THE Energy Authority

November 9, 2023

The Energy Authority (TEA) comments following BPA's Day-Ahead Market (DAM) Workshop #3

TEA is a public power-owned, nonprofit corporation that as a national portfolio management company, evaluates challenges, manages risks, and executes solutions to help its clients maximize the value of their assets and respond competitively in the changing energy markets. TEA partners with over 60 public power clients, managing approximately 30,000 MW of peak load and 24,000 MW of generation in North America's organized and bilateral wholesale energy markets, including in the Pacific Northwest and California regions. TEA views BPA as a vital partner in achieving successful outcomes in the near- and long-term for the clients and customers TEA serves and strongly supports BPA's role in the region and its mission as a Federal Marketing organization.

TEA firmly supports BPA's proactive approach to assessing its potential options for DAM participation in the coming years and commends BPA's executives, senior management, and staff for their deep engagement in both the California ISO (CAISO) Extended Day Ahead Market (EDAM) and Southwest Power Pool (SPP) Markets + development efforts. BPA's technical expertise and leadership, particularly in the SPP Markets + arena, has been and will continue to be invaluable to the success of each.

TEA understands the institutional and political challenges BPA's leadership is facing in determining which of the two current DAM opportunities to pursue. TEA is confident though that the Administration is well-positioned to weigh its alternatives, consider the impacts its choice will have for its customers and the region as a whole, and choose the path that will offer the greatest long-term, holistic benefits. TEA notes that a delay by BPA or any of its key strategic partners in the west in committing to their preferred DAM path may jeopardize the existence of options and foreclose future opportunities. Previous market formation efforts in the Pacific Northwest have shown that failing to make a timely decision is itself a decision. Given that PacifiCorp as both a Balancing Authority and a Load Responsible Entity in the Western Resource Adequacy Program has indicated its intention to join CAISO's EDAM, BPA has by default become a decision taker on the question of *whether* BPA will be involved in at least one of the western interconnect's new day-ahead markets – as early as Spring 2026 when EDAM is estimated to launch, BPA will begin serving its transfer loads in PacifiCorp's area according to the rules of the EDAM. Further, regardless of the number of entities that join the EDAM in the initial year it is offered or who commit to immediate participation in the day-ahead component of the SPP Markets + offering, the presence of one or more day-ahead organized markets in the West will have a sizable impact on bilateral day-ahead and real-time trading and market liquidity, with impacts increasing as key entities join both markets. These impacts will be felt across both BPA's power-supply and transmission business lines, challenging its coordinated operations, its marketing of surplus power and transmission, and its facilitation of flows across its system. For these reasons, TEA believes it is imperative that BPA puts itself in the driver's seat and with the support of its customers and stakeholders sets a proactive path forward for the organization on its established timeline that aligns with its strategic plan and statutes.

Specific to the October 23 Workshop, while TEA appreciates the significant effort and investment of resources that went into the formation of the Western Markets Exploratory Group (WMEG) and the intent of the study the group commissioned Energy and Environmental Economics (E3) to perform, TEA is concerned that the study results as conceived and presented do not provide an accurate, actionable assessment of DAM options in the Western Interconnect and therefore should be considered with caution as a decision-making driver for BPA and its regional partners. Based on its experience operating in the western interconnect, its deep participation in the CAISO and SPP stakeholder processes, and its knowledge of organized market design, TEA is concerned that multiple assumptions and input selections fall short of accurately representing outcomes that would reasonably be expected, including such areas as:

- CAISO area export constraints in the current- vs. future-state scenarios;
- CAISO market mechanisms impacting its full-market and EDAM asymmetrically, which likely drive sub-optimal outcomes for non-California market participants (e.g., the EDAM net-export constraint, the presence of Ancillary Service co-optimization in the CAISO full-market but not the EDAM, and the presence of convergence bidding, intertie bidding, and a Congestion Revenue Rights auction-based congestion cost allocation paradigm);
- Reduced economic optimization depth brought by disparate Resource Adequacy programs;
- Persistent self-scheduling and significant use-limitations of resources participating in CAISO's full market;
- Participants' firm transmission rights over a Transmission System Provider's (TSP's) system not in the same market not being assumed to be used by that participant; and
- Over-inflation of assumed "friction" in moving power between regions in the two market scenarios applied to existing and future intertie market activity.

The WMEG study assumed tremendous transactional friction between EDAM and Markets+ in the Split Case Scenario, which overstates the seams impacts that can reasonably be expected from the presence of two day-ahead markets operating in the west as compared to operations across existing regional market seams. The study assumed an additional \$15/MWh for exports out of Markets + and \$19/MWh for exports out of EDAM. E3 explained that the transactional friction is made up of the weighted average of the OATT transmission rate for TSPs within each footprint (\$9/MWh for EDAM and \$5/MWh for Markets +) plus a \$10/MWh flat transactional fee intended to represent inefficiencies of trade between two organized markets. TEA does not understand why an OATT transmission charge was added as compared to the Business as Usual (BAU) case that already requires OATT transmission rights in the bilateral market. E3 has stated that they assumed a small \$2.50/MWh transactional friction in the BAU case and did not include any charge for OATT transmission. However, BPA has long term firm transmission rights that it uses to sell energy to the CAISO through CAISO's day-ahead and real-time intertie bidding markets, separate from its WEIM participation, in the BAU case. Despite this, the study has assumed that those same transactions using those same long-term firm transmission rights now require a \$15/MWh export fee as compared to the BAU case when BPA is assumed to be in Markets +. It does not make sense in any real case scenario that the transactional friction for BPA's transactions with California increase by 60% when BPA joins Markets +. At a minimum the OATT transmission charges should be consistent between the BAU case, the Split Case Scenario, and the EDAM scenario.

Notably, the study includes a scenario that reduced the day-ahead transaction fee from \$10/MWh to \$6/MWh and the real-time transactional fee from \$10/MWh to \$3/MWh, which resulted in a drop in costs of \$150 million, an almost 70% decrease in overall costs in the Split Case. Assuming a \$10/MWh transaction fee between EDAM and Markets + presumes a worst-case scenario in which there is no seams coordination between SPP and CAISO. TEA is confident that the CAISO and SPP are both capable market operators that have the competence and motivation to negotiate efficient seams coordination that drive down the transactional friction of trade between the two markets. The hurdle rate assumed in the Split Case appears to be the largest, if not the only, driver of the cost/benefit results and it is unclear why such extreme hurdle rates were assumed for the purpose of this study. Given these assumptions are unlikely outcomes, TEA believes that BPA and other WMEG entities should consider to what extent they put stock in the published outcomes.

In closing, TEA emphasizes its support for BPA to maintain its current decision-making timeline regarding its future DAM path and preferred selection of a market operator and organization capable of partnering with BPA and the region to foster long-term success. TEA also encourages BPA to continue to align other efforts with the direction of its preferred DAM path, including its assessment of planned products and its commitment to meeting WRAP binding program timelines. Further, TEA suggests that BPA begin scoping a transition plan for its operations prior to its final decision being issued. This will help BPA's regional partners in their internal change-management assessments, given the depth and breadth of BPA's system and presence in the market. TEA understands the challenges these market transitions will bring, including the need for BPA to commit staff and resources in its role as facilitator of third-parties using BPA's system to participate in the CAISO markets, but believes strongly that with decisive action and a strong commitment to coordination with its regional partners, BPA will be successful and emerge from this period of change well-positioned to meet the demands of the next decade and beyond.