests of its Idaho customers, as Avista's Idaho customers testified to in this docket.

ICL RECOMMENDATION

Based on the comments provided above, ICL recommends the Commission direct Avista to improve the process for the 2021 IRP by:

1. Applying the social cost of carbon in the analysis of energy resources for Idaho customers as a proxy for valuing the public health and safety impacts of resource options;
2. Develop a detailed plan to protect its Idaho customers from uncertain and volatile circumstances surrounding Colstrip Units 3 and 4;
3. Use publicly available gas price forecasts so that customers and the Commission can vigorously test this major assumption that drives the IRP process; and
4. Fully explain and account for how Avista treats Renewable Energy Credits created by Idaho resources.

DATED this 19th day of August 2020

Respectfully submitted,

/s/ Benjamin Otto
Benjamin J. Otto
Idaho Conservation League

CERTIFICATE OF SERVICE

I hereby certify that on this 19th day of August, 2020, I served the foregoing COMMENTS OF THE IDAHO CONSERVATION LEAGUE, in case no. AVU-E-19-01, by emailing a copy thereof, in accordance with Idaho Public Utilities Commission Order No. 34602, to the following:

Electronic Mail:

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

Edward Jewell
Deputy Attorney General
Idaho Public Utilities Commission
edward.jewell@puc.idaho.gov

David J. Meyer, Esq.
Vice President and Chief Counsel for Regulatory and Governmental Affairs
Avista Corporation
david.meyer@avistacorp.com

Shawn Bonfield
Senior Manager of Regulatory Policy and Strategy
Avista Corporation
shawn.bonfield@avistacorp.com

/s/ Benjamin Otto
Benjamin J. Otto