ORDER NO. 21-184

ENTERED Jun 04 2021

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

LC 74

In the Matter of IDAHO POWER COMPANY, 2019 Integrated Resource Plan.	ORDER

DISPOSITION: 2019 IRP ACKNOWLEDGED

This order memorializes our decision, made and effective at the April 15, 2021 Special Public Meeting, concerning Idaho Power Company's 2019 Second Amended Integrated Resource Plan (IRP). We acknowledge all action items proposed in Idaho Power's revised action plan with the exception of the items discussed below. In addition, we adopt many of Staff's additional recommendations, modifying some action items as described in Staff's report, most of which are applicable to Idaho Power's forthcoming 2021 IRP.

I. INTRODUCTION

Through this IRP process, we reviewed a series of actions Idaho Power intends to take for the long-term provision of service to customers. These decisions include both removal of resources from its portfolio, such as exits from coal facilities, and development and acquisition of new resources. We acknowledge Idaho Power's early exit from coal facilities as reasonable given IRP modeling results, though we accept that further near-term analysis could lead Idaho Power to modify the timing of its actions. We acknowledge Idaho Power's Boardman to Hemingway (B2H) transmission project action items, as we also did in Idaho Power's 2017 IRP. We also accept, as has Idaho Power, many recommendations from Staff for additional analysis and review as part of the 2021 IRP.

II. IRP PROCESS

A. Purpose

The objective of the IRP process is to ensure an adequate and reliable supply of energy at the least cost to the utility and customers in a manner consistent with the public interest.[1]

[1] *In the Matter of the Investigation into Least-Cost Planning for Resource Acquisitions by Energy Utilities in Oregon*, Docket No. UM 180, Order No. 89-507 at 2 (Apr 20, 1989).

The IRP process provides an extensive opportunity broad input from a range of stakeholders and public participation. This input and IRP guideline requirements are meant to ensure a detailed and wide-ranging review of resource options, technology advancements, pricing scenarios, and risk profiles, and to test the utility's conclusions. The IRP process is intended to be iterative. Where weakness in the analysis or issues are identified, stakeholder participation can help identify alternatives and improvements to the action plan or analysis in the next IRP. Utilities should respond proactively to the concerns of stakeholders, and consider alternatives.

Ultimately, an acknowledged plan will become a working document for use by the utility, the Commission, and other interested parties in Commission proceedings.[2] We have noted in recent IRP decisions that during a time of considerable electric utility industry transition, IRPs should serve to allow for course corrections as industry evolution comes into greater focus.[3]

B. Timing and Content

We require regulated energy utilities to prepare and file IRPs within two years of acknowledgment of the utility's last plan.[4] The IRP process uses a 20-year planning period. Oregon's IRP guidelines include thirteen elements. Summarized, the elements are: (1) Identification of capacity and energy needs to bridge the gap between expected loads and resources; (2) Identification and estimated costs of all supply-side and demand-side resource options; (3) Construction of a representative set of resource portfolios; (4) Evaluation of the performance of the candidate portfolios over the range of identified risks and uncertainties; (5) Selection of a portfolio that represents the best combination of cost and risk for the utility and its customers; and (6) Creation of an action plan that is consistent with the long-run public interest as expressed in Oregon and federal energy policies.

The primary outcome of the IRP process, after the presentation of the plan and review by Staff and stakeholders, is the selection of a portfolio of resources with the best combination of expected costs and associated risks and uncertainties for the utility and the customers, culminating in a Commission acknowledgment decision that indicates whether the Commission deems reasonable the plan overall and any specific action items.

[2] *Id.* at 7.
[3] *In the Matter of Portland General Electric Company, 2016 Integrated Resource Plan, Docket No. LC 66*, Order No. 17-386 at 2 (Oct 9, 2017).
[4] OAR 860-027-0400(3).

C. Action Plan

An important product of the IRP process is an action plan. Where the preferred portfolio calls for new supply-side and demand-side resources or resource actions to meet system needs, the action plan will include these resource actions. The action plan identifies the steps the company will take within the next four years to deliver resources identified in the preferred portfolio of resources. Different resources require different actions on different timelines. Transmission, in particular, requires more development lead-time than other supply-side resources.

D. Acknowledgment

Our acknowledgment of an IRP means that the Commission finds that the utility's preferred portfolio and action plan is reasonable at the time of acknowledgment.[5] We may decline to acknowledge specific action items if we are not satisfied that the proposed resource decision presents the least cost, least risk option for customers. We may provide the utility an opportunity to revise the IRP before issuing an acknowledgment order.[6]

Acknowledgment is not a guarantee of cost recovery, nor is consistency with an acknowledged plan a requirement for recovery of resource costs in rates. Acknowledgment provides guidance for later ratemaking proceedings, which are the forum for the Commission to make its ultimate decision to approve or disapprove a resource procurement as prudent and subject to recovery in customer rates. Consistency with an acknowledged plan may be used as evidence in support of favorable ratemaking treatment, but the utility still must demonstrate that its actions remained reasonable, particularly in light of any material changes in the facts, circumstances, and assumptions that supported IRP acknowledgment.

III. DISCUSSION

In its Second Amended 2019 IRP, Idaho Power requested the acknowledgment of 14 action plan items. Staff proposed some modifications to Idaho Power's action plan items and additional recommendations for Idaho Power's next IRP, which we adopted except where described below. Below, we review action items and other issues in the same order and groupings as was discussed during the April 15, 2021 Special Public Meeting.

[5] *In the Matter of Public Utility Commission of Oregon, Investigation into Integrated Resource Planning Requirements*, Docket No. UM 1056, Order No. 07-002 at 16 (Jan 8, 2007).
[6] OAR 860-027-0400(6).

A. Items Recommended for Non-Acknowledgment by Staff

1. Jackpot Solar

In action plan item no. 12, Idaho Power requested the acknowledgment of the 120 MW Jackpot Solar project, scheduled to be online by December of 2022. On March 22, 2019, Idaho Power and Jackpot Holdings, LLC entered a 20-year Power Purchase Agreement (PPA) for the purchase and sale of 120 MW of solar electric generation from the Jackpot Solar facility located north of the Idaho–Nevada state line near Rogerson, Idaho. Under the terms of the PPA, Idaho Power will receive all renewable energy credits from the project. An application was submitted to the Idaho Public Utility Commission (IPUC) on April 4, 2019, requesting an order approving the PPA, and on December 24, 2019, the IPUC issued Order No. 34515 approving the Jackpot Solar PPA. On the same day as the IPUC application, Idaho Power submitted a notice to this Commission, in accordance with OAR 860-089-0100 (3) and (4), of an exception from Oregon's competitive-bidding requirements for electric utilities as the PPA with Jackpot Holdings, LLC presented a time-limited opportunity to acquire a resource of unique value to Idaho Power customers.

a. Stakeholder Positions

The Oregon Citizens' Utility Board (CUB) believes that Idaho Power is requesting this Commission's acknowledgment of an investment that has already been made, because Idaho Power had already signed the PPA and is obligated to purchase the power when it becomes available, resulting in the project being "substantially complete." CUB argues it is inappropriate for an executed PPA to be included in a list of action items for acknowledgment, because an acknowledgment would be in part a judgment of the prudence of the action.

CUB does not dispute that the execution of this PPA is a proper use of the OAR 860-089-100(3)(b) exception to our competitive bidding guidelines. Similarly, CUB is not making a judgment regarding the prudence of the company's action in executing the PPA at this time. Instead, CUB argues that we have a precedent of not acknowledging action items that have already occurred, and that a request to acknowledge an action item that has already occurred, is in effect, a request for a prudence determination in an IRP.[7] As a result, CUB argues we should not acknowledge this action item.

---

[7] *In the Matter of PacifiCorp, dba Pacific Power, 2013 Integrated Resource Plan*, Docket No. LC 57, Order No. 14-252 (Jul 8, 2014)

STOP B2H supports the Jackpot Solar project, and we discuss STOP B2H comments on the project below in our review of the B2H project, as they are most relevant in that discussion.

Staff is concerned with the Commission acknowledging a project for which a utility has already requested a waiver of competitive bidding rules and, therefore, recommends not acknowledging this project. Staff agrees with CUB and STOP B2H that the project does appear to be a cost-effective opportunity but also agrees with CUB that it would be inappropriate for us to acknowledge. Staff states Idaho Power should feel free to pursue cost recovery on this project in a rate case without acknowledgment.

In opening comments to the Amended IRP, Idaho Power clarified that AURORA was able to select the Jackpot Solar PPA as a cost-effective resource rather than a resource based on capacity or energy need. In the Amended IRP, AURORA selected the Jackpot Solar PPA in the majority of the 24 WECC-optimized portfolios. Because the decision to acquire Jackpot Solar was time bound, Idaho Power agreed with Staff that the Jackpot Solar Action Item should be removed. As Staff noted, however, Idaho Power did not remove this Action Item in the Second Amended IRP.

Idaho Power states that it included this action item in its Amended IRP action plan as it was a significant decision that was based on the results of the 2019 IRP analysis and was part of the action plan in its original IRP filing. Idaho Power notes that it is important to recognize that Jackpot Solar project representatives approached Idaho Power at a unique time during which the company was able to analyze the proposed PPA within the 2019 IRP portfolio development and analysis.

b. Resolution

We understand the recommendation of CUB and Staff is that we not acknowledge action plan item no. 6 because of the Commission's past precedent of not acknowledging action items when they represent actions that the utility has already committed to take or has taken. That precedent comes in part from the Commission's review of PacifiCorp's 2013 IRP, where PacifiCorp included coal plant environmental retrofit investments that were already "substantially complete" in its list of action items for acknowledgment. In declining to acknowledge the investments, the Commission stated "that energy utilities that desire acknowledgment of an investment decision should request acknowledgment before the decision is made and before the required project is substantially completed." The Commission noted it would "review these situations on a case-by-case basis to determine whether or not the project has progressed past a resource planning decision and into a project that is substantially complete."

We also understand Idaho Power to either have agreed that this precedent applies to the Jackpot Solar project in this docket, or to at least not to have strongly objected to applying that precedent.

In this case, we find no compelling reason to depart from our precedent that the parties seem to accept, and decline to acknowledge action item no. 6 for the reasons offered by CUB and Staff. We note that no party took the position that the Jackpot Solar project was problematic in any specific regard, and appreciate the analysis presented by Idaho Power and tested by stakeholders in this case because it has, at least, provided valuable information and transparency into the utility's actions, which will be reviewed for prudence at the time the company seeks cost recovery for the project.

In the future, we continue to reserve our discretion to review utility actions on a case-by-case basis to determine whether they are appropriate for acknowledgment in an IRP process. We recognize that the Commission's past precedent and this case-by-case approach could lead to uncertainty about whether any specific resource decision should be analyzed in an IRP if there is a question about whether the project has reached a level of finality that makes it inappropriate for acknowledgment. We encourage utilities to err on the side of including analyses in their IRPs of resource acquisitions or decisions that will come into service after an IRP is filed, so that such analysis can at least inform parties' and the Commission's views and provide transparency, even if such items are ultimately deemed to not be appropriate for acknowledgment.

2. Boardman Exit by December 31, 2020

In action plan item no. 6, Idaho Power committed to exit the Boardman facility by December 31, 2020. The Boardman closure has been a component of the Company's IRP for several cycles. The Boardman plant retired in 2020, and this resource decision continued to be selected as part of the least cost and least risk portfolio in the 2019 Second Amended IRP. Both CUB and Staff recommended that we not acknowledge this action item because it has already been completed.

We do not acknowledge action plan item no. 6 for reasons similar to those expressed above with regard to the Jackpot solar facility. This action has already occurred, and we do not see a need to reach a decision as to acknowledgment at this stage.

B. Distributed Resources

1. Incorporation of solar hosting capacity into the customer-owned generation forecasts for the 2021 IRP

In action plan item no. 2, Idaho Power will incorporate solar hosting capacity into its customer-owned generation forecast for 2021. Staff notes that this action item is consistent with current Commission objectives and policies associated with Distribution System Planning, which includes guidance that each utility should conduct system evaluations to identify generation in constrained areas.

We acknowledge action plan item no. 2.

2. Monitoring Variable Energy Resource Monitoring (VER) needs, Study of projected effects of addition of Jackpot and early exit of Bridger Units and VER Study

Action plan item no. 5 is to monitor VER variable and system reliability needs and to conduct a study of the projected effects of the addition of Jackpot PV and early exit of Jim Bridger units. Action plan item no. 8 is to conduct a VER study. Both were to be completed by 2020; neither had been completed at the time of the April 15, 2021 Special Public Meeting. Staff agrees that Idaho Power's VER study efforts are appropriate, but that it is not appropriate to acknowledge these action items because they were scheduled for completion in 2020.

Neither of these action items were completed as scheduled, but we understand that Idaho Power still plans to complete them and there were no substantive concerns raised with the VER study that cannot be raised by stakeholders in the ongoing study efforts. Therefore, we acknowledge action plan items no. 5 and no. 8.

3. Energy Efficiency

Idaho Power tested a number of energy efficiency potential forecasting methods in the 2019 IRP, but ultimately adopted a potential study that was the same as the 2017 IRP methodology and served as a base case for comparison purposes. For the 2019 IRP, Idaho Power's outside contractor provided a 20-year forecast of Idaho Power's energy efficiency bounded by the total resource cost (TRC) test. The contractor also provided additional forecasts based on different economic scenarios. The 20-year energy efficiency potential included in the 2019 IRP declined from 273 MW in the 2017 IRP to 234 MW in the 2019 IRP. System on-peak potential from energy efficiency also declined from 483 MW to 367 MW from the 2017 IRP to the 2019 IRP. Idaho Power contends that most of this decline is due to the reduction of available residential lighting measures.

Idaho Power has also indicated that it may be required by its Idaho regulator to use an alternative cost test for energy efficiency in the future.

STOP B2H argues Idaho Power's energy efficiency potential is greater than the company asserts, and that its forecast indicates an insufficient commitment to energy efficiency as a resource.

Staff notes that Idaho Power promised additional energy efficiency studies for the 2019 IRP that were not provided by the company. Staff requests that Idaho Power report on the impact that the Idaho cost evaluation change may have, in conjunction with Idaho Power's obligation to evaluate efficiency potential consistent with Oregon cost assessment methodologies as part of the next IRP. Staff also requests that the company do a comprehensive review of Energy Trust of Oregon's efficiency measures from 2018 through 2020, and share the results.

While contending that its energy efficiency forecasting methodology is consistent with industry standards, Idaho Power agrees to Staff's recommended approach to verifying that its methodology will achieve outcomes with Oregon cost effectiveness methodology and measures evaluated by Energy Trust of Oregon. We adopt Staff's recommendation.

C. Coal Plant Unit Early Exits

1. Valmy Unit 2

Action plan item nos. 9 and 13 are to provide an economic and system reliability analysis on the timing of the exit from Valmy Unit 2 and to exit Valmy Unit 2 by December 31, 2022, respectively**.** Staff recommends acknowledgment of action item no. 9, but does not recommend acknowledgment of action item no.13. Staff finds there is not currently sufficient analysis of near-term reliability issues to support an earlier date. Staff supports changing the date to the previous exit date at the end of 2025, consistent with economic modeling results in the 2017 IRP.

Idaho Power defends its actions in accelerating the exit date in the action plan to 2022, and requests acknowledgment of this date. The company's initial modeling in the second amended IRP indicates cost savings for customers associated with an early exit date of 2022. Idaho Power is willing to change the date back to the 2025 date, but the company does not wish to ignore the economic modeling results supporting an earlier exit date. Idaho Power must give its ownership partner 15 months' notice of intent to withdraw, so Idaho Power would prefer the acknowledgment of a 2022 exit date at this time. Idaho Power has committed to performing more analysis as soon as possible and will involve stakeholders in a transparent process.

CUB disagrees with Staff's recommendation on action item no.13, and supports acknowledging the 2022 exit date. CUB recommends acknowledgment because the company identified significant economic benefit for customers associated with this 2022 exit timeline in its Second Amended 2019 IRP. CUB notes the accelerated retirement of coal plants is consistent with Oregon's climate goals and climate-associated utility directives. CUB notes Staff's concern that the near-term analysis must be supported by additional cost and reliability analysis. Therefore, CUB's recommendation to acknowledge this item is coupled with an additional recommendation that Idaho Power provide updates to its initial study as soon as possible, given the 15-month notice the company must provide to the plant operator.

Renewable Northwest supports the finding that exiting Valmy Unit 2 in 2022 would provide net economic benefits to Idaho Power and its customers subject to further reliability analysis while recognizing that additional analysis is needed. Renewable Northwest, Idaho Power Conservation League and Sierra Club sent correspondence to the company that presented some additional considerations and modeling adjustments for Idaho Power to use in its subsequent reliability analysis. Renewable Northwest notes that the company was receptive and that the three entities planned to provide additional input to Idaho Power for its future analysis.

Resolution:

We acknowledge action plan item nos. 9 and 13. We are comfortable with Idaho Power's assessment that there are economic benefits for customers associated with the earlier exit date, and agree with CUB that acknowledgment is appropriate for resource decisions supported by long-term portfolio modeling, even if additional analysis may be required to confirm that the utility's decision to proceed with an exit is consistent with near-term reliability considerations. Action item no. 9 is a focused economic and system reliability analysis to further inform the exit date for Valmy Unit 2. We direct Idaho Power to provide the results of the analysis in its 2021 IRP to either confirm the proposed 2022 exit or provide clarification on next steps in the event the early exit is not supported by analysis. We also note that, although an IRP action plan acknowledgment provides important context for utility decision making, the utility retains the responsibility to make the decision that is least cost, least risk and in the best interest of customers, in light of all relevant information at the time of the decision.

2. *Exit Jim Bridger Units 1 and 2*

Action plan items nos. 1, 7, 10, 11, and 14 all involve coordination with PacifiCorp and evaluation to assess and exit Units 1 and 2 of Jim Bridger. Under the plan, one unit would be retired during 2022 and a second unit retired during 2026. Idaho Power plans to coordinate with PacifiCorp and regulators on the specific timing of the exits.

Staff supports early exit planning from the Jim Bridger Units. Staff notes the need for more coordination between PacifiCorp and Idaho Power. Staff recommends acknowledging four of the five action items relating to the Jim Bridger exits, and further requests to review a reliability impact analysis from Idaho Power. Staff also requested that the company address whether the difference in fixed operation and maintenance (O&M) costs had any significant effect on the selection of the preferred portfolio. Finally, Staff did not recommend acknowledgment of action item no. 7, which is a Regional Haze reassessment of Jim Bridger Units 1 and 2, because the negotiation with Wyoming regulators associated with this item was slated for completion in 2020. These negotiations are now complete in terms of approval from the Wyoming Department of Environmental Quality (DEQ), and now awaits approval from the EPA.

Idaho Power states that its manual adjustment process supported identification of optimal exit scenarios for the Jim Bridger Units through which customers will realize economic benefit. Idaho Power also argues that it appropriately relied on actual fixed O&M costs as the basis for its modeling. Idaho Power concedes that it has not come to terms with PacifiCorp on specific exit dates, but commits to updating the Commission on material developments in negotiations. Idaho Power noted that approval from the EPA is still pending for the Regional Haze reassessment described in action item no. 7.

Renewable Northwest supports the company's exits from Jim Bridger Units 1 and 2 as described in the corresponding action items, and further supports Idaho Power's exits from Jim Bridger Units 3 and 4 by the end of the decade. Sierra Club noted the improved and updated analysis from the company's 2017 IRP. In addition, Sierra Club is concerned that PacifiCorp will attempt to delay Idaho Power's exits from the Jim Bridger units.

Resolution:

We acknowledge action item nos. 1, 10, 11, and 14 supporting early exits from Jim Bridger Units 1 and 2. Idaho Power's analysis demonstrates that customers will realize economic benefits associated with Idaho Power's exit from five of seven coal-fired generating units by the end of 2026, and the company's exit from the remaining two units at the Jim Bridger facility by the end of the 2020s. Idaho Power views this strategy as consistent with its objectives to ensure low-cost supply. We agree that the early exit due to the favorable economics is reasonable. We will review the additional analysis and updates on negotiation with PacifiCorp in Idaho Power's 2021 IRP.

Jointly owned projects are common in our region as relatively smaller customer bases drive a need to partner in order to realize economies of scale. As we have articulated in other cases, minority partners are expected to vigorously pursue least cost, least risk results for their customers in jointly owned projects. They are expected to stay fully involved in analysis and decision making, evaluating actions independently, and advocating for their customers with their joint owners.[8]

We acknowledge action item no. 7 even though negotiations with the Wyoming DEQ have concluded, because approval from the EPA remains pending. As noted in the Staff Report, more information regarding these exits should be provided in the 2021 IRP, including a reliability impact analysis similar to the one proposed for Valmy.

D. Boardman to Hemmingway (B2H) Transmission Line Action Plan Items

Action plan items nos. 3 and 4 relate to ongoing B2H permitting activities, negotiations with B2H partners, preliminary construction activities, acquiring long-lead materials, and constructing B2H. The B2H transmission project involves permitting, constructing, operating and maintaining a new single-circuit 500-kV transmission line approximately 300 miles long between the proposed Longhorn Station near Boardman, Oregon and the existing Hemingway Substation in southwest Idaho. Idaho Power states that this project will provide the lowest cost, lowest risk capacity resource to meet identified capacity needs commencing in 2026. Idaho Power plans to meet capacity needs through market purchases facilitated by the development of the line.

Proposals for ownership and utilization of the B2H transmission project have changed over time. In the current IRP, Idaho Power proposes ownership of what had previously been the BPA-owned portion of the project. According to current plans, Idaho Power will acquire the BPA ownership share, and BPA would purchase access to B2H through the Company's Open Access Transmission Tariff (OATT). Idaho Power states that PacifiCorp remains financially committed to the project.

---

[8] See, for example, Docket UE 374, *In the Matter of PACIFICORP, dba PACIFIC POWER, Request for a General Rate Revision*, Order No. 20-473 at 65 (Dec 18, 2020). There we stated that "Even where PacifiCorp is a minority owner, the company should be prepared to demonstrate in future proceedings the measures it took to actively advocate for its ratepayers' interests and present evidence of meaningful action and analysis."

Party Positions:

Staff recommends acknowledgment of action item nos. 3 and 4 of Idaho Power's Second Amended 2019 IRP relating to the B2H project. Staff supports Idaho Power incorporating cost sensitivities for the B2H project in the 2021 IRP, and supports modeling of B2H cost risk sensitivities in the 2021 IRP. Staff, however, does not support Idaho Power removing or reducing the 20 percent cost contingency. Staff finds incorporating cost contingency is standard practice and a conservative modeling choice that incorporates genuine risk of cost overruns. Staff also supports an update to any B2H costs before creating new portfolios for the 2021 IRP.

Staff also believes B2H is not subject to competitive bidding guidelines, as Order No. 18-324 clarified that "[the] requirements generally do not apply where a utility is seeking to exclusively acquire transmission assets or rights." Staff still believes it is appropriate to consider the potential risk of additional costs for the project as it relates to potential shifts in ownership of the project. Staff recommends additional cost and risk analysis for the B2H project in Idaho Power's 2021 IRP through sensitivity tests for multiple cost futures.

Idaho Power argues that its IRP analysis continues to identify the B2H project as the lowest cost, lowest risk resource option to serve customers. Idaho Power points to extensive modeling and scenario testing that demonstrate that, across a variety of market scenarios, the project remains the lowest cost option. Idaho Power maintains that any shift in ownership will not materially impact the preferred portfolio results in its Second Amended 2019 IRP. Idaho Power states that any ownership changes at this point are hypothetical, and that current partners remain committed to the project. Idaho Power also asserts that, if BPA were to relinquish its ownership share, net costs to customers would not significantly change because it expects BPA would enter into a transmission service agreement with Idaho Power that would offer equivalent cost benefits and risk mitigation to Idaho Power's customers. Idaho Power has agreed that its 2021 IRP will include modeling of the B2H partnership costs and risks.

Idaho Power contends that the B2H project is foundational to a clean energy future for Idaho Power and the western electricity grid, and that it is critical to meeting future carbon reduction goals. Idaho Power disagrees with Staff's recommendation to continue using a 20 percent cost contingency because doing so may functionally duplicate its forthcoming cost sensitivity analysis, and Idaho Power is currently working to update cost estimates.

STOP B2H argues that the B2H project should not be acknowledged and that the central premise of the project, that it can deliver lower cost energy from Mid-C, has not been sufficiently tested. STOP B2H recommends Idaho Power complete a more robust market analysis, including markets beyond the Mid-C, for potentially advantageous alternatives to meeting its capacity needs. STOP B2H references an IPUC determination that found that the Jackpot Solar project was cheaper than Mid-C market purchases, and therefore that the project would provide Idaho Power's customers with less expensive, clean renewable energy than Mid-C market purchases over a 20-year period. According to STOP B2H, this supports non-acknowledgment as evidence that alternative resources may provide more cost-effective energy than the B2H project. STOP B2H also believes that, in Idaho Power's 2017 IRP, we acknowledged only Idaho Power's 21 percent of a 2,050 MW bi-directional transmission line, and requests that we affirm this understanding of the limited nature of our previous acknowledgment.

Idaho Power refutes the STOP B2H claim that market purchases are over-priced relative to new renewable energy like Jackpot Solar. Idaho Power agrees the Jackpot Solar resource is cost-effective, which is why Idaho Power executed a PPA to purchase the project's output. But Idaho Power believes STOP B2H is misguided in its implication that Mid-C has a static (and high-cost) price relative to Jackpot Solar or other resources. Idaho Power argues that Mid-C is a dynamic market where prices go up and down based on supply and demand. As such, Mid-C is not a single resource and should not be used to support the incorrect inference that B2H is a more costly resource than solar. Rather, B2H provides a different value to Idaho Power's customers in the form of a firm and diverse resource—for instance, by providing access to power in those hours when Idaho Power has a capacity need when a solar facility may not operate.

STOP B2H also argues that without firm terms for the Bridger exits with PacifiCorp, exit dates are actually undefined and do not support the need for B2H. Idaho Power notes that the second Bridger unit retirement date of 2026 will result in a resource deficiency and is not possible without the addition of other resources. Idaho Power argues the most efficient way to address this deficiency is with the B2H project.

CUB supports Staff's recommendation for the Commission to acknowledge action items 3 and 4 addressing permitting, construction, and long lead material acquisition for the B2H transmission line. CUB joins Staff in recommending additional cost and risk analysis for the B2H project in Idaho Power's 2021 IRP through sensitivity tests for multiple cost futures. CUB supports Staff's additional recommendation to have Idaho Power continue to include the 20 percent cost contingency for the B2H project in the 2021 IRP.

STOP B2H argues that the degree of uncertainty with B2H costs should require a contingency assumption greater than the 20 percent contemplated. Renewable Northwest supports acknowledgment of the B2H project as a resource that will provide low-cost, low-carbon energy and capacity to the company.

Numerous comments detail the impacts the project will have on the landscape and communities along the route, and state that lower-cost alternatives are available. Some comments note that a supply option, like the B2H project, will create impacts on the land and its residents for generations, while other options, like solar energy resources, will not. For this reason, the commenters argue, Idaho Power should embrace those lower-impact resources. Other comments note that Idaho Power's stated need for additional capacity and energy has consistently fallen throughout the consideration of the project. Comments also generally oppose the project because of the impact it is anticipated to have on cultural resources, natural resources and wildlife. Finally, comments note that in recent years transmission lines have been identified as the origin of wildfires in California, and that this negative impact has not been taken sufficiently into account in consideration of the project.

Resolution:

We acknowledge action items nos. 3 and 4, regarding the Boardman to Hemingway (B2H) project. By doing so, we find that these action items related to B2H are reasonable at this time and for this IRP, given the information developed through our IRP processes. We agree with Staff that a cost contingency for the project is necessary, and that developing an appropriate contingency is an important and standard part of consideration of a resource of this character. In response to comments for clarification from STOP B2H, we will allow the 2017 IRP Order to speak for itself. We affirm here that we acknowledge the B2H project action items in this IRP, which are applicable to the proposed project as it is presented in the company's Second Amended 2019 IRP, which includes a 500 kV transmission line with the partnership arrangement as described by Idaho Power.

In coming to this conclusion, we have reviewed Idaho Power's Second Amended 2019 IRP and Staff's analysis and recommendations, the filed comments of all stakeholders, and all of the comments submitted by individual commenters. We have also engaged with stakeholders and the public during public meetings and workshops and consider these inputs fully and carefully in our decision-making process. We have received many comments from members of the public, and we very much appreciate the time and effort required to engage with our processes.

Many commenters lament the impacts that this project is expected to create on the landscape and to their communities. We take these comments seriously, and they help inform us about the risks and impacts of the proposed project. Ultimately, we make a determination on the reasonableness of Idaho Power's plan to serve customers with the B2H project; we do not review or expressly weigh the impacts to communities that this project or resource selections broadly may present, as opposed to the land and community impacts of other options for serving customers. We have considered, and will continue to consider the risks of the project described by public commenters that are relevant to our least-cost, least-risk review standards, and we consider the opposition to the line as relevant to informing us about the risks of cost overruns, or potential barriers that Idaho Power may face in seeking to construct the project. For all proposed resource solutions, however, the direct consideration of questions regarding local impacts are addressed in forums other than our IRP process.

Our acknowledgment means that the action plan items pertaining to this project, as currently presented, meet our guidelines of least-cost, least-risk planning for customers. We emphasize it is not a determination of the prudency of the overall project, nor are we granting Idaho Power cost recovery for any portion of the B2H project as proposed at this time. A prudency review and ratemaking decisions will occur in future proceedings, at such times as those determinations are required. As described by Idaho Power in its Second Amended 2019 IRP, the activities and actions that move the B2H project forward will continue to require ongoing analysis in future IRPs and other proceedings. Those future proceedings can and will involve continued review and analysis of the B2H project, and will continue to test the assumptions and projections that justify the proposed actions.

We note that, in general, the analysis presented supports the project. The project is reasonably modeled, meaning that core assumptions underlying the analysis such as projected market prices, capacity needs, and resource costs have been tested by stakeholders and fall within a reasonable range. In multiple scenarios, the B2H project remains cost-competitive, even in scenarios where fundamentals not favorable to the project are tested, such as where the cost contingency is triggered and under a variety wholesale energy cost estimates. Throughout these scenarios, Idaho Power has demonstrated that the project is reasonable, and given the information available today, the projected least-cost, least-risk option.

We recognize the scale of this project and understand the potential impacts to Oregon, including the communities and lands that will be most impacted by the project. We recognize the uncertainties surrounding this project, including cost, cost risks, partnerships, and market depth. We also recognize that these risks and uncertainties must be evaluated in a context of potentially significant opportunities and benefits, including enabling better regional integration of low-cost renewables, allowing clean energy goals to be met at a lower cost to consumers, advancing regional reliability, and avoiding the need to meet large-scale capacity needs with new fossil fuel infrastructure that is at risk of being economically stranded.

We find that Idaho Power's analysis of the project in its IRP comports with our established guidelines and is reasonable, even though we recognize there are still questions to be answered and that future developments, yet to occur, will continue to be reviewed. Below, we review these issues and emphasize at the conclusion of this resolution that we expect the company to produce updated and ongoing analysis to address these issues in the 2021 IRP.

First, cost overruns are a matter of significant concern, as they often are with large, complex resource solutions. Idaho Power must continue to stress test this project aggressively as a part of the preferred portfolio. Idaho Power's stress testing must build in potential costs and cost contingencies that arise with concerns on the landscape, wildfire, and property risks. Typically, construction cost contingencies narrow as the project reaches completion. However, given the substantial size of this project, Idaho Power must keep the range of cost uncertainty reasonably wide in its modeling exercises and contingency planning. We agree with Staff that Idaho Power's cost contingency should not be removed. We agree that incorporating a reasonable cost contingency is standard practice that helps prepare for the risk of cost overruns, and is valuable during the modeling process. We decline to determine that 20 percent is the appropriate cost contingency, but expect Idaho Power to explain and support the cost contingency assigned to this project in the 2021 IRP.

Second, the specific partnership structure of the project remains unresolved. Idaho Power states that BPA remains committed to the project and that its 21 percent share of the project is still appropriate. The company further states that it will not shift additional costs to retail customers without an increased and corresponding benefit for those customers. Idaho Power states that ownership details will be finalized and presented in its 2021 IRP. Partnerships are vital to the project's future success and will need to be closely monitored. Partnership agreements bring complexity to the project and Idaho Power must continue to evaluate the risks to customers that result from these arrangements. We expect Idaho Power to analyze closely whether expanding its ownership share from 21 percent, and relying on OATT revenues to offset its additional costs is truly comparable, in terms of risks and financial impacts, to joint ownership. Where differences may exist, we expect that Idaho Power will explain how those risks are mitigated or considered in its analyses.

Stakeholders have questioned the availability of market resources over the long term, particularly given regional resource adequacy needs. We note that Idaho Power's market needs are centered in the early summer months, driven by irrigation use, which is distinguishable from the broader current resource adequacy needs in the region, and supports the conclusion that market resources will be available to meet Idaho Power's needs, based on the best information available today. Idaho Power's modeling has also consistently demonstrated that it saves money to retire coal and replace it with a blend of renewables and transmission that connects customers to markets and brings low-cost economics to the table. Nonetheless, as market conditions and availability are central to the success of this project as a resource, they must continue to be reviewed and tested.

In addition to market dynamics, project costs must be consistently updated as Idaho Power moves forward with this project. STOP B2H recommends, and Staff agrees, that Idaho Power should update its estimated costs prior to submitting its 2021 IRP. Idaho Power states that it plans to update its estimated project costs in the next IRP and has hired a consultant to assist.

We would specifically like to see cost updates explicitly account for design changes for operating the line in a mid-century climate, particularly accounting for the changing understanding of wildfire risks by mid-century. We plan to continue to analyze new information regarding this wildfire issue as it becomes available, and expect the uncertainties surrounding this and other risks to be resolved as the company continues its own evaluation, development and refinement of applicable action plan items. These issues, and the many estimates, details, and analyses will continue to be monitored and evaluated in the next IRP, which the company states will be filed no later than the end of this year.

We note that our acknowledgment is limited to our interpretation of IRP standards specific to the Oregon Public Utility Commission and does not interpret or apply the standard of any other state or federal agency.

E. Additional Recommendations

1. Renewable Northwest – Renewables plus Storage

Renewable Northwest requests that Idaho Power model renewables plus storage as part of IRP planning. Idaho Power has agreed to do so for the next IRP. We appreciate the efforts of Renewable Northwest to raise this issue, and expect this to be addressed in Idaho Power's 2021 IRP.

2. Demand Response

Idaho Power's original 2019 IRP action plan included acquisition of 5 MW of Demand Response (DR) in 2026. After discovering that its IRP modeling only dispatched DR in resource deficit situations, Idaho Power revised modeling to treat DR as a resource to offset load, which resulted in additional DR being selected in the preferred portfolio.

CUB expressed concern over both the scope of Idaho Power's DR review, which CUB found inadequate given the DR opportunities exploited by utilities across the country, and by the delay in the acquisition of DR in the plan. CUB notes that DR acquisition is a multi-part, multi-year strategy and must be ramped up over time. STOP B2H notes that the Northwest Power and Conservation Council in its 7th Power Plan has determined that DR is the cheapest way to meet capacity needs, and must be prioritized as a result.

Idaho Power argues that it has embraced DR as much as practicable, and that it executed a settlement agreement in 2013 that bound Idaho Power not to add new DR programs in years when it did not anticipate peak-hour capacity deficits. Staff is concerned that levelized cost of capacity (LCOC) of the DR modeled by the Idaho Power is inadequate, and requests that the 2021 IRP should model expanded DR with an LCOC based on programmatic approximations for acquiring incremental DR.

Resolution:

We acknowledge Idaho Power's DR acquisition plan, and adopt Staff's recommendation. As discussed above, in the context of Idaho Power's resource acquisition efforts, DR needs comprehensive review. We agree with CUB that programs need to be expanded in general, and conceived of and developed earlier in time. DR needs to be a priority for Idaho Power, and it needs to carefully review how DR could fill out peak needs, with potentially lower costs than alternative resources.

3. Error Testing of the Load Forecast

Staff recommends that Idaho Power be required to present a plan for cross-validation to check whether Autoregressive Integrated Moving Average (ARIMA) modeling is likely to reduce load forecast error. Idaho Power argues that other modeling options may be superior and should be reviewed, and that ARIMA has been shown to produce highly accurate short term forecasts, but that for IRP purposes, the longer-term forecasts are the priority in the analysis.

We do not adopt Staff's recommendation to require that Idaho Power replace its error testing methodology for the load forecast with ARIMA. Instead, we determine that Staff should work with Idaho Power to review the current framework and alternatives, and that Idaho Power should work with Staff and stakeholders to update its methodology. After working with stakeholders, Idaho Power should be prepared to justify its final chosen approach in its next IRP.

4. Renewable Energy Coalition – Wind Sensitivity Analysis and QF Capacity Value.

The Renewable Energy Coalition (REC) highlighted two Qualifying Facility (QF) related issues for our consideration. First, REC and Staff identified issues associated with wind QF renewal estimates in the Idaho Power IRP. Next, REC reviewed the value of capacity provided by QFs in avoided costs.

In its 2019 Second Amended IRP, Idaho Power assumes no QF wind contracts will renew. In its final April 6, 2021 Report, Staff noted that there is risk in assuming none of these wind contracts will renew, and recommended that, as a part of its 2021 IRP, the company perform a sensitivity analysis pertaining to wind replacement assumptions, in order to evaluate the impact on resource planning.

In response to the Staff Report, REC supported Staff's recommendation for a sensitivity analysis, but noted that Idaho Power should be directed to do more. REC notes that the company continues to forecast all of its wind resources continuing while not including any QF wind resources. REC recommends that Idaho Power be directed to provide a more detailed explanation in future IRPs to better aid stakeholder understanding of this discrepancy.

The second issue raised by REC is the value of the capacity provided by QFs included for renewal in the company's IRP. REC argues the capacity value associated with these renewals are not adequately reflected in avoided costs. Staff states in its Report that the issue is "out of place" in this docket, and will be addressed in our general investigation into avoided cost methodology in the UM 2000 docket. Idaho Power noted that its first wind QF contracts will not be eligible for renewal until 2027. The company asserted that, because it has no experience with wind QF renewals from which to draw upon, its analysis assumes no QF wind contract renewals.

Resolution:

Wind renewals are still several years away, but we agree with Staff that modeling should include some percentage, rather than taking an "all or nothing" approach. Idaho Power's assumption of zero renewals of wind QFs is unrealistic, but assuming that all resources will renew may also not be realistic. Some reasonable assumption must be made. Without any actual experience, developing such an estimate may seem arbitrary, but IRPs are, in part, based on such uncertainties and reasonable estimates and forecasts. In addition to adopting Staff's recommendation to come up with reasonable assumptions through a sensitivity analysis, we direct that, in the next IRP, Idaho Power explain how the sensitivities resulting from the study would affect the IRP's preferred portfolio and action plan if incorporated. Although we prefer that this issue be addressed generically, through UM 2038, we recognize that this docket has been delayed and conclude that such delay should not preclude directing utilities to advance toward more reasonable renewal assumptions in individual IRPs.

Regarding compensating QFs for capacity value, we agree with Staff that IRP acknowledgment decisions should not directly address avoided cost methodology nor make avoided cost pricing determinations. Capacity valuation and its impact on PURPA avoided cost methodology will be addressed in other Commission dockets, including but not limited to UM 2000 and UM 2011.

IV. ORDER

IT IS ORDERED that:

The Integrated Resource Plan filed by Idaho Power is acknowledged as described with the terms of this order and the attached Appendix A.

Made, entered, and effective Jun 04 2021.

Megan W. Decker
Chair

Letha Tawney
Commissioner

Mark R. Thompson
Commissioner

PUBLIC UTILITY COMMISSION OF OREGON