Department of Energy

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Re: Comments in Response to Ecology's March 5, 2025 Cap-and-Invest Electricity Forum on electricity imports and centralized electricity markets

BPA appreciates the opportunity to respond to the Washington Department of Ecology's (Ecology) March 6, 2025 cap-and-invest electricity forum, and to the questions contained in Ecology's requested feedback on electricity imports and centralized electricity markets.

Before responding to the specific questions Ecology issued, BPA needs to clarify a misconception in Ecology's March 6 presentation about the level of control BPA has over its ACS emission factor. Slide 51 of Ecology's presentation states: "Currently, BPA (as an ACS) and each MJRP has level of control over system [emission factors] as they procure resources through bilateral transactions, influence long-term system investments, and have operational control of owned generation."

BPA has limited control over its ACS emission factor. This stems from limited operational control over federal system generation and from statutory requirements related to BPA resource acquisition. Additionally, BPA has a diverse customer base from across the region and must consider the needs of its customers located in multiple states, not just in Washington, in considering what resources to acquire. Finally, because BPA by statute sells from a system of resources, it cannot sell from individual resources to individual customers.

The hydroelectric projects that comprise the Federal Columbia River Power System (FCRPS) are owned and operated by the United States Army Corps of Engineers and United States Bureau of Reclamation. BPA is responsible for marketing the generation from these projects. About 85 percent of the system power BPA markets is hydro generation. The FCRPS is a highly constrained system. BPA and its federal partners operate the FCRPS to meet multiple public purposes including flood control, protecting fish and wildlife (both fish passage and

water quality), recreation, irrigation, and navigation. Power generation is a lower priority objective and there is limited flexibility and operational control over how much power is generated. BPA works within these limitations to deliver on its statutory obligations to provide reliable, cost-effective power to the region.

There is also a high degree of variability in water runoff, the volume and timing of which impacts how much hydro generation BPA has available and, in turn, drives BPA's need to make purchases from wholesale power markets. Historically, BPA has used market purchases as a cost-effective means to balance generation and load obligations. Market purchases also allow BPA to diversify its portfolio to minimize the risks of violating hydrological constraints and environmental obligations, and to mitigate financial risks (costs to BPA's customers). The volume of market purchases in BPA's ACS emission factor has historically ranged from 3 to 12 percent. Water availability is the largest single factor in determining the volume of market purchases BPA must make.

In current markets, BPA sees limited ability to purchase specified source power. There is no standardized product for trading such power so most transactions are made bilaterally. Further, BPA's observation is that at times when BPA is short there is limited availability of specified source power. This indicates to BPA that a significant volume of specified source power available in the short-term market is sourced from hydrogeneration, and the shared hydrological conditions across the region lead to mutual lack of availability of specified source hydro generation. Additionally, when specified source power is available, it typically trades at a premium. This means such power may not meet BPA's statutory obligation to procure "cost effective" power.

Finally, by federal statute BPA markets from a system of power. This includes the federal hydro system, CGS nuclear plant, and non-federal and market purchases. The ACS construct was created to recognize BPA's need to market from a system while fitting BPA into the specified source construct of GHG reporting. Because BPA makes system sales, this greatly limits BPA's ability to adjust its resource portfolio to control its ACS emissions factor.[1]

Given all the factors described above, any control BPA has over its ACS emission factor is relatively minor. With this important clarification in mind, BPA responds to several of the questions Ecology raised in its March 6, 2025 workshop and March 7, 2025 request for feedback.

[1] For more detail on BPA's system sales requirement, see Bonneville Power Administration Administrator's Record of Decision: Energy Imbalance Market Policy, section 3.2.4, September 2019, available at https://www.bpa.gov/-/media/Aep/projects/energy-imbalance-market/rod-20190926-energy-imbalance-market-policy.pdf

Defining GHG Zone and treatment of system power

1. **Central question: How should the WA GHG Zone be defined within CEMs and how does this interface with existing reporting frameworks?**

BPA is responding narrowly to this question, speaking only to the loads within BPA's Balancing Authority Area (BAA) and the resources comprising the federal system from which BPA markets power. The Climate Commitment Act stipulates that the federal system is an import to Washington. See RCW 70A.65.020 §42(c). Therefore, BPA assumes that federal resources participating in a market will be defined and modeled as outside the Washington GHG Zone.

Roughly half of the consumer load in BPA's BAA is in the service territory of consumer-owned utilities located in Washington. BPA assumes that this load will be modeled as inside the Washington GHG Zone.

2. **What load and what generation resources should be included in the WA GHG Zone for:**
    a. **BPA BAA (multi-state BAA federal power marketing administration)**

See answer to question 1 above. BPA declines to comment on the situations raised in Ecology's questions that pertain to other BAAs.

Understanding CEMs and BPA interactions

The responses below describe how BPA currently participates in the Western Energy Imbalance Market (WEIM) when it offers to serve load in California. BPA expects to use similar methods for offering to serve load in Washington once the GHG zone is established. At this time, BPA has not made a final decision on joining a day-ahead market and thus does not have implementation information to share as that would be pre-decisional. Going forward, BPA expects GHG accounting for organized markets will necessitate some evolution in BPA's ACS emission factor calculation.

Regardless, BPA must abide by its statutory requirements as described in BPA's opening comments above. Further, BPA is still in the process of negotiating new long-term contracts with its preference customers and intends to convey environmental attributes and provide emissions accounting consistent with those contracts. BPA urges Ecology to create rules that enable flexibility and to provide further instruction in guidance documents as needed.

Ecology should expect continued evolution on BPA specific reporting just as there will be continued evolution on GHG accounting for CEMs generally.

1. **How are BPA's system generation resources represented in a CEM model? Are distinct generation resources represented at distinct nodes and can be separately scheduled or awarded by a CEM?**

   In the WEIM today, BPA's participating resources are its "Big-10" hydro projects. These projects are grouped into three aggregations—lower Columbia, upper Columbia, and Snake River—for purposes of participation in the EIM. For more information, see Bonneville Power Administration Administrator's Record of Decision: Energy Imbalance Market Policy, section 3.5.1, September 2019, available at https://www.bpa.gov/-/media/Aep/projects/energy-imbalance-market/rod-20190926-energy-imbalance-market-policy.pdf. This participation construct is consistent with BPA's statutory obligation to make sales from the federal system. *Id*. at section 3.2.4. BPA has not made a final decision about participation in a day ahead market, but its current thinking is it would likely use a similar aggregation. See Bonneville Power Administration Day-Ahead Market Draft Policy, section 6.1.1.2, March 2025, available at https://www.bpa.gov/-/media/Aep/projects/day-ahead-rket/2025/20250306-day-ahead-market-draft-policy.pdf. This could evolve over time and Ecology's rules should not be specific to whether BPA uses aggregations of resources or bids in specific resources.

2. **What EF should be used in the GHG bid adder for BPA system energy or generation resources for CEM attribution to the WA GHG Zone?**

   It is BPA's discretion to determine what GHG bid adder should be used for bidding federal resources into Washington. Currently in the WEIM when BPA enables attribution of the federal system to California, BPA uses its ACS emission factor as its bid adder. In the near term, BPA expects that it will continue to use its ACS emission factor when bidding into Washington for the WEIM as well. At this time, BPA does not have a position on how the GHG bid adder might evolve over time for the WEIM and how it may evolve if BPA joins a DAM.

3. **What EF should be used to determine Cap-and-Invest compliance obligations for BPA system energy or generation resources attributed to the WA GHG Zone?**

   In the WEIM when the federal system is attributed to California the compliance obligation is based on BPA's ACS emission factor. For the WEIM only, it would

be reasonable for Ecology to use BPA's ACS emission factor as well. At this time, BPA does not have a position on if and how the compliance obligation should evolve if BPA joins a day-ahead market. However, because BPA sells from a system of resources, a state's method of assigning compliance obligations for the federal system must be consistent with this construct.

4. **When attribution to the WA GHG Zone is enabled by CEMs, how should BPA system energy supplied to WA and associated emissions be accounted for within the Cap-and- Invest Program?**

   Please see the answer to 3 above.

   a. **Should BPA participation in a day-ahead or real-time only CEM impact the usefulness or calculation of the BPA ACS EF?**

      BPA's ACS emission factor was originally created by the California Air Resources Board, as a regulatory method of deeming BPA's entire system to be a "specified source." The goal was to recognize that BPA's sales to California were essentially a specified source of energy from the overall federal system (as opposed to an individual generating unit). At the time, specified source sales occurred only through the bilateral market. The ACS emission factor was subsequently adopted for Washington and Oregon GHG reporting programs.

      The ACS emission factor has provided transparent and accurate accounting of GHG emissions associated with the federal system, including purchases BPA makes to meet its load obligations. It has provided a known emission factor that establishes price signals to BPA's power marketing counterparties across the West. Today, the WEIM only consists of a small portion (less than 1 percent) of total generation and purchases reported for the ACS calculation across all states, and there is no load in BPA's BAA that is in a GHG zone.

      BPA recognizes that the addition of a Washington GHG zone to meet Washington cap-and-invest program needs (which would encompass load in BPA's BAA), as well as BPA's potential participation in a day-ahead market (which would result in transactions that make up a much larger percentage of the total generation and purchases reported for the ACS calculation), necessitate refreshed consideration of GHG accounting for the federal system and may impact the mechanics of any such calculation. BPA believes further discussions

are needed between BPA and all state regulators (Washington, Oregon, and California) to determine the "usefulness" or need for evolution of the ACS emission factor calculation going forward. Because BPA has not made a final decision on whether to join a day-ahead market, such discussions would be premature. Should BPA decide to join a day-ahead market, BPA expects to engage on such issues during the implementation phase of its day-ahead market decision.

b. **If BPA participates in a day-ahead CEM, would all energy and emissions associated with BPA system imports to WA be accounted for by attribution of BPA generation to the WA GHG Zone?**

   It is premature to answer this question until implementation discussions as described under 4a above have occurred. To the extent Ecology is inquiring whether BPA may have other transactions with Washington utilities outside of a day-ahead market, BPA expects bilateral transactions will still occur if BPA joins a day-ahead market.

c. **Would BPA export energy from the CEM to WA customers outside the market footprint?**

   Yes, BPA expects that if it joined a day-ahead market there would be exports of federal system energy from the market footprint to Washington utilities in another market footprint (e.g. to BPA Washington customers in another BAA) or not in a market.

Unspecified imports from CEMs

BPA does not have a specific proposal for the answers to the questions Ecology asks regarding what emission factor should be used for unspecified imports to Washington in a centralized electricity market. A more dynamic emission factor such as the residual rate being developed by market operators would better represent changing emissions on the grid but poses challenges for identifying an appropriate GHG adder in the market because the emission factor used for compliance would not be known in advance. Conversely, a static emission factor provides certainty on what should be used for the GHG adder but may over or under account for actual emissions. BPA suggests discussion of an appropriate emission factor for CEMSs requires a focused forum to discuss the tradeoffs with various approaches and make a recommendation.

Potential CEMs and e-tag interactions

BPA worked with the Joint Utilities (Avista, PacifiCorp, Public Generating Pool, and Puget Sound Energy) to answer this set of questions. BPA incorporates those responses into its comments by reference.

Emissions Leakage

BPA refers Ecology to its previous comments on leakage in the electricity market rulemaking and has no further comments at this time.

BPA appreciates Ecology staff's willingness to engage with stakeholders on these complex issues. Please contact me if there are any questions on these comments.

Thank you,

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