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Re: Powerex Comments on Bonneville Power Administration's Day-Ahead Market Draft Policy

Executive Summary

Powerex strongly supports Bonneville Power Administration's March 2025 Day-Ahead Market Draft Policy to participate in the Southwest Power Pool (SPP) Markets+ day-ahead organized market. Bonneville's draft policy reflects thorough analysis, extensive stakeholder input, and a clear understanding of the long-term structural, operational, and economic implications of organized day-ahead market participation. Powerex supports Bonneville's conclusion that Markets+ is the best option to protect the value of the federal system, uphold its statutory obligations, and promote a durable, fair, and transparent market platform for Bonneville, its customers, and the region.

Powerex Supports Bonneville's Decision to Join a Day-Ahead Market

Powerex agrees with Bonneville's conclusion that joining a day-ahead market is in the best interest of Bonneville and its customers. As Bonneville identifies, a day-ahead organized market enables more granular and efficient optimization over a larger footprint resulting in significant economic and reliability benefits for its customers. As more utilities make their own choices, a "wait and see" approach is not viable nor in the interest of Bonneville and its customers. As a large and growing number of entities plan to join a day-ahead market in the near-term, there is a growing risk that Bonneville will face reduced trading liquidity in bilateral markets when seeking to make short-term transactions to help manage the federal hydro system. Bonneville should not be asked to sacrifice the expected economic efficiency, reliability benefits and environmental gains available from day-ahead market participation, nor take unnecessary risk of waiting on the sidelines while others proceed swiftly in making their decisions. Delays will only serve to increase cost, risk, and complexity of eventual market participation to the detriment of Bonneville and its customers.

Powerex Supports Bonneville's Decision to Join Markets+

Powerex agrees that Markets+ best aligns with Bonneville's eight evaluation principles established early in its stakeholder process to ensure all important aspects are considered. Below, Powerex addresses some of the major findings in Bonneville's draft policy and expresses support for Bonneville's conclusions.

Governance

Powerex strongly supports the foundational importance placed on independent governance in Bonneville's evaluation framework. The widespread adoption of day-ahead organized markets in the West means that virtually all generation and load will ultimately be bought and sold through centralized market processes and approximately \$25 billion in annual electricity trade value will be directly or indirectly impacted by day-ahead organized market design choices and rules, likely for decades to come. There is nothing short of full independent governance that can provide Bonneville with confidence in its choice for the long-term.

Powerex also support's Bonneville's conclusion that Markets+ meets this objective through its governance model that is independent, durable, and inclusive, ensuring that no single state or entity dominates the decision-making process.

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In fact, Markets+ is the only available choice meeting these requirements. Markets+ provides transparent stakeholder engagement and equitable representation through the Markets+ Independent Panel, meaningful stakeholder voting rights, and a fully impartial market operator and market monitor. Furthermore, the Markets+ market platform was designed under its fully independent governance framework, rather than being ported over from an existing market, such as California ISO's WEIM/EDAM, that lacks such independence.

While the West-Wide Governance Pathways Initiative (WWGPI) has led to some improvements for the region, the model simply cannot achieve the necessary requirements for full independence given the role of California ISO staff in driving priorities and acting as the market operator, as well as the oversight of a California-appointed board with obligations to prioritize California's interests. It is also highly problematic that WWGPI is simply adopting the EDAM platform which was not designed under a fully independent governance framework and poses risks, as was illustrated most recently in the identified design flaw in its treatment of congestion revenue.¹

Resource Adequacy and Reliability

Powerex supports Bonneville's conclusion that the standardized Resource Adequacy (RA) framework applied in Markets+ via Western Resource Adequacy Program (WRAP) participation is essential to long-term grid reliability. This design ensures all participants bring forward adequate resources and are held to consistent standards applied under an independent governance framework, without "leaning."

Unlike Markets+, EDAM does not have a common RA standard. Instead, EDAM uses a last-minute test to validate the quantity of supply made available from each Balancing Authority Area (BAA), with weak consequences for shortfalls that enables leaning and fails to provide an effective incentive for entities to secure sufficient supply in advance. This is not only inequitable, but it also increases the chances that the overall market footprint will have less supply than necessary to support reliability.

In addition, the lack of independent administration and oversight of the EDAM means that CAISO is in the position of designing and applying the resource sufficiency test to itself. The consequences of this inherent conflict of interest are illustrated by a lengthy history in the WEIM of the CAISO BAA being able to "pass" the hourly resource sufficiency evaluation even during periods when it was clearly not sufficient (e.g., energy emergencies).

Price Formation and Market Power Mitigation

Powerex agrees with Bonneville's conclusion that the Markets+ approach to price formation better reflects operational conditions and equitable market outcomes. Sound price formation provides appropriate price signals under a range of potential conditions while also incenting long-term investment where appropriate. Furthermore, the conduct-and-impact framework used in Markets+ focuses on observed behavior rather than theoretical market power potential, reducing over-mitigation risks that can have significant operational consequences for hydro operations.

Congestion Rent Allocation

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¹ PacifiCorp's Recent FERC Filing Reveals a Major EDAM Market Design Flaw.pdf



Bonneville identifies that Markets+ allocates congestion rents equitably based on actual usage of constrained paths and proportional rights ownership. This contrasts with EDAM's approach, where congestion revenue is allocated to the BAA where congestion is modeled, even when that BAA is not the source of the transmission flow or the BAA where the generation and load is located that is bearing the congestion costs in the first place, potentially shifting significant economic value between BAAs and their customers inappropriately.

GHG Accounting and Environmental Policy Integrity

Powerex agrees with Bonneville's analysis that Markets+ offers superior Greenhouse Gas (GHG) attribution mechanisms—particularly the "Type 1A" contract-based attribution and surplus threshold modeling. These features protect the integrity of Bonneville's low-carbon federal power in Washington and Oregon compliance frameworks, ensuring Bonneville customers receive expected benefits from clean supply. It is also notable that the framework to recognize contractual commitments is beneficial for other uses requiring source attribution more broadly. The Markets+ framework will provide improved validation and transparency to meet GHG program objectives.

Caution on Production Cost Modeling (PCM)

Bonneville weighs PCM results as only one factor to consider among many. Powerex supports Bonneville's caution that PCM models have limitations. While PCM models may be useful to provide some high-level directional information around the potential magnitude of dispatch cost savings of a centralized market, they have no value in comparing one market to another when the two markets have fundamentally different approaches to governance and market design. For example:

- 1. PCMs assume each market is virtually identical to the other and therefore the results cannot accurately evaluate crucial market design differences in numerous areas including GHG treatment, price formation, and congestion allocation.
- 2. PCMs do not consider the tremendous impact of the market operator's actions on market outcomes and the risk that the market operator takes (or does not take) an action that prioritizes the interests of one region over another.
- 3. PCMs cannot accurately model the true variability of system conditions, including periods of scarcity. These are precisely the periods, however, when the financial and reliability consequences of market outcomes are most significant, and thus having confidence in an equitable market design and a neutral market operator is most important.
- 4. PCM models are highly dependent on input assumptions such as hurdle rates that can produce outcomes that inaccurately predict that limited trade will occur between markets.
- 5. PCM models cannot predict the future evolution of market design or the impacts of those choices on the costs and benefits of market participation. Only independent governance can provide assurance to stakeholders that future choices will be consistent with efficient and equitable market outcomes for the long-term.

It is also important to note that although PCMs may typically provide some valuable insights into the benefits of joining an organized market versus remaining in the status quo, Powerex believes PCMs actually

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provide little, if any, insight into Bonneville's choice whether to join a day-ahead market. This is because any comparison to the status quo will fail to reflect that many of Bonneville's trading partners are making their own choices to join a day-ahead market and therefore doing nothing would leave BPA with limited day-ahead bilateral trading opportunities going forward.

Risk of Delay

Powerex agrees that waiting for additional developments—such as a transitional initiative or legislative approval of California governance reforms—is not prudent. Bonneville rightly concludes that such reforms remain speculative and even if they succeed, they do not address structural issues in California ISO-operated markets.

Additional Considerations in Support of Bonneville's Decision to Join Markets+

Bonneville's March 2025 Day-Ahead Market Draft Policy is extremely thorough and represents the amalgamation of considerable stakeholder input provided over the course of almost two years. Powerex offers a few additional considerations to augment the evaluation below.

Third-Party Transmission Revenue

Bonneville identifies that Markets+ encourages transmission customers to retain and purchase long-term firm transmission rights as a result its congestion rent design, use of Type 1A contract-based attribution of clean supply, and WRAP firm transmission requirements. The EDAM design does not provide these same incentives for third-party customers to retain and purchase long-term firm transmission rights, potentially putting a significant source of revenue at risk for Bonneville and putting upward pressure on long-term rates.

Long-Term Investment

Bonneville identifies that Markets+ has superior price formation to provide appropriate price signals within the market. This is not only important for equitable outcomes within the market, but it also provides the appropriate incentives for long-term investment in transmission expansion and new resources, ultimately for the benefit of efficiency and reliability.

Seams

While much attention has been paid to the seams between organized markets, Bonneville recognizes that multiple seams exist today and will continue to exist regardless of which market entities elect to join. From its years of experience, Bonneville is an expert in managing seams. Bonneville provides a thorough analysis of what will be required, however, there is also additional benefits in negotiating seams agreements on a "peer-to-peer" basis between two similarly situated market operators to reduce risks of preference for any specific type of entity or geographic location.

Participation and Implementation Cost Estimates

Bonneville provides a careful breakdown of estimated participation and implementation costs. While these costs are important as part of a thorough review, the magnitude of these costs should ultimately be weighed relative to the risks and benefits of sound market design with independent governance and an

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impartial market operator. The design and implementation of a day-ahead and real-time organized market in the West will impact as much as \$25 billion a year in trade.

Two illustrative examples of market design choices that have potential to shift value far exceeding the implementation costs include:

- Congestion rent allocation over \$100 million value shift from the Northwest to California over five days in January 2024 during a cold snap.²
- Fast start pricing annual estimated regional cost shift of \$93-\$185 to the detriment of Northwest ratepayers and \$95-\$235 million to the detriment of Southwest ratepayers, while benefiting California LSEs by as much as \$1.3 billion per year in reduced costs of both imported energy and instate purchases from merchant generators.³

Bonneville captures the importance of these market design considerations in the draft policy, but it is also important to consider the magnitude of these types of value shifts relative to any differences in implementation costs and/or the simplified production cost modelling results.

Bonneville Should Commit to Join Markets+

Bonneville's draft policy is a careful, strategic decision grounded in regional priorities and durable customer benefits. This policy reflects a thorough assessment of Bonneville's statutory obligations, each market's governance, oversight, and initial design, and includes both quantitative and qualitative considerations. Powerex supports this policy direction without reservation and encourages Bonneville to move promptly toward finalizing its decision to join Markets+.

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² Analysis of the January 2024 Winter Weather Event.pdf

³ The Importance of Fast Start Pricing In Market Design - June 2022.pdf