



Department of Energy

Bonneville Power Administration
P.O. Box 3621
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EXECUTIVE OFFICE

In reply refer to: A-7

Subject: Bonneville's draft decision to participate in the Northwest Power Pool Resource Adequacy Program Phase 3A

To: BPA stakeholders

The Bonneville Power Administration is proposing to participate in the next phase of the Northwest Power Pool's Resource Adequacy Program. This effort is reaching a critical stage as participants transition from developing concepts to testing them, determining the program's viability and shaping its final design.

Bonneville's participation in the Non-Binding Forward Showing Program, or Phase 3A, will give us experience and knowledge that would not be gained without our direct involvement. During this voluntary phase, Bonneville – like all participants – will have the ability to test the effectiveness of the program without making operational commitments or incurring financial penalties for non-compliance. Bonneville will also have the ability to determine whether the final binding program design aligns with its statutory obligations, and whether the resources relied upon by participants are adequate to meet demands for power.

Bonneville is committed to working with customers and stakeholders throughout Phase 3A to share analysis and experience with the program as it is available. Ultimately, by participating in the non-binding phase of this effort, Bonneville will be able to make an informed decision about joining the program's final phase, the binding program, in 2022.

The development of the NWPP Resource Adequacy program is a proactive effort by the region to address concerns driven by climate change, thermal plant retirements and additions of intermittent, non-dispatchable resources. The program will establish common metrics and increase transparency into resources and transmission needed to reliably supply power to meet existing and future load demands. The binding program will enforce compliance with those metrics, providing a shared foundation to maintain reliable operation of the system.

I am encouraged by the collaboration with our fellow Northwest Power Pool members and by the direction of the program design and initial governance proposals. I believe that by working together, we can unlock additional value from the federal hydropower and transmission system and enhance the reliability of the region's power supply in the face of more extreme weather events.

I also remain focused on adhering to Bonneville's statutory obligations and the interests of our customers and the region, and will evaluate this decision with your input in mind. We are inviting comments on this draft decision through Sept. 3, and I expect to release a final decision on Bonneville's Phase 3A participation later that month.

Sincerely,

A handwritten signature in black ink that reads "John L. Hairston". The signature is written in a cursive style with a large, looping initial "J" and a distinct "L." before the last name.

John L. Hairston
Administrator and Chief Executive Officer

*Draft Decision***Re: Bonneville Considers Participation in Phase 3A Non-Binding Forward Showing Program of the Northwest Power Pool Resource Adequacy Program**

Over the last year, Bonneville has worked with the members of the Northwest Power Pool (NWPP) to gather information and to develop conceptual and detailed design for a NWPP Resource Adequacy Program. The initiative is now advancing to the next phase in its development, known as the Phase 3A Non-Binding Forward Showing Program (“Phase 3A”). In this draft Letter to the Region, Bonneville is proposing to participate in Phase 3A and invites public comment on this decision. Phase 3A will enable Bonneville to continue to work with regional partners to flesh out the design details of the Resource Adequacy Program and to evaluate the potential value of the program by participating in the Forward Showing activities with informational, non-binding requirements. This also will enable Bonneville to work with its customers to address any remaining issues that may affect Bonneville’s potential decision to join the Phase 3B Binding Program (“Phase 3B” or “Binding Program”). Public comment on this draft Letter to the Region for Bonneville to participate in Phase 3A is due by September 3, 2021. Please submit comments online at www.bpa.gov/comments.

Resource Adequacy Regional Coordination Context

In recent years, utilities and power planners within the Pacific Northwest and beyond have become increasingly concerned about having adequate resources and transmission to reliably supply the power needed to meet existing and future load demands. These concerns have been driven in large part by accelerating retirement of base-load thermal generating facilities and growing development and use of non-dispatchable resources that may not be available at key times to meet power needs. In addition, recent extreme weather events have contributed to resource adequacy concerns across the country. In some cases these weather events have resulted in forced unplanned power outages, such as those observed in California, both last summer and this summer, and in Texas last winter.

Many states have passed clean energy laws or have proposals in the legislative process to enact such laws. These actions continue the trend of the retirement of base-load fossil-fueled resources and increases the development of non-carbon emitting variable energy resources that are largely non-dispatchable and weather-dependent. Thus, carbon-free energy resources are required to balance the intermittent renewable resources to meet peak power demands. In recognition of the additional complexity this brings for resource planning and the need to ensure the availability of reliable capacity to meet peak load events, members of the NWPP have come together to scope the development of a Resource Adequacy Program.

NWPP Resource Adequacy Program: Initial Design Efforts

In general, nearly all utilities do their own resource planning through integrated resource plans. Since the deregulation of wholesale transmission in the mid-1990s many utilities have relied on



the availability of energy and capacity in the spot market to cover part of their needs. Given the aforementioned challenges, utilities have begun to question the reliance on the spot market as an assured resource that is available when called upon. The NWPP Resource Adequacy Program is intended to ensure sufficient generating and transmission capacity is available to meet forecasted peak hourly demand, and a planning reserve margin that includes contingency reserves. Beginning in 2019, Bonneville and other utility members of the NWPP initiated discussions that led to a cooperative process to start reviewing and addressing resource adequacy in the region. The NWPP Resource Adequacy Program represents a proactive effort to address resource adequacy risks in the West through coordination among actors in the power industry. Participants in the initiative have been working to develop the program's technical design, as well as a framework for governance that accommodates jurisdictional implications for the diverse mix of potential program participants.

The NWPP Resource Adequacy initiative is organized into three phases:

- Phase 1, Information Gathering
- Phase 2, Conceptual and Detailed Design
- Phase 3, Implementation

Phase 2 is nearing completion. In fall of 2021 the initiative will transition from conceptual design work to initial implementation for Phase 3, which will be divided into two segments:

- **Phase 3A:** This phase will consist of a Non-Binding Forward Showing Program; completion of work related to detailed design and system development, and a winter and summer forward showing data submittal. Phase 3A represents an interim step to evaluate the viability of the Phase 3B Binding Program. Phase 3A will also include finalization of the governance design framework, and submittal to Federal Energy Regulatory Commission (FERC) of the program for approval.
- **Phase 3B:** This phase will consist of a Binding Program for Forward Showing, along with a Binding Operational Program that will go into the operating day. It is currently anticipated that the Binding Forward Showing period of the program will begin in spring or summer 2023 for the winter 2024 season, meaning a Forward Showing submittal seven months in advance of winter 2024. The Binding Operational period of the Program would then begin in winter 2024. It is expected that the full Phase 3B Binding Program and its governance structure will be subject to FERC jurisdiction; therefore, the timing of when the binding program will become effective is dependent on when FERC approval is received.

The NWPP is the organizer of this initiative and maintains updates for the program developments on its website (www.nwpp.org/adequacy).

Bonneville's Interest in Continued Participation in the Initiative

Participation in the Phase 3A Design Work

Bonneville sees opportunity for benefits in continued participation in the NWPP Resource Adequacy Program's Phase 3A Non-Binding Forward Showing Program. While the development of a NWPP Resource Adequacy Program is expected to help meet resource

adequacy challenges facing Load Responsible Entities (LRE)¹, there are still many unknowns. Participation in the ongoing design work will allow Bonneville to be more effective at addressing the interests of the agency and our customers, as well as the region's concerns about potential capacity shortfalls and the direction of any future resource adequacy requirements that may affect the Pacific Northwest. Bonneville's continued contribution to the program design work will better ensure that the Binding Program design will be consistent with Bonneville's statutory authorities and effectively support Bonneville's customers by way of helping to meet its load service obligations, should Bonneville decide to participate in the Binding Program in the future.

Benefits of Participation in the Phase 3A Non-Binding Forward Showing Program

By participating in Phase 3A, Bonneville will have an opportunity to test the effectiveness of the program on a voluntary basis without the financial (other than committed participation costs) or operational requirements that are associated with a Binding Program. The information learned through Bonneville's participation in the Phase 3A Non-Binding Forward Showing Program will allow the agency to better assess the potential value of the program and will serve to further inform Bonneville's ultimate decision regarding whether to participate in the Phase 3B Binding Program.²

In addition, Bonneville's participation will help facilitate the broader objectives and desired outcomes of the final NWPP Resource Adequacy Program, which include:

- A clear, uniform standard with accountability and commitment from each participant.
- Parameters around how much capacity each participant is responsible for providing.
- Transparency and standardization around the resources and transmission plans relied upon by participants to assure resource adequacy.
- Cost and resource savings through diversity benefits gained from measuring the overall resource adequacy needs across the program's footprint.

These objectives are intended to ensure that all participants in the program have a commitment to resource adequacy, which would help mitigate the risk of future potential shortages that could impact all participants.

Another important interest Bonneville has in the development of the NWPP Resource Adequacy Program is the promise it offers in helping Bonneville meet its long term power sales contract obligations to supply firm power to its regional power customers. Demand for power is expected to continue to grow while the spot market is expected to have increasing periods of scarcity and price volatility. Like other entities that have power supply obligations to serve load, there is

¹A Load Responsible Entity ("LRE") for purposes of the program is an entity that (i) owns, controls, and/or purchases capacity resources, or is a Federal Power Marketing Agency, and (ii) has the obligation, either through statute, rule, contract, or otherwise, to meet energy or system loads at all hours. Subject to the aforementioned criteria, an LRE may be a Load Serving Entity ("LSE") or either an agent or otherwise designated as responsible for an LSE or multiple LSEs or load service under the Resource Adequacy Program.

² Further information pertaining to Bonneville's engagement or anticipated impacts can be found at www.bpa.gov/Projects/resource-adequacy/Pages/Resource-Adequacy.aspx.

concern that the reliance on, and use of, the spot market to source short-term supply needs is becoming much more volatile as large thermal projects throughout the West are replaced by non-dispatchable variable energy resources. This shift in the resource mix creates challenges for LREs and their ability to meet the expected peak load demand over the coming years. The NWPP Resource Adequacy Program is expected to address many of these capacity challenges to improve overall coordination and situational awareness for bulk transmission system and power operations reliability in the region.

The NWPP Resource Adequacy Program is also expected to establish a standard practice of how the capacity of different types of resources are accounted for, and a standard planning reserve margin to ensure that participants plan for uncertainty in a consistent manner. Participants would have more certainty that all participating LREs are using the same standards and methods, creating more transparency and consistency across the region. Such standardizations would also ensure that participants are adequately planning for physical resources to supply the capacity needed to meet their own peak loads.

Bonneville expects that this standardized practice could reduce dependency on the spot market and encourage the development of resources with dependable capacity, which in turn would reduce the volatility of the spot market. Over time, with increased stability and refined standardizations, this program could result in a reduction in reliability risks, less volatility of the spot market, and the potential for additional product options (both sales and purchases), translating into realized benefits for Bonneville's customers and the region.

Participation Costs for the Phase 3A Non-Binding Forward Showing Program

Based on expected participation levels, Bonneville's estimated costs for the 15-month Phase 3A Non-Binding Forward Showing Program are expected to be roughly \$1 million, spanning across two fiscal years. This amount may be slightly lower or higher depending on the number of participants who ultimately join Phase 3A.

Decision Process Roadmap

Decision Process for Phase 3A Non-Binding Forward Showing Program

Throughout Bonneville's participation in the NWPP Resource Adequacy Program, Bonneville has engaged in ongoing discussions with customers about the program's development and to indicate Bonneville's perspective. In addition, the NWPP has hosted several public engagement workshops, including the Load Service Information Forum (LIF) sessions, to build awareness and understanding of the Resource Adequacy Program and encourage broad LRE participation as the program moves forward. Bonneville's customers have been invited to participate in these public sessions on a regular basis. The NWPP forums, Bonneville's ongoing engagement with customers, and Bonneville's participation in the earlier program design phase has built a solid foundation for Bonneville to execute its decision-making process for determining whether it will participate in Phase 3A. The timeline below shows the process leading up to the final Phase 3A decision anticipated this fall:

1. NWPP Resource Adequacy Program Public Webinars (February 2020-May 2021)
2. Informal Bonneville engagement with customers and stakeholders (Summer 2020 – ongoing)
3. Agency evaluation of NWPP Resource Adequacy Program risks (May-July 2021)
4. NWPP Load Service Information Forum Sessions (May-August 2021)
5. Bonneville public meetings and stakeholder input (July-September 2021)
6. Finalize Bonneville’s Non-Binding Forward Showing Program business case (June-September 2021)
7. Issue proposed decision regarding participation in the Phase 3A Non-Binding Forward Showing Program for public comment (August 2021)
8. Issue final decision regarding participation in the Phase 3A Non-Binding Forward Showing Program in Letter to the Region (September 2021)

Decision Process for Phase 3B Binding Program

Following Bonneville’s decision to participate in Phase 3A, Bonneville will need to assess the business case for participating in the full Phase 3B Binding Program once that information is available. Bonneville will complete a similar decision process for the Binding Program as for the Non-Binding Forward Showing Program, including an opportunity for public comment and review before making a final decision for Phase 3B. The anticipated process and tentative³ timelines include:

1. Continue informal Bonneville engagement with customers and stakeholders (summer 2021 – ongoing)
2. Agency evaluation of NWPP Resource Adequacy Program risks (fall 2022)
3. Bonneville public meetings and stakeholder input (fall/winter 2022)
4. Finalize Bonneville’s Binding Program business case (fall/winter 2022)
5. Issue proposed decision regarding participation in the Phase 3B Binding Program for public comment (fall/winter 2022)
6. Issue final decision regarding participation in the Phase 3B Binding Program in Decision Document/Closeout Letter (fall/winter 2022)

Conclusion: Draft Decision on Participation in Phase 3A Non-Binding Forward Showing Program of the NWPP Resource Adequacy Program

For the reasons set forth in this letter, Bonneville proposes to continue participation in the NWPP Resource Adequacy Program’s Phase 3A Non-Binding Forward Showing Program. Bonneville invites public comment on this draft decision by close of business on September 3, 2021. Please submit comments online at www.bpa.gov/comments.

³ Subject to NWPP Resource Adequacy Program timelines.