

*Submitted via Tech Forum on December 6, 2024*

**RE: BPA Day-Ahead Market Workshop #9**

The Public Power Council (PPC)<sup>1</sup> continues to support BPA’s efforts to thoroughly explore the potential benefits of participation in an organized day-ahead market for its customers. As we have stated previously, it is critical that the agency continues to take an active leadership role as markets develop in the West. It is also critical that BPA thoughtfully consider its market options and work with its customers to identify the best path forward, reviewing a mix of qualitative and quantitative inputs that directly tie into the agency’s long-term strategy and obligations. BPA’s decision on day-ahead markets will impact the trajectory for the agency and its preference customers – who are heavily reliant on BPA to reliably serve communities across the Northwest – for many years to come.

PPC appreciates both the high level of transparency and the holistic nature of the discussion at BPA’s November 4 workshop. The agency has continued to make information publicly available regarding specific details of the production cost models produced on its behalf. BPA and E3 subject matter experts were available to answer questions and made the assumptions behind the analysis very clear. Additionally, publishing the data supporting the study allows for interested stakeholders to evaluate specific outcomes and multiple metrics to better understand interactions within the production cost model. This level of information, along with the broad range of scenarios conducted by BPA and E3, provides customers with helpful information to make their own assessments of the production cost study results. We discuss this in more detail below.

In addition to the production cost modeling results, it is important to consider other factors which stand to significantly impact the costs, benefits, and long-term strategic direction of BPA’s potential market participation. This is particularly true given that energy markets are highly dynamic and will continue to evolve in unforeseen ways over the coming years. The value associated with BPA having a voice in how the market develops and responds to regulatory, legislative and operational needs will likely significantly outweigh the differences in market footprint estimated by production cost studies. These other factors have been largely evaluated from a qualitative perspective, but that does not make them any less important in considering

---

<sup>1</sup> PPC, established in 1966, is an association that represents the vast majority of consumer-owned electric utilities in the Northwest, with membership spanning across six states. PPC’s mission is to preserve and enhance the benefits of the Federal Columbia River Power System operated by BPA for consumer-owned utilities. PPC’s members pay roughly 70% of BPA’s annual \$3.9M revenue requirement, in addition to owning their own generation and transmission facilities in the Northwest. These comments reflect the collective perspective of PPC’s member utilities; individual PPC members will conduct their own analysis of market participation options which may differ.

how BPA and its customers may be impacted by the agency's market participation. PPC appreciates that BPA continues to identify these additional considerations and transparently share its evaluation of these important elements.

At this time, PPC concurs with BPA's analysis that Markets+ continues to be the preferred option. It is critical that BPA fund implementation of Markets+ on SPP's proposed timeline to retain this valuable option for the agency and its preference customers. Market governance continues to be critical to PPC's evaluation of BPA's market participation. While the Pathways Step 1 and Step 2 proposals offer limited and incremental improvements to EDAM governance, the proposals fall well short of PPC and BPA's expectations for independent governance. As discussed in more detail below, while the production cost model results can be informative, they are not determinative. The broad range of results in E3's analysis demonstrates the degree to which somewhat speculative assumptions drastically change BPA's anticipated outcomes. At the same time, critical risks – such as those related to governance, market design, and tail events – are not fully reflected in the production cost model studies. The uncertainty related to the economic outcomes studied leads PPC to put a heavier emphasis on qualitative and strategic considerations related to BPA's market participation.

PPC continues to support BPA's public process for its market participation decision, as well as its planned timeline for coming to a decision. The agency has already delayed its decision to accommodate feedback from some stakeholders. At the same time, other entities are moving forward with their day-ahead market decisions and are able to focus their efforts on implementing those decisions. It is our understanding that some of these same entities continue to request that BPA delay its decision further. PPC does not support this request. Further, BPA should be highly skeptical of entities and reports that represent they know what is best for BPA and its preference customers. BPA should prioritize its own assessment and work with its customers to identify the best market to meet our collective needs.

It is unclear what additional information would be available to inform the agency's decision within a reasonable timeframe. BPA has stated that the initial phase of Pathway's Step 2 proposal does not meet its expectations, so additional information on the success of legislative efforts to implement that proposal in 2025 does not provide meaningful new information for BPA and its customers. Instead, BPA and its customers who have established clear expectations for independent governance would need to continue to wait<sup>2</sup> for an evaluation of further governance "evolution" which would likely not conclude before 2027 at the earliest. Delaying BPA's decision to wait for this additional information is unreasonable and disadvantages the

---

<sup>2</sup> The region is approaching roughly a decade of attempting to revise CAISO's governance structure. This started with California SB 350, the Clean Energy and Pollution Reduction Act of 2015, which included a requirement for state agencies to examine the feasibility of a regional electric grid which do not result in any legislative or structural changes to CAISO's governance. Subsequent efforts to enact legislative change included CA AB 813 introduced in 2017 and AB 538 introduced in 2023, both which failed to move forward. In parallel, there have been several stakeholder efforts to improve CAISO's governance, which have resulted in incremental improvements, but not sufficiently addressed BPA and PPC's concerns.

agency as compared to other utilities in the region who have made decisions or whose decisions are anticipated imminently. BPA must be able to independently make a well-supported decision on its day-ahead market participation consistent with its proposed timeline. If the agency does decide to pursue market participation it will require significant time to work with the market operator and its stakeholders to fully vet implementation details – an important issue that was raised by several stakeholders during the last workshop. The sooner a market participation decision is made, the sooner that work can begin.

PPC thanks BPA for its continued attention to this decision process. Market evaluation provides an exciting and challenging new chapter for the agency and the region. PPC looks forward to continuing to partner with the agency as PPC has done throughout its nearly 60-year history. Likewise, our members remain committed to working together with BPA to serve the communities of the Northwest, just as public power has done since the agency's inception.

### **Updated Production Cost Studies**

PPC appreciates the additional analysis shared by BPA and E3 and commends the transparency the agency has provided around the production cost modeling and results. The updated supplemental E3 production cost study reinforces PPC's perspective that there are broad directional benefits from day-ahead market participation, but the analysis falls short of encapsulating the aggregate impacts to preference customers of BPA's day-ahead market decision. PPC agrees with BPA's assessment that production cost benefits studies provide meaningful information but are only one component of a wide range of quantitative and qualitative analysis needed to inform BPA's day-ahead market participation decision. Narrowly focusing on production cost study results will omit critical market design, reliability, statutory, and governance considerations that will have significant impacts to BPA and preference customers over the coming decades.

PPC continues to believe the assumed hurdle rates in most scenarios may be driving analytical outcomes that are not likely to actually occur. The higher hurdle rates assumed most cases appear to both:

- Significantly overstate the role of market footprint in economic benefits.
- Overstate the economic benefits of EIM participation and the status quo relative to Markets+.

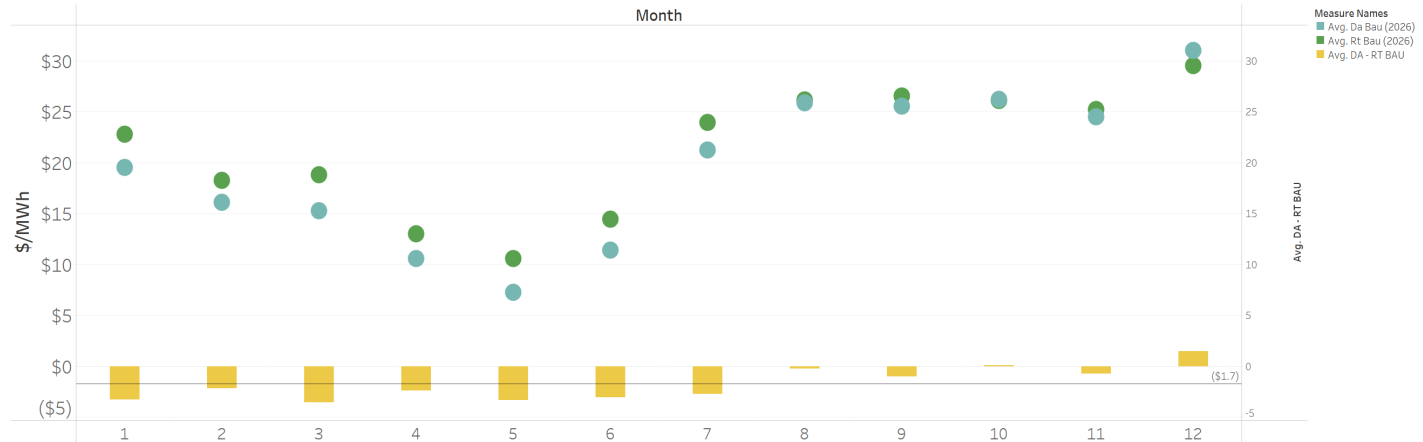
PPC understands the assumed hurdle rates are meant to capture transmission costs and transactional friction costs, but the level of assumed hurdles exceeds what we would expect to occur based on both markets' continued use of long-term firm transmission. The high hurdle assumptions essentially prevent trading between BPA and California when BPA participates in Markets+, even in scenarios where BPA has sufficient excess generation which could help serve California load.

When a hurdle is applied across a market seam or in the business-as-usual case, exports are reduced, trapping excess Pacific Northwest generation in the region and lowering prices and

exports. For trades occurring within the EDAM market footprint or within the WEIM, the hurdle rate is removed converging prices of the pacific northwest to higher priced regions like California and increasing exports. This results in increased modeled benefits to BPA in the form of increased revenues for surplus sales.

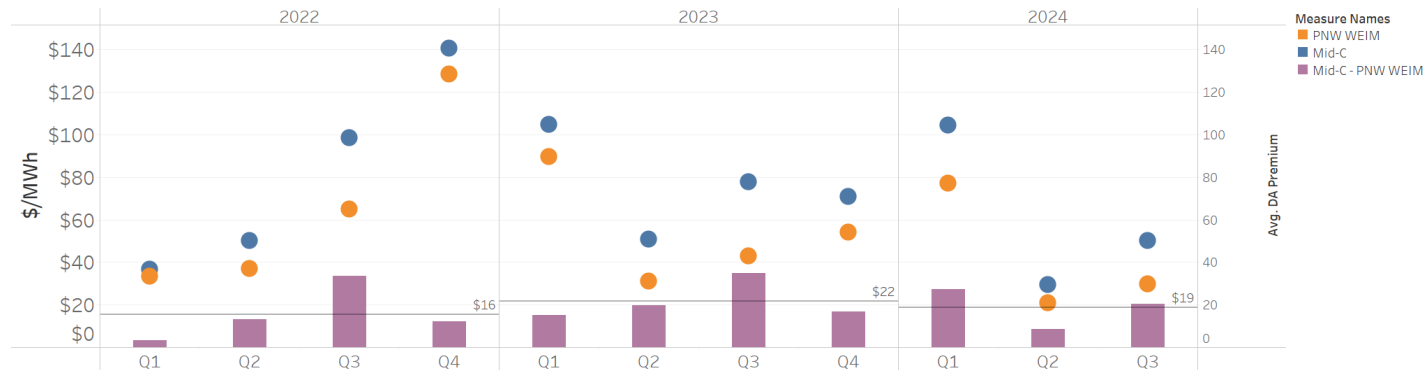
The impact that the assumed hurdles have on modeled prices can be readily observed in the price differences between the business-as-usual day-ahead (hurdle = OATT Rate +\$2/MWh friction) and real-time prices (no hurdle), shown in the chart below.

DA and RT BAU (2026) Monthly Avg. Price



The removal of the hurdle increases real-time prices in the WEIM by roughly \$2/MWh relative to the day-ahead prices as the real-time prices converge to higher priced regions in the WEIM.

PNW Day-Ahead and WEIM Prices



Mid-C is average ICE DA Mid-Columbia Index  
 PNW WEIM is Fifteen Minute Market Average of BPA, PAC West, PGE, PSE, SCL and, TPWR

However, comparing real-world day-ahead and EIM prices provides a significantly different result. The chart above shows actual day-ahead and EIM prices. This data shows that bilateral day-ahead prices exceed real-time EIM prices by more than \$15/MWh on average. This real world data shows that prices are essentially showing the opposite of what is modeled in the study; lower hurdle trading in the EIM does not result in higher prices than the higher hurdle trading in the day-ahead market. This demonstrates the multitude of factors not fully reflected in

the production cost model - such as fast-start pricing, scarcity pricing, and others - are having significantly larger price impacts than reduced hurdle rates and wider footprints.

The pattern of BPA's actual EIM participation is also inconsistent with the modeled results of lowering the hurdle rate. Under this low hurdle trading scenario, the agency typically is a net-importer from the EIM<sup>3</sup>. As explained above, PPC expects these hurdle assumptions create an incorrect perception that the economic consequences of market footprint trump other economic and other considerations not reflected in production cost studies and overstate the value of BPA's EIM participation.

In the business as usual case, the reduced day-ahead prices from incorporating a hurdle rate creates the same price reducing effect of the market-to-market hurdle applied to Markets+ scenarios, only the effect is amplified because the assumed hurdle increases from no hurdle in EDAM to OATT Rate + \$8/MWh of friction in Markets+. Under Markets+, the overwhelming majority of BPA schedules will continue to occur on "sunk cost" long term transmission contracts, and it does not seem reasonable that the cost to transact across a seam will more than double.

As highlighted in the BPA presentation, market design choices such as fast-start pricing, greenhouse gas attribution, and market power mitigation can all significantly impact the anticipated economic benefits BPA receives in a day-ahead market but are not fully reflected in production cost analysis. A real-world example of market design differences driving large economic outcomes include the January 2024 cold snap where congestion rent allocation on the Southern Intertie resulted in CAISO congestion revenue rights holders collecting over \$100 million of congestion revenue for congestion occurring on a jointly funded and operated multi-state transmission asset<sup>4</sup>. This event, which lasted only a week, had economic impacts on par with the estimated annual production cost differences between BPA participating in EDAM and BPA participating in Markets+. Similarly, the Energy GPS study on fast-start pricing, commissioned by PPC and Powerex, estimated that implementing fast-start pricing in the CAISO market would increase revenues to those with surplus generation in the Pacific Northwest (including BPA) by \$200 million annually.<sup>5</sup> These are two real-world examples of economically significant market considerations that may not readily be reflected in production cost studies.

For these reasons and based on additional developments indicating that a west-wide EDAM is very unlikely, PPC believes the \$65-\$221 million difference in production cost cited in the BPA slides and industry publications drastically overstates the difference in economic benefits between Markets+ and EDAM. PPC greatly appreciates the additional market-to-market coordination (M2M) scenarios that explicitly show as the hurdle cost is reduced, BPA benefits significantly increase. Reducing the hurdle to \$5.25 from \$14.50 increases BPA's modeled benefits by over \$150 million annually. The scenario with the lowest assumed hurdle of \$5.25/MWh is a much more reasonable starting point for estimating production cost benefits, and potentially still overstates the true market-to-market trade cost. Additionally, the Alt Split 2NV

---

<sup>3</sup> [BPA QBR EIM Net Transfer: Q1 2024 – Q4 2024](#) (Slide 63)

<sup>4</sup> [Transmission Congestion Revenue Distribution Panel](#) – PNUCC March 8, 2024

<sup>5</sup> [The Importance of Fast Start Pricing in Market Design](#) – June 2022

footprint is much more likely than a west wide EDAM footprint given recent participation announcements<sup>6</sup>. Comparing the Alt Split 2NV footprint to the Alt Split 4A scenario with reduced hurdle costs shows little economic differences in the estimated production cost benefits.

Given this context of uncertain assumptions and wide-ranging results, PPC believes that the factors that are difficult or not included in production cost studies should be given more weight in BPA's decision process. Energy markets are highly dynamic and will continue to evolve in unforeseen ways over the coming years. The value associated with BPA having a voice in how the market develops and responds to regulatory, legislative and operational needs will likely significantly outweigh the differences in market footprint estimated by production cost studies.

## **Pathways and Independent Governance**

As stated above and in PPC's previous comments, governance continues to be a critical aspect of BPA's market decision.<sup>7</sup> PPC has established that any organized market it supports *must* have a strong and effective independent governance structure which does not unduly discriminate in favor or against specific market participants. PPC members have collectively established criteria for achieving "strong and effective independent governance," which align well with the principles for governance that BPA shared at the November 4 workshop.<sup>8</sup>

Much like BPA, PPC has engaged as a stakeholder in the West-Wide Governance Pathways Initiative ("Pathways"), submitting written comments to the Launch Committee at each opportunity. We also actively participated in the Stakeholder Process working group and appreciated the opportunity to work with the expanded stakeholder group discussing those issues. We appreciate the work of the Launch Committee to volunteer their time and explore potential improvements to EDAM and WEIM governance. The approach taken by the Launch Committee was novel as compared to previous regionalization efforts. Pathways also benefited from a foundational third-party legal analysis, as well as extensive review of implementation challenges for different governance options.

---

<sup>6</sup> [Arizona Utilities Plan to Join Markets+ to Strengthen Grid Reliability and Resilience](#): November 24, 2024

<sup>7</sup> PPC's comments on BPA's Day-Ahead Market Decision Process:

August 15, 2024 <https://www.bpa.gov/-/media/Aep/projects/day-ahead-market/2024/ec-letter-to-bpa-on-markets-funding-M-phase-2-final-081524.pdf>

June 24, 2024, <https://www.bpa.gov/-/media/Aep/projects/day-ahead-market/2024/ppc-comments-on-workshop-7.pdf>

May 3, 2024, <https://www.ppcpx.org/wp-content/uploads/PPC-Comments-BPA-DAM-Policy.pdf>

February 23, 2024, <https://www.bpa.gov/-/media/Aep/projects/day-ahead-market/2024/ppc-mdc-letter-bpa-leaning-m-support.pdf>

January 5, 2024, <https://www.bpa.gov/-/media/Aep/projects/day-ahead-market/ppc-comments-on-bpa-day-ahead-workshop-4.pdf>

November 20, 2023, <https://www.bpa.gov/-/media/Aep/projects/day-ahead-market/ppc-comments-on-bpa-day-ahead-workshop-112023.pdf>

October 15, 2023, <https://www.bpa.gov/-/media/Aep/projects/day-ahead-market/ppc-day-ahead-202310.pdf>

August 15, 2023, <https://www.bpa.gov/-/media/Aep/projects/day-ahead-market/ppc-mdc-letter-on-bpa-market-decision-process-final.pdf>

<sup>8</sup> BPA, "BPA's Public Engagement for Establishing a Policy Direction on Potential Day Ahead Market (DAM) Participation - Workshop 9," November 4, 2024, <https://www.bpa.gov/-/media/Aep/projects/day-ahead-market/2024/dam-workshop-9-presentation-110424.pdf>, pg. 19

While PPC greatly appreciates the efforts of the Launch Committee and understands that for some in the West the proposal signifies a meaningful shift in EDAM governance, the proposal falls well short of our expectations for strong, independent governance. PPC applied our criteria for independent governance to the Pathways Draft Step 2 proposal, finding that many of the criteria were not met and that for the remaining criteria there was significant uncertainty around whether they would be met under the proposal. This analysis is included in [PPC’s comments to the Launch Committee](#) on their Step 2 proposal.

PPC agrees with BPA’s analysis that “that the Step 2 proposal does not achieve fully independent governance due to the continued intertwining with the CAISO.”<sup>9</sup> It is worth noting that PPC and BPA were not alone in this perspective with multiple entities also stating that the Pathways Step 2 proposal did not meet their expectations for independent governance.<sup>10</sup> The final draft of the Step 2 proposal did not address the primary concerns raised by these stakeholders, instead pointing to potential future evolution of market governance to achieve further independence. While PPC understands the challenges the Launch Committee identified with pursuing more independent governance now, the fact remains that there is **no commitment to future governance changes** and that the current proposal would leave the new Regional Organization heavily reliant on CAISO. Under the proposal, it is PPC’s understanding that additional governance changes to achieve truly independent governance would not be considered until 2026 at the earliest, with a process evaluating potential options much more likely to conclude in 2027 or beyond. It’s also worth noting that the ability to achieve the incremental improvements included in the proposal is contingent upon changes from the California legislature which are not under the Launch Committee’s direct control.

While PPC supports the idea of future evolution of EDAM governance, there is not sufficient certainty about the speed or scope of that evolution to influence BPA’s day-ahead market participation decision. Asking BPA to wait until 2026 or 2027 to decide on day-ahead market participation while nearly all other entities in the West make their market participation choices is not reasonable. Additionally, PPC is concerned that there could be a loss in the momentum to pursue further governance changes in the future, especially as entities in the West proceed with making their day-ahead market participation decisions. For entities that are comfortable with the current governance structure, it is unclear what motivation there would be to continue to pursue further evolution if many participants have already made their decisions about which market they will participate in.

---

<sup>9</sup> *Id.*, pg. 22

<sup>10</sup> Tacoma Power, <https://www.westernenergyboard.org/wp-content/uploads/B.-TPWR-Comments-to-WWGPI-October-2024.pdf>  
Arizona Public Service, Salt River Project, and Tucson Electric Power Company, <https://www.westernenergyboard.org/wp-content/uploads/E.-Arizona-Utilities-Response-to-Step-2-Proposal.pdf>  
Puget Sound Energy, [https://www.westernenergyboard.org/wp-content/uploads/O.-PSE-Comments-Pathways\\_Step-2-Draft-Proposal-10.25.24.pdf](https://www.westernenergyboard.org/wp-content/uploads/O.-PSE-Comments-Pathways_Step-2-Draft-Proposal-10.25.24.pdf)  
Deseret Power, [https://www.westernenergyboard.org/wp-content/uploads/T.-Deseret-Power\\_Step2\\_Proposal\\_20241025.pdf](https://www.westernenergyboard.org/wp-content/uploads/T.-Deseret-Power_Step2_Proposal_20241025.pdf)



For all these reasons, PPC agrees with BPA’s evaluation that EDAM does not offer independent governance, which is achieved in Markets+. We also agree with the agency’s perspective that it is appropriate to move forward with a decision on market participation as planned in spring of 2025.

PPC continues to see governance as a critical consideration in evaluating day-ahead market options. We understand that BPA has also prioritized this principle. As BPA approaches its decision on day-ahead market participation, PPC also asks that the agency clarify whether independent governance is a prerequisite for any market it would consider. Essentially, does a BPA determination that a market does not include independent governance preclude BPA’s participation in said market? We appreciate some additional clarity on how BPA is weighting its governance evaluation.

### **Market Design Assessment**

In our prior comments<sup>11</sup>, PPC has discussed, in depth, our perspective on the market design elements in both EDAM and Markets+ options. The evaluation shared by BPA on November 4 is consistent with that in the staff recommendation which PPC also supported. We appreciate BPA reiterating these considerations as they are important inputs into the agency’s decision.

### **Conclusion and Next Steps**

PPC remains committed to its continued support of BPA in its ongoing engagement in market development. This includes participation in Markets+ development, Pathways governance discussions, and ongoing CAISO stakeholder processes, as well as this decision process. We appreciate the agency’s efforts to be transparent with its stakeholders and are supportive of the analysis shared by BPA to date.

On the last stakeholder call, several parties brought up important implementation questions that the agency will need to address once it makes its decision about day-ahead market participation. PPC would appreciate BPA beginning to develop a coordinated plan on how those items will be addressed, including clearly informing customers on the appropriate forums for discussion of various topics.

PPC appreciates the continued discussions with BPA and other stakeholders on these important issues. We would also note that regardless of each entity’s market decisions, we anticipate that all entities in the West will continue to work together, collaborate, and trade as they do today. Continued conversations, as well as respect and understanding of each other’s perspectives is critical in developing this collaborative future.

---

<sup>11</sup> See comments linked above. In particular, PPC’s Comments in Response to BPA Day-Ahead Market Participation Staff Recommendation, May 4, 2024, [https://www.ppcpdx.org/wp-content/uploads/PPC-Comments-BPA-DAM-Policy .pdf](https://www.ppcpdx.org/wp-content/uploads/PPC-Comments-BPA-DAM-Policy.pdf)