

December 13, 2024

Seattle City Light Comments RE: BPA Day-Ahead Market Participation Workshop #9

Seattle City Light (City Light) appreciates Bonneville Power Administration's (BPA) ongoing engagement with customers regarding its day-ahead market (DAM) decision process and the November 4, 2024, workshop sharing the results of its Western Markets Exploratory Group (WMEG) Follow-up Analysis completed by Energy + Environment Economics (E3).

On November 14, 2024, City Light provided feedback regarding the E3 results and BPA's Markets+ Phase 2 decision in a letter from Dawn Lindell, Seattle City Light General Manager and CEO, to BPA Administrator John Hairston.¹ The letter stated it is not reasonable that BPA fund Phase 2 of Markets+ or continue to recommend that it join Markets+, and urged BPA to reconsider its decision to proceed with the \$25 million commitment. The letter addressed three high-level themes:

1. Markets+ is higher cost for BPA and its customers. City Light is alarmed that BPA's continues to recommend joining the Markets+, despite clear and overwhelming results of the E3 evaluation that (1) *favor the Extended Day Ahead Market (EDAM) over Markets+ in every scenario analyzed by \$69-221 million annually, and (2) favor BPA's continued operations in WEIM-only over participation in Markets+ by \$79-\$129 million annually.*
2. The Markets+ footprint reduces reliability. City Light is concerned that BPA's support for joining Markets+ ignores the reliability impacts of a fragmented market footprint with limited connectivity between regions, harming the efficiency and coordination of real-time operations in the West.
3. The West-Wide Governance Pathways Initiative is creating a real change in governance for Western Markets. Considering the negative economic and reliability outcomes that are likely to result if BPA joins Markets+, City Light implores BPA to closely consider the impactful and crucial governance changes that are underway through the West-wide Governance Pathways Initiative (Pathways Initiative).

In addition to the feedback provided in City Light's November 14, 2024, letter (attached to this document for reference), City Light provides the following comments that provide a more in-depth discussion of several issues, including: E3's sensitivity analysis on seams and transmission, WEIM-only as an option, the value of production cost modeling, how market design elements should be considered in BPA's decision, reliability, and governance.

¹ November 14, 2024 letter to John Hairston from Dawn Lindell, Seattle City Light General Manager and CEO, RE: City Light response to BPA's E3 study sensitivities & Markets+ Phase 2 Decision, available at: <https://www.bpa.gov/-/media/Aep/projects/day-ahead-market/2024/scl-letter-bpa-markets-phase-2.pdf>

E3 Analysis Confirms Benefits of Broader/More Interconnected Footprint

The E3 analysis looked at several market-to-market sensitivities that modeled reduced friction at the market seam and increased connectivity within the Markets+ footprint.² These changes, in effect, allow the divided Markets+ footprint to take on the characteristics of and to function more like a larger, better interconnected market. Overall, these sensitivities confirm that BPA benefits the most in a diverse, interconnected market.

Unsurprisingly, applying these optimistic seams assumptions improves the outcomes for BPA's participation in Markets+. However, even the best-case-scenario seams assumptions for Markets+ (M2M3), the analysis still favors the West-wide EDAM scenario by \$69M. Stakeholders at the November 4, 2024, workshop noted that these changed assumptions narrowed the margin between Markets+ and the smaller EDAM footprint analyzed in Alt Split 2NV to a difference \$14M, however, this is not a like-for-like assessment with improved seams assumptions for both market footprints. If there were improved seams assumptions for EDAM in Alt Split 2NV, the benefits would likely approach or exceed the West-wide market scenario, maintaining or expanding the gap in benefits. Further, if BPA joins EDAM, it is likely that other entities will follow, which would result in benefits closer to the West-wide EDAM results than the smaller Alt Split 2NV footprint.

The sensitivity analyses also looked at improved transmission connectivity in Markets+ between the Pacific Northwest and Desert Southwest in the Alt Split 4A footprint. These revised assumptions increased transmission connectivity from 400MW of existing contract rights in the base case, to include 1000MW of contract rights between BPA and Palo Verde and to model an additional 2000MW of new transmission between BPA and Palo Verde. Similar to the improved market-to-market assumptions, the increased connectivity results in better outcomes for Markets+ but still falls considerably short of the EDAM benefits by \$74-\$129M. Additionally, BPA did not conduct a similar analysis looking at the impact of new transmission infrastructure for the EDAM scenarios and it is reasonable to assume new transmission capacity would result in increased benefits to both the West-wide market and the Alt Split 2NV scenario as well as Alt Split 4A.

In Markets+ BPA can only hope to recreate the connectivity and footprint assumptions that are inherent in the EDAM footprint. However, even under the most optimistic assumptions for Markets+, EDAM is still a better option for BPA.

BPA's "Key Takeaways" Ignore WEIM-only option

The E3 analysis raises significant questions about the prudence of BPA's intent to fund or pursue Phase 2 of Markets+, as it found not only that EDAM would create greater benefits than Markets+, but also that *BPA would benefit more from participating only in the WEIM than it would from participation in Markets+*. This finding should spur BPA to reconsider its approach to Markets+.

² Since BPA's presentation of its initial WMEG results in October 2023, there have been questions about whether the analysis overstates the impact of seams and the potential associated costs. While it is reasonable to evaluate whether there might be different impacts than modeled, E3 did not develop these assumptions in a vacuum. Instead, the inputs to the analysis were ultimately driven by WMEG participants— including BPA—based on what they provided as known and likely costs.

Notably, in BPA's discussion of its "Key Takeaways" from the E3 analysis, this WEIM-only option was not discussed. BPA indicated these WEIM-only scenarios were created as an alternative to the "business-as-usual" scenario, which would have created a new baseline for comparison of the various DAM options. However, City Light believes this new baseline provides an important metric to guide BPA's decision-making.

Specifically, BPA has repeatedly indicated that it cannot delay a Markets+ decision, because it needs to maintain Markets+ as an option. Prior to the updated E3 analysis, BPA might have presumed that joining EDAM or Markets+ were its only options. However, BPA's most recent analysis indicates that remaining in the WEIM and not joining either DAM is not only a feasible outcome, but also a considerably better option than joining Markets+.

City Light questions the value of continuing down the Markets+ path if the economics are bad for BPA and its customers. We do not support maintaining optionality, especially at an exceptionally high price, if the option does not create benefits for customers.

Production Cost Modeling is an Industry-Standard Best Practice

Overall, the E3 results should give BPA pause as it considers its next steps in its DAM decision. While the production cost modeling results are not a precise representation of the expected outcomes of any specific scenario, they provide useful insight into the impacts of footprint and connectivity, and multiple analyses conducted by various well-respected firms have reached similar conclusions over the past 18 months.

City Light is concerned that BPA and some of its customers have indicated that the production cost modeling results should not be the foundation of BPA's DAM. City Light does not agree with this position. Production cost modeling is a standard tool and best practice utilized throughout the electric industry to inform important investment and resource decisions, including by BPA, and should serve as the core of BPA's business case. Discounting or dismissing the outcomes of this analysis rather than utilizing the results to inform BPA's DAM decision is problematic.

Market Design Elements are Not Impactful Compared to Footprint and Connectivity

In addition to the economic analysis, BPA will rely on an assessment of qualitative factors and market design elements to inform its DAM decision. As City Light noted in prior comments, specific market design elements, while important, are ultimately less impactful than transfer capability and footprint. Thus, it is unlikely that any of these specific market design elements will override the outcomes of the E3 analysis.

For example, BPA has indicated that it prefers fast-start pricing and considerable emphasis has been placed on this issue in DAM discussions throughout the region. However, multiple analyses have indicated that fast-start pricing has a limited impact on generators in the Pacific Northwest. Specifically, WMEG took fast-start pricing into account in its analysis, and found:

"Fast start pricing, however, has less of an impact in the Pacific Northwest portion of the Markets+ footprint, due to transmission constraints getting from the Northwest to the Southwest or Rockies area while avoiding transmission through the EDAM."³

Additionally, CAISO is reviewing fast-start pricing for potential adoption in the Price Formation Enhancements Stakeholder Initiative;⁴ as a part of this effort, it has conducted multiple analyses and sought input from independent market experts.⁵ Analysis of fast-start pricing in the WEIM found that the impacts of would vary among regions, with minimal or \$0/MWh impacts in the Pacific Northwest.⁶

While fast-start pricing has captured a lot of attention in the DAM discussion, these analyses indicate it will not impact BPA's market outcomes anywhere close to the scale of footprint and connectivity. This example underscores the need for BPA to clearly identify where there are *meaningful* differences in market design and the scale of the impact of these qualitative issues.

BPA should provide a detailed discussion, with clear issue identification and examples and quantification where available, for the items identified on Slides 31 and 33 of BPA's November 4, 2024, presentation. For example, while BPA has indicated a concern about CAISO's market power mitigation, it has not discussed any mitigation issues it currently experiences in WEIM. Additionally, BPA has not clearly indicated whether the CAISO GHG framework is unworkable, or if BPA simply prefers the Markets+ construct. BPA also identified "bid caps" as an issue that could impact the economic outcomes; this was a key issue addressed last year in the Price Formation Enhancements stakeholder initiative at CAISO, where CAISO worked on an expedited timeline to resolve a critical issue for hydro in the WEIM. City Light asks BPA to elaborate on its ongoing concern on this issue, and to provide information about whether the same issue exists for Markets+.

BPA indicated these qualitative and market design items are critical elements of BPA's decision-making framework; overall, BPA needs to provide a much more robust conversation on these issues and the potential impact. While it is difficult to assign dollar values to the qualitative factors, it is not enough to

³ See, Western Markets Exploratory Group: Western Day-Ahead Market Production Cost Impact Study, p. 17. Additional discussion on pp. 8-9, 18-19. <https://www.bpa.gov/-/media/Aep/projects/day-ahead-market/9-public-talking-points-june-2023.zip>

⁴ See CAISO's "Discussion Paper and Stakeholder Recommendations – Price Formation Enhancements" for an overview. Available at: <https://stakeholdercenter.caiso.com/InitiativeDocuments/Discussion-Paper-and-Stakeholder-Recommendations-Price-Formation-Enhancements-Sep-05-2024.pdf>.

⁵ CAISO staff and stakeholders found it necessary to conduct additional analysis to provide clarity on the issue, as an EnergyGPS study widely cited in fast-start pricing discussions overestimates the impacts because it assumed an approach that is far beyond what other ISOs and RTOs have adopted. For example, it considered resources with start times of up to 4 hours as "fast-start", whereas the CAISO looked at resources with 10-minute, 30-minute, and 60-minute start times, as those resources provide the attributes sought by the design. The EnergyGPS study also conducted an hourly analysis, rather than a more granular 5-minute analysis, and included self-scheduled resources and resources outside the WEIM footprint.

⁶ Presentation available at: <https://stakeholdercenter.caiso.com/InitiativeDocuments/Presentation-Price-Formation-Enhancements-Apr8-2024.pdf>

presume these factors will have a meaningful impact on BPA's outcomes. Without proper assessment, BPA could forego hundreds of millions of dollars of customer benefits.

BPA has not Adequately Addressed Operational Reliability Impacts

On Slide 13 of the November 4, 2024, presentation, BPA stated it "will continue to prioritize and minimize operational risks as a part of the DAM evaluation." However, this is an area of the analysis that BPA has not explored in-depth, despite the fact it should be a critical input into the DAM decision. Specifically, City light asks BPA to provide more details about how it anticipates transfers will occur in a divided market footprint with limited connectivity and restrictions on transactions across seams. We also ask that BPA assess how there might be different implications for both the day-ahead and real-time markets.

This nuance is important to discuss because while transmission rights holders participating in Markets+ can utilize their rights across transmission service providers that are EDAM participants, those transmission rights will likely only support static transfers that would facilitate day-ahead activity that can be scheduled in 1 hour or 15-minute increments. In order to facilitate real-time dispatch between the disconnected potential Markets+ regions utilizing transmission across EDAM, Markets+ participants will need dynamic transfer capacity. However, to date, no entity has indicated or provided evidence that it has dynamic transmission capacity that can facilitate these flows, and it is not clear there will be dynamic capacity available to facilitate these flows if requested.

City Light is concerned that this lack of connectivity could have negative impacts for BPA's operations, and for the region, and asks that BPA explain how it is assessing this risk as a part of this decision process. Specifically, we ask that BPA provide additional detail about the potential impacts on operations that could arise from a lack of real time transfers between the Pacific Northwest, the Desert Southwest, and/or Colorado.

While there have been arguments from Markets+ proponents that it will result in greater reliability than EDAM, this is primarily tied to the Markets+ requirement for participants to join the Western Resource Adequacy Program (WRAP). However, we believe this is a narrow perspective. While we strongly support WRAP, the state of California has its own Resource Adequacy program that is already operational, and all the entities that have indicated they are interested in EDAM are participating in WRAP. Additionally, EDAM and WEIM both have mechanisms that ensure that entities cannot lean on the market, and CAISO has created the Day-Ahead Market Enhancement product, which will help to address uncertainty between the day-ahead and real-time markets by compensating generators to show up to real-time with capacity.

At the November 4, 2024, workshop, in a discussion of reliability and operational impacts, BPA acknowledged that its market decision "will introduce new seams on top of those that already exist." BPA needs to conduct a rigorous discussion on market seams and reliability. As indicated in multiple analyses, the market-to-market coordination components relied on in Eastern Markets are not easily

transferable to the West, and resolution of seams issues takes decades, if they are resolved at all. Seattle City Light continues to believe the best seam is no seam for economic transfers.

The Stanford Woods Institute for the Environment recently published a paper presenting the reliability benefits associated with broad footprint electricity markets and operations, specifically looking at the impact under stress conditions.⁷ The analysis demonstrates the potential reliability benefits that could be achieved by greater cooperation across the Western Interconnection, as the risk of outages in an extreme weather event decreases the likelihood of outages by 40 percent in a West-wide organized market footprint.⁸ Specifically, the authors noted,

Coordination and optimization of operations under stress conditions within an ISO/RTO footprint is accomplished via computer algorithms that solve for the complex problem of meeting demand across the footprint at least cost using available supplies. This approach allows for greater visibility into which resources are actually available and what an optimal dispatch of resources is under stress conditions.... Particularly when resources are short, this visibility of available resources across a footprint can be helpful to maintaining reliability for bulk power system operations.⁹

This finding is consistent with the initial intent behind the WEIM and the benefits experienced to date—that shared capacity and resources between areas of diverse weather, loads, and generation help to reinforce operations for everyone.

Paired with the negative economic outcomes in the cost benefit analyses, the additional complexity that will be introduced to operations and the potential increased reliability risk further raises questions as to the prudence of BPA's Markets+ funding decision.

Governance

BPA staff indicated that it believes that Markets+ provides the “gold standard” for market governance. However, City Light is concerned that BPA's evaluation of governance does not take into account the economic outcomes of the related market. Generally, BPA's unwavering support of Markets+ gives the indication that BPA has placed an unlimited price on governance. This approach is unreasonable, particularly in light of the E3 analysis favoring WEIM-only participation over Markets+, and that BPA has found CAISO's current governance structure acceptable for purposes of WEIM.

Additionally, as noted in City Light's November 14, 2024 letter, the Pathways Initiative continues to make real, demonstrable forward progress in enhancing and enacting meaningful governance changes in California and facilitate expanding upon the significant success and connectivity that has been

⁷ Ahumada-Paras, Maredi, Michael Mastrandrea, and Michael Wara, *Grid Regionalization in the West: Reliability Benefits from Increased Cooperation in Electricity Markets and Operations*, August 2024, available at:

https://woodsinststitute.stanford.edu/system/files/publications/Woods_Grid_Regionalization_White_Paper_v05_WEB.pdf

⁸ *Ibid*, p. 2.

⁹ *Ibid*, p. 8.

achieved in the WEIM. While BPA stated it delayed its DAM decision in order to incorporate Pathways Initiative developments, BPA intends to make a final decision prior to the end of the California Legislative session. Step 2 is likely to result in a crucial governance change that BPA and others have sought—an independent regional organization that sets and decides market policy, which will then be carried out by the market operator, consistent with BPA’s stated governance principles. Further, the proposal lays out a detailed and realistic path for how governance can continue to evolve.

The development of an independent governance structure for the operations of a regional market including California is a considerable achievement and City Light does not believe this work should be discounted or criticized for not going far enough. The West has a proven track record of success through incrementalism. The Pathways Initiative’s approach to the creation of a Regional Organization is no different and is the beginning to what will assuredly be further augmentation in the governance of western markets.

Conclusion

It is not reasonable for BPA to fund Phase 2 of Markets+ or continue to recommend joining Markets+; it cannot be ignored that a decision to remain in WEIM and join no day-ahead market produced higher benefits for its customers than joining Markets+. City Light strongly urges BPA to reconsider its decision to proceed with the \$25 million commitment. While BPA has stated that it has not made a decision to join Markets+, and that this funding commitment is the cost to maintain the option, SPP recently published a document contradicting that point¹⁰:

*Phase two of Markets+ is a 28-month process that involves the development, testing and implementation of systems needed to facilitate market go-live. **These activities cannot begin until prospective market participants execute phase two funding agreements, essentially committing to join Markets+.** Any delay to these commitments results in a delay in Markets+ go-live and places Markets+ at a competitive disadvantage to western market alternatives.*

This document also makes several unfounded statements arguing that multiple markets would provide value, for the West, which directly contradicts all available analysis. Pushing forward with Markets+ will harm BPA’s customers. City Light believes markets are a way to mitigate upward rate pressure and to promote efficient usage of the region’s transmission system. However, joining no DAM appears to be more prudent than joining the wrong market.

¹⁰ Available at: https://southwestpowerpool.s3.amazonaws.com/Markets-Timeline-The-Value-of-Multiple-Markets-in-the-West_1224.pdf

Sent via Electronic Mail

November 14, 2024

John Hairston
Administrator
Bonneville Power Administration

RE: Seattle City Light response to BPA's E3 study sensitivities & Markets+ Phase 2 Decision

Dear Administrator Hairston:

Seattle City Light (City Light) appreciates Bonneville Power Administration's (BPA) ongoing engagement with customers regarding its day-ahead market (DAM) decision process and the November 4, 2024, workshop sharing the results of its Western Markets Exploratory Group (WMEG) Follow-up Analysis completed by Energy + Environment Economics (E3). This new analysis updates assumptions about available market footprint and connectivity based on recent market decisions of regional utilities. As noted by BPA, the economic benefits, as well as the operational capabilities of the grid will be significantly impacted by market footprint,¹ so this new analysis is critical for understanding the implications of BPA's DAM decision.

According to BPA, this new economic evaluation favors the California Independent System Operator's (CAISO) Extended Day Ahead Market (EDAM) over the Southwest Power Pool's (SPP) Markets+ by **\$69 to \$221 million per year**.² Despite these dramatic economic differences, BPA has stated that the results "have not shifted the Bonneville Power Administration's staff recommendation to join the Southwest Power Pool's Markets+."³

City Light is alarmed by this statement. BPA has a fiduciary obligation to carefully weigh the variables and impacts to its customers before making any market decision. BPA should not make a significant, long-term investment in either DAM without a business case that supports such a decision. BPA's continuing preference for Markets+ gives the impression that BPA is unconcerned about costs or benefits associated with its market decision and is intent on pursuing a specific path regardless of the results of any economic analysis. Based on BPA's analysis, City Light estimates that the \$69 to \$221 million loss in benefits to BPA's preference customers from BPA joining Markets+ rather than EDAM has the potential to negatively impact City Light customers in increased power costs by between \$6 million to \$21 million per year.⁴ Furthermore, it cannot be ignored that a decision to remain in WEIM and join no day-ahead market produced higher benefits for BPA's customers than joining Markets+.

¹ BPA's August 2024 Response Letter to Senators Merkley, Wyden, Cantwell, and Murray (Response to Senator Letter), pp. 2, 5.

² BPA's Public Engagement for Establishing a Policy Direction on Potential Day Ahead Market (DAM) Participation - Workshop 9, November 4th, 2024; Slide 30.

³ BPA's October 31, 2024 Press Release PR-20-24; "[BPA gains valuable insight from supplemental cost study](#)".

⁴ Based on multiplying the changes in the per TOCA Composite and non-Slice rates with City Light's FY2025 TOCA %.

City Light is also concerned that **a fragmented market footprint with limited connectivity between regions creates a higher likelihood of reliability challenges** for BPA, its customers, and the west-wide region. The forecasted increases in load, the changing needs and challenges of the region, and the likely increased reliance on imports underscore the need for greater visibility, coordination, and optimization, not less.

BPA has stated that independent governance is the primary reason for its preference of Markets+ over EDAM despite the \$69 to \$221 million annual difference in benefits. The West-Wide Governance Pathways Initiative was launched in summer 2023 to address concerns around the current governance structure for EDAM. BPA was invited to join the Launch Committee for this effort and declined, BPA did not substantively engage in the development of governance proposals under this effort and has declined to provide any funding to develop this initiative.

BPA has indicated that it intends to sign an agreement committing it to fund Phase 2 of Markets+, at an estimated cost of \$25 million.⁵ This is in addition to the approximately \$2 million that BPA funded for the first phase of Markets+ development.⁶

If BPA were conducting a fair analysis of market options, we would expect to see them engaging in and funding solutions to each market equally. Instead, we have seen BPA continue to favor Markets+ and provide significant staff time and funding to this market, while identifying concerns with EDAM but not engaging in efforts to resolve those concerns despite the consistently better economics related to EDAM.

It is not reasonable that BPA fund Phase 2 of Markets+ or continue to recommend that it join Markets+. City Light strongly urges BPA to reconsider its decision to proceed with the \$25 million commitment. We also strongly encourage BPA to support the next steps of the Pathways Initiative, which has asked for \$25,000 from interested entities. This reasonable cost commitment will ensure that BPA supports the effort to achieve the governance changes advocated for by BPA and its customers.

Markets+ is Higher Cost for BPA and its Customers

Since BPA issued its Staff Leaning in April 2024, several regional utilities have indicated their preference for the Extended Day Ahead Market (EDAM) or the Western Energy Imbalance Market (WEIM).⁷ **Based on these decisions, the potential Markets+ footprint is significantly limited, and there is no potential contiguous Markets+ footprint connecting the Pacific Northwest to other sub-regions**

⁵ While BPA stated that its commitment to fund Phase 2 of Markets+ does not bind the agency to join, it is nevertheless a considerable cost that will flow through to customers. City Light estimates that its share of this cost is \$1.6 million.

⁶ This includes an initial payment of \$1.5 million through the tariff filing, and BPA's share of monthly payments since April 2024 which ranged between \$74,940 and \$87,243 per month. See, [Markets+ Exhibit A Phase 1 Funding Agreement](#).

⁷ Since March 2024, Idaho Power, Portland General Electric, NV Energy, the Balancing Authority of Northern California and Public Service Company of New Mexico have announced they will join EDAM; Black Hills Energy announced it will join WEIM; Western Area Power Administrator—Desert Southwest Region and the Arizona Electric Power Cooperative (AEPSCO) withdrew support for Markets+, and the Arizona G&T cooperatives in its balancing area are pursuing EDAM participation.

in the West. The make-up of the initial Phase 1 Markets+ funders represented a broad, somewhat interconnected footprint. However, with recent decisions, *this is no longer the case*. City Light is concerned that a limited market footprint will unnecessarily increase costs and risks for BPA and its customers.⁸ This lack of connectivity has significant implications for BPA's economic outcomes, as shown in every economic analysis completed to date, including BPA's most recent WMEG analysis.

BPA's analysis specifically accounted for the changes to market footprint based on the decisions of other entities in the West, and considered key sensitivities, including low water years and stressed load conditions, as well as different seams costs. The analysis tells an important story about how BPA's DAM benefits are driven by footprint and connectivity. The results found that a broad, west-wide market would result in the greatest benefits, with economic outcomes deteriorating as the footprint became more fragmented and disconnected. These results make clear that **the only remaining potential Markets+ footprint, which is smaller, less diverse, and more disconnected than other scenarios analyzed, results in worse outcomes for BPA than EDAM or WEIM only.**⁹

Findings of the updated WMEG analysis include:

- For the year 2026, this new economic evaluation favors EDAM over Markets+ by \$69-\$221 million per year. This considerable difference in benefits between Markets+ and EDAM remains sizable even in later years (2030 and 2035).¹⁰
- BPA would achieve \$79-\$129 million in greater benefits annually by continuing participation in the WEIM than it would from joining Markets+ —even if all other regional market participants join a DAM.
- E3 analyzed multiple sensitivities to test whether stressed conditions, low-water years, improved market-to-market coordination, or increased transmission capability between the Northwest and Southwest would produce different outcomes. While changing assumptions that reduce the negative impacts of seams and limited connectivity somewhat improved the outcomes for Markets+, **there were no scenarios in which the remaining viable Markets+ footprint provided a net benefit to BPA over EDAM.**

The results favoring EDAM are clear and overwhelming. Even by changing assumptions to reduce the costs and risks of seams and limited connectivity, Markets+ still resulted in considerably worse outcomes for BPA.¹¹ BPA indicated that it will rely on the improved market-to-market assumptions to

⁸ In its August 2024 Response to Senator Letter, BPA noted that the market decisions of other regional utilities affect the relative net economic benefits of each market, and were a key reason the agency took more time on its DAM decision, p. 2.

⁹ BPA's analysis also included a look at two larger Markets+ footprint options (Scenarios Main Split and Non-CA West-wide Markets+), but these footprints included entities that have made decisions to join EDAM, and thus, only provide context to BPA's decision, but do not represent an actual option for BPA.

¹⁰ This finding is notable, as BPA had previously indicated in its August 2024 Response to Senator Letter that it believed there are significant differences in benefits of each market footprint over time, with legitimate questions about the value of participation for the Northwest in the long-term time horizon. (p. 2)

¹¹ In those scenarios, the difference between EDAM and Markets+ remains sizable, with a West-wide EDAM footprint providing between \$70-\$154 million more benefits. (BPA did not analyze the different seams assumptions for the smaller EDAM footprint.)

inform its preference for Markets+. However, it is not reasonable to presume this type of best-case-scenario assumption around seams will occur, as the inherent costs and inefficiencies associated with seams are well-documented and are difficult if not impossible to resolve.¹² The benefit of organized markets is the ability to optimize transmission and generation across market participants in a region. Seams create artificial barriers and result in a non-optimal outcome, increasing cost and risk. City Light believes the only reliable way to ensure that BPA does not incur the costs and risks of a market seam is to be in the same market footprint as its neighbors.

At a time when City Light and other utilities throughout the region are working to contain costs for our customers, and against the backdrop of proposed double-digit rate increases for both BPA Power and Transmission customers, BPA's disregard for the economic benefits to customers is alarming.

Markets+ Footprint Reduces Reliability

Aside from the negative economic outcomes for BPA's customers, City Light is also concerned that a fragmented market footprint with limited connectivity between regions creates a higher likelihood of reliability challenges. The Pacific Northwest Utility Conference Committee's (PNUCC) 2024 Regional Forecast estimates that loads in the Northwest will increase by 7,400 average megawatts in the next 10 years.¹³ While the region is planning for this unprecedented increase, the changing needs and challenges of the region, and the likely increased reliance on imports, underscore the need for greater visibility, coordination, and optimization, not less.

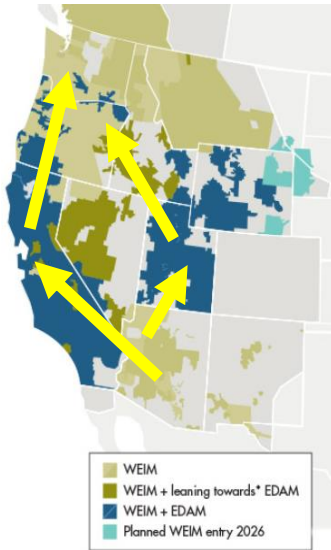
The 2024 Martin Luther King Jr. weekend multi-day, cold weather event showcased how imports from throughout the West were needed to support the reliability and operations of utilities in the Pacific Northwest. This event demonstrated reliance on neighbors to the South in the event of a winter extreme event. At its peak, the Northwest utilized transmission throughout the West to import more than 6,000 MW of energy from California and the Desert Southwest to help meet demand.¹⁴ Over the course of the weekend, the WEIM economically rebalanced supply across the WEIM footprint to meet demand and manage congestion.¹⁵ The map below is illustrative of how the transmission connectivity across the West was used to move generation to serve loads in the Pacific Northwest, through both bilateral trading and the WEIM. Notably, these flows rely on the transmission systems of entities that will join EDAM.

¹² The Public Generating Pool and Western Power Trading Forum partnered with Grid Strategies to develop information for its members and stakeholders regarding seams issues. Available at: https://www.publicgeneratingpool.com/s/Western-Day-Ahead-Seams-Exploration-FINAL_240116.pdf. Grid Strategies also produced a report in June 2024, "Market Configuration Matters: Effects of Market Choices on Consumers in the Northwest US." Available at: <https://gridstrategiesllc.com/wp-content/uploads/Market-Configuration-Matters-June-2024.pdf>

¹³ See, <https://www.pnucc.org/wp-content/uploads/2024-PNUCC-Northwest-Regional-Forecast-final.pdf>

¹⁴ See, Northwest Power and Conservation Council January 2024 Cold Weather Event Memo (Council Memo), page 4. Available at: https://www.nwcouncil.org/f/18649/2024_03_5.pdf

¹⁵ See, CAISO Winter Conditions Report for January 2024, available at: <http://www.caiso.com/Documents/WinterMarketPerformanceReportforJan2024.pdf>



Unfortunately, there is a prevalent narrative around the events of MLK weekend that greatly misrepresents what occurred, incorrectly blaming the congestion and high prices for exports at Malin on CAISO’s market policies rather than as a product of limited transmission capacity and high demand, in other words—simple economics and physics.¹⁶ This problem was further exacerbated by the fact that there was no import capability to BPA’s system on the Pacific DC Intertie, due to an outage. While City Light understands that the events of that weekend caused considerable economic hardships for many utilities in the region, we are concerned that this incorrect narrative is driving a perception that leaving WEIM/CAISO to join Markets+ will result in improved outcomes in future extreme weather events, both in terms of cost and reliability. **However, the opposite is likely true; reduced connectivity and coordination will result in greater congestion, as well as less visibility and capability to economically and efficiently redispatch the generation and transmission to meet demand.** This scenario makes the

region more susceptible to high prices and reliability concerns during stressed conditions.

This challenge will be particularly acute in a scenario where the Northwest is separated from other Markets+ participants in the region because the market will not be able to economically rebalance supply and demand across its entire footprint in real-time without dynamic transmission connectivity between the Markets+ sub-regions.¹⁷ As a result, the real-time operations of the West will be balkanized into islands of load and resources that are not coordinated with neighboring areas. This outcome deteriorates existing reliability. The WEIM has facilitated unprecedented coordination of real-time operations over the past decade that has been largely ignored by BPA staff in their DAM decision-making. Dividing the region into pockets of load and resources with limited connectivity between them creates a new risk, particularly in cases of stressed grid conditions.

Pathways Initiative is Creating Real Change in Governance for Western Markets

BPA has stated that independent governance is the primary reason for its preference of Markets+ over EDAM. BPA should consider closely the considerable advances that are on the horizon in the West-Wide Governance Pathways Initiative (Pathways Initiative) and actively engage in the Pathways Initiative.

The Pathways Initiative continues to make real, demonstrable forward progress in enhancing and enacting meaningful governance changes in California and facilitate expanding upon the significant success and connectivity that has been achieved in the Western Energy Imbalance Market (WEIM). The Step 2 Draft proposal released on September 25, 2024, is a considerable accomplishment.

¹⁶ CAISO shared an update regarding the misconceptions surrounding the MLK weekend event at the September 27, 2024, Regional Issues Forum. Presentation available at: <https://www.westerneim.com/Documents/Presentation-WEMRegionalIssuesForumCRRs-CAISO.pdf>.

¹⁷ To facilitate real-time dispatch between the disconnected Markets+ regions, participants will need dynamic transfer capacity on EDAM transmission providers. However, to date, no entity has provided evidence that it can facilitate these flows.

Step 2 is likely to result in a crucial governance change that BPA and others have sought—an independent regional organization that sets and decides market policy. The proposal lays out a detailed and realistic path for how governance can continue to evolve and has benefited from an exceptional level of regional collaboration and coordination not previously experienced.¹⁸ Legislation to effectuate the Step 2 proposal will be crafted this fall and introduced in 2025. While the proposal may not accomplish every outcome at once, it represents a sea-change in the governance overseeing the regional markets administered by CAISO. The results of the Pathways Initiative should be celebrated as a major accomplishment in the region. Creating an independent governance structure for the operations of a regional market is no small feat and City Light does not believe this work should be discounted or criticized for not going far enough. The West has a proven track record of success through incrementalism. Pathways and the creation of a Regional Organization is no different and is the beginning to what will assuredly be further augmentation in the governance of western markets.

Recommendation and Conclusion

It is not reasonable that BPA fund Phase 2 of Markets+ or continue to recommend that it join Markets+. Markets+ is the more expensive option based on BPA's economic analysis and has negative impacts on reliability. Additionally, there are significant governance changes likely to occur through the Pathways Initiative. **Furthermore, it cannot be ignored that a decision to remain in WEIM and join no day-ahead market produced higher benefits for its customers than joining Markets+.** City Light strongly urges BPA to reconsider its decision to proceed with the \$25 million commitment. We also strongly encourage BPA to support the next steps of the Pathways Initiative, which has asked for \$25,000 from interested entities. This reasonable cost commitment will ensure that BPA supports the effort to achieve the governance changes it advocated for by BPA and its customers.

We understand that some BPA customers are concerned that BPA is being pressured to join EDAM, in order "to ensure BPA's significant generation and transmission resources benefit EDAM and its participants."¹⁹ While WMEG and other analyses indicate that there are EDAM participants that would benefit from BPA's participation, those same studies also show that BPA would mutually benefit from EDAM participation. Further, there are participants in either market that will benefit from BPA's generation and resources, and this argument could be made about Markets+ participants as well. For example, Puget Sound Energy,²⁰ as well as utilities in the Desert Southwest²¹ have all indicated that they would benefit from BPA in Markets+. **The key difference is that in EDAM, BPA will also benefit.** As

¹⁸ See, "California Labor, Public Power to Sponsor Pathways Legislation", *RTO Insider*, October 30, 2024, available at: <https://www.rtoinsider.com/90828-california-labor-public-power-sponsor-pathways-legislation/>

¹⁹ August 15, 2024, Letter from the PPC Executive Committee to Administrator John Hairston, RE: PPC Support for BPA Funding Phase 2 of Markets+, p. 2.

²⁰See, Puget Sound Energy Day-Ahead Market Presentation to Washington Utilities and Transportation Commission, Docket No. UE-240537, August 7, 2024, p. 16, available at: <https://www.utc.wa.gov/casedocket/2024/240537/docsets>

²¹ See, APS Resource Planning Advisory Council Presentation, September 23, 2023, p. 25, Available at: https://www.aps.com/-/media/APS/APSCOM-PDFs/About/Our-Company/Doing-business-with-us/Resource-Planning-and-Management/September_2023_RPAC_Meeting_Presentation.

BPA considers its DAM options, the larger consideration should be which market will provide BPA with the best outcomes for its customers, not who is denied benefits.

City Light's position has been clear and consistent throughout this process. We believe BPA's market decision should be based on the physics and economics of the system. We believe markets are a way to mitigate upward rate pressure and to promote efficient usage of the region's transmission system. However, joining no DAM appears to be more prudent than joining the wrong market. We appreciate the Administrator taking these comments and look forward to continuing our partnership in the process.

Sincerely,



Dawn Lindell
General Manager/CEO
Seattle City Light

Cc: WA Congressional Delegation
David Turk, Deputy Secretary U.S. Department of Energy