RE: Comments in Response to May 19 BPA EIM Stakeholder Meeting

PPC appreciates the opportunity to comment on BPA’s Energy Imbalance Market (EIM) stakeholder process. These “implementation” workshops are an important part of BPA’s five-phase process in place to guide the agency’s decision on EIM participation.

All PPC members are statutory preference customers of BPA and represent over 90 percent of BPA’s Tier 1 sales. Overall, Northwest public power is the largest purchaser of BPA’s power products and services and is among the largest purchasers of BPA’s transmission products and services, funding nearly 70 percent of the agency’s total power and transmission costs. As BPA is a self-funding agency and covers its costs by selling its products and services, this means that PPC members will bear the majority of the impacts from BPA’s participation in the EIM. As a representative for those that will bear the majority of the risk associated with EIM participation, we repeat our request that BPA perform a genuine and thorough analysis of participation in making this decision.

PPC reiterates the importance of Phase V of BPA’s EIM decision process. The comments offered below are limited to responding to BPA’s materials presented on May 19. PPC is not taking a position on BPA’s EIM participation at this time. In that spirit, PPC offers the initial comments on the concepts presented at BPA’s May 19 BPA EIM stakeholder meeting.

EIM Business Practice

PPC appreciates BPA’s overview of its planned approach for updating its business practices to enable EIM participation. To fully understand the impact of BPA’s participation in the EIM on the agency’s business practices, we would appreciate a list of which existing business practices will be updated as part of BPA’s participation and a description of any new business practices that will be created. It would be particularly helpful if this list could refer back to the topics included in the customer impact overview so customers could crosswalk where each of those impacts will be codified.

BPA should also publish its EIM business practice, even if it is still in draft form, at the same time it issues its Phase V letter to the region to help inform customer comment on the agency’s participation. The purpose of having the Phase V decision after implementation scoping and after the rates and tariff proceedings is so that customers can comment on BPA’s potential EIM participation with full knowledge of how that participation will be implemented. Understanding what will be captured in the EIM business practice, even if it is not fully finalized, will be helpful in informing customers’ positions.
Post Go-Live Reporting

While we appreciated BPA verbally acknowledging some of our recommendations for post go-live reporting submitted in advance of the workshop, it was unfortunate that BPA did not respond in writing. We ask that BPA do so in the June workshop. In response to the proposal for go-live reporting presented at the May 19 workshop, we reiterate the requests for reporting included in our May 11 comments.

Consistent with our earlier comments, the metrics to track performance of policies established in BP-22 and TC-22 rate cases should be included in regular reporting. We do not agree waiting until pre-rate and tariff workshops to begin reviewing available data is the best approach to understanding the impacts of rates and tariff rules adopted in BP-22 and TC-22. These metrics should be included as part of regular, qualitative and quantitative reporting on the agency’s EIM participation post go-live.

BPA should not solely rely on the CAISO benefit report to assess benefits of EIM participation. The simplified approach taken to generate this benefit report is likely not reflective of the actual benefits that BPA will accrue through EIM participation. If BPA does believe this is an accurate representation of benefits received, it should work with customers to describe why that is the case and explain how these benefits will flow through to Power Services customers, specifically how they would be captured in future modeling in BPA rate cases. If the agency has confidence in these benefit estimates, PPC will expect to see a consistent estimate of benefits reflected in future rates. If the agency does not have enough confidence in those estimates to reflect the estimated benefits received in its future rates, a new approach for estimating benefits must be developed.

BPA should perform its own benefit analysis on EIM participation to better understand not only the level of benefits received, but also what types of benefits it is realizing through EIM participation. BPA should work with customers to develop a methodology to better assess benefits realized through EIM participation. This methodology should work to identify benefits associated with meeting imbalance needs within the BAA and separately identify benefits to secondary revenues through a more efficient dispatch of the FCRPS beyond balancing needs. Understanding these details will be important to help customers understand whether BPA’s participation is the EIM is consistent with BPA’s EIM participation principles – particularly #5, “Bonneville’s participation is consistent with the objectives of Bonneville’s strategic plan.”

Additionally, the agency should make data related to BPA’s participation available to customers once it goes live in the EIM so customers can perform their own analysis. We look forward to discussing with BPA in more detail the mechanism for making this information available as well as what information would be helpful for customers.

Phase V Close Out Letter

PPC is supportive of the items that BPA plans to include in its Phase V close out letter but must also address the issues PPC is raising here. In particular we agree that thorough assessment of
the changes between the Phase V decision and BPA’s previous EIM Policy Record of Decision will be important.

PPC recommends that BPA also clearly capture any elements of EIM market design or governance that the agency sees as required for supporting BPA’s participation. For instance, in early phases of the stakeholder process, BPA identified changes to CAISO’s Local Market Power Mitigation (LMPM) policies to be a “must have” for participation. Are there other areas BPA has identified as critical for supporting participation? This list should not be limited to areas where changes are needed for BPA to participate, as was the case with LMPM, but also areas where potential revisions away from current policy may impact BPA’s ability to participate. We understand that the agency cannot imagine all potential rule revisions which may cause it to rethink its EIM participation, but it would be helpful if BPA identified foundational aspects of the market design that are essential to enabling the agency’s potential participation.

In addition to those topics identified for inclusion in the Phase V close out letter, BPA should also make clear commitments to regularly report on EIM participation metrics, including any commitments on developing and improving methodology for assessing costs and benefits associated with participation.

Business Case

PPC appreciates BPA sharing its assessment of the business case early, given the extremely tight Phase V process. We are disappointed that it appears that BPA will not address questions raised by PPC and others around the existing business case results, BPA’s confidence in those results, and BPA’s assessment of whether similar levels of benefits will ever actually be reflected in Power Service’s rates.

It is challenging to comment on whether there are sufficient benefits resulting from BPA’s EIM participation when BPA does not appear to believe that actual or reasonable benefits expected to accrue to customers are reflected in the business case. BPA’s rate case testimony, as well as the framing provided for other analysis based off of the E3 analysis, made it clear that BPA has little confidence that the agency will experience the level of benefits shown in the E3 study in the near term and possibly ever.

Further, to the extent that net benefits may materialize there is currently no clear plan to quantify those benefits or include that value in rates. As PPC has made clear in many instances, additional and systematic accrual of financial reserves is not a net benefit to power customers due to the opportunity cost of lost alternative uses of those funds. Like any business, BPA has liquidity needs which are governed by the Treasury Payment Probability standard and Financial Reserves Policy. However, financial reserves for risk in the BPA fund accrue almost zero interest. Those funds could be put to higher value uses by public power utilities and the communities and businesses they serve. Rates should be set at the lowest level consistent with sound business principles and not to accrue cash reserves beyond the liquidity needs of the business.
Our understanding is that BPA sees the E3 study as the “industry standard” for assessing benefits but does not have enough confidence in this industry standard analysis to use it to develop an estimated impact of EIM participation in BPA’s Power Rates. It continues to be unclear to PPC why the E3 study is sufficient to make a business decision, but insufficient to use as a starting point for capturing changes to secondary revenues in rates. In addition to raising important questions about the consistent use of the E3 study, PPC’s testimony on this issue recommended use of some of the scenarios run as part of the E3 study in BPA’s rate calculation, with appropriate modifications to reflect the timing and effectiveness of BPA’s anticipated participation in the EIM during the BP-22 time period. Agency staff rejected this recommendation. The excerpt of PPC’s BP-22 testimony addressing BPA’s EIM benefit estimates is attached for reference.

In its Phase V letter to the region, BPA should clearly explain if and when BPA actually expects to receive benefits at levels reflected in the E3 study. If the agency does not expect to receive this level of benefits, it should explain why the study is sufficient for supporting BPA’s participation in the EIM.

**Appropriate Quantification and Distribution of EIM Benefits to Preference Customers**

The disconnect described above between assessed benefits in the business case and expected benefits included in rates creates significant uncertainty in whether Power customers will ever realize the anticipated benefit of EIM participation. This potential is even more concerning given BPA’s proposal to track benefits going forward is the CAISO benefit report. This is another “industry standard” report, which may or may not earn BPA’s confidence, and PPC is concerned that it will provide another excuse for the agency to base its participation in the EIM on one set of analysis, while using another – entirely different – analysis to determine what benefits power customers actually receive.

We are concerned that the result could be BPA continuing to purport significant benefits in the EIM, without actually having the confidence to include those benefits in the lowering of Power service rates. We look forward to hearing how the agency plans to address these concerns in its Phase V letter to the region.

**Conclusion**

PPC appreciates the opportunity to comment. We would like to express our appreciation for staff’s hard work to develop and share BPA’s planned EIM policies with stakeholders through this process.
we stress that we believe no level of revenue financing in Power rates has been
adequately supported in this proceeding and see no justification for meeting further
towards BPA staff’s initial proposal.

**SECTION 3: ASSUMED EIM BENEFITS IN POWER RATES**

*Q:* Please briefly summarize your analysis and recommendations regarding this issue.

*A:* PPC is concerned that the assumption of no net benefits from BPA’s Energy Imbalance
Market (EIM) participation is not consistent with the agency’s current business rationale
for pursing EIM participation. BPA has relied on the E3 benefit study to support
decisions to move towards participation in the EIM, and assumed benefits should be
based on that study in the absence of new or better information. We propose a
conservative approach to include $11.7 million in gross benefits per year ($8.3 million
net of cost).

Sensitivities in the E3 study already consider the substantial factors that BPA staff
is concerned may reduce participation benefits in BP-22, and the risk profile of Power
Services is such that including assumed benefits at the level we propose does not carry
substantial risks. If BPA is not confident in the value of EIM participation such that
reasonable net benefits can be included in BP-22 rates, then the agency needs to revise
its business case evaluating participation to ensure that proper assumptions are included
in the rate case and used in other decision-making processes.

*Q:* What is the Energy Imbalance Market?

*A:* The EIM is a real-time market to dispatch economic bids voluntarily offered by
participating resources to balance within-hour supply, transfers between balancing areas,
and load across its footprint. The EIM is operated by the California Independent System
Operator (CAISO) and includes numerous participating EIM entities across the Western Interconnection. BPA is currently in the fourth phase of a five-phase process of incremental decisions on whether and how the agency will join the EIM. If BPA decides to join the EIM, it anticipates a go-live date of March 1, 2022.

Q: How does BPA staff propose to account for the BP-22 Power benefits that could be realized if BPA joins the EIM?

A: BPA staff proposes to include roughly $3.4 million of incremental EIM benefits per year. The $3.4 million is meant to offset forecast costs in the BP-22 rates and would result in a rate-neutral approach to EIM benefits.

Q: Has BPA previously studied the potential benefits that could be realized if BPA joins the EIM?

A: Yes. As part of the five-phase EIM decision process, BPA retained Energy and Environmental Economics, Inc. (E3), a leading industry consultant to perform a benefits analysis that examined the potential dispatch benefits of BPA’s participation in the EIM. The goal of the benefits study was to estimate the benefit of BPA’s participation in the EIM using an industry standard EIM benefits modeling approach customized to reflect the constraints of the BPA system. The BPA EIM Policy Record of Decision\(^1\) (“EIM Policy ROD” or the “EIM ROD”) provides a brief list of the conservative operational constraints enforced in E3’s analysis to ensure that the modeling reflected feasible dispatches by the federal system. BPA also performed additional verification of E3’s

proposed dispatches to ensure the study produced feasible results. See EIM Policy ROD at 97-100; see also EIM Policy ROD, Attachment B.

Q: What were the results of the E3 cost-benefit analysis?

A: The E3 study estimated that EIM participation would produce gross benefits of $36 million to $40 million per year relative to the status quo. E3 performed additional sensitivities to independently analyze the impact of different key assumptions. The additional sensitivities increased the range of potential benefits to $24.4 million to $47.1 million per year.

Q: Has BPA previously relied upon the results of the E3 benefits analysis?

A: Yes. BPA extensively relied upon the results of the E3 benefits analysis in the EIM Policy ROD to support the decision to sign an Implementation Agreement with the CAISO. The EIM Policy ROD found that “[c]omparing the costs of joining EIM with the modeled net dispatch benefits indicates significant annual net financial benefits to Bonneville if it participates in the EIM.” EIM Policy ROD at 100. The ROD further concludes that the E3 modeling, paired with estimates of startup and ongoing costs, suggests that EIM participation would quickly pay for itself based on dispatch benefits and that the modeled sensitivities do not change this conclusion. EIM Policy ROD at 100. In the EIM Policy ROD, BPA uses the additional net annual revenue of $29-34 million to support its conclusion that moving towards joining the EIM is a sound business decision. BPA then goes even further, stating that absent fundamental changes to underlying facts or market rules, the agency does not intend to redo its business case unless a fundamental flaw in that analysis is found. EIM Policy ROD at 115-116. To our knowledge, no party has identified such a flaw.
Notably, BPA acknowledged in the EIM Policy ROD that should a fundamental market or factual change result in estimated benefits that would be closer to zero or even negative, holding onto an outdated and clearly flawed analysis would be unsound. EIM Policy ROD at 115.

Q: How does BPA staff justify its EIM Secondary Credit forecast deviating so substantially from the E3 study?

A: BPA staff relies on two general arguments as to why the initial proposal significantly deviates from the gross benefits estimated in the E3 benefits analysis. First, staff argues BPA has not yet made a final decision to join the EIM and including full EIM dispatch benefits would create potential consequences if benefits did not fully materialize during the rate period. Second, even if BPA were to use the E3 study as a basis for establishing EIM benefits, BPA staff argues several adjustments would have to be made to the results of the E3 study. Staff argues the study would need to be discounted because the E3 study presumes “mature” participation over a full operating year. Staff highlights BPA’s projected start date for participation is six months into the BP-22 rate period and that initial participation at that time would likely be a shallow entry with limited participation, both of which would require further discounting. Finally, BPA staff argues operational constraints would also warrant further discounting of the E3 study. BPA staff specifically highlights the ability of BPA to pass the EIM’s sufficiency tests and potential lack of sufficient transmission as two operational constraints that would necessitate discounting of the E3 study. BPA staff concludes that these factors weigh strongly against using the E3 study estimates for the proposed secondary EIM benefits in this proceeding. BPA staff further concludes that if staff had developed a risk-adjusted
version of the E3 study, it is likely staff would have produced a value close to the $3.4
million.

Q:  *Does PPC agree with BPA staff’s assessment?*

A:  No. BPA staff’s proposal and rationale are concerning to PPC. The proposal to
superficially limit EIM benefits to $3.4 million annually will inequitably cap BPA
customer benefits without limiting the risk exposure associated with BPA’s participation.
Further, the recharacterization of the dependability of the E3 study benefits relative to the
EIM ROD is particularly troubling. The majority of BPA staff’s rationales for
discounting the E3 study, such as the operational constraints discussed above, were
explicitly considered and modeled by E3 and the results were vetted by BPA (EIM Policy
ROD at 98-99). Other justifications for the need to discount benefits included in BP-22
rates, such as partial rate period participation and limited participation, could readily be
estimated without additional work. The forecasted benefits could be pro-rated to reflect
the potential time period BPA would participate and sensitivities included in the analysis
could be used to represent limited initial participation. The position that these factors –
which the EIM ROD describes as being addressed – now necessitate discounting that
would result in benefits close to BPA staff’s proposal raises concerns that the E3 study
cannot be reliably depended upon for the Administrator’s decision-making. If the
concerns raised by BPA staff warrant the discounting of E3 study benefits to $3.4 million
annually are accurate, they necessitate revisiting the cost-benefit analysis so the
Administrator’s final decisions can be based on a sound business case.

Q:  *Please explain how BPA’s proposal inequitably caps BPA customer benefits without
limiting customers’ risk exposure?*
A: The E3 study estimates that potential EIM dispatch benefits may be as high as $47.1 million annually. Limiting benefits included in rates to the estimated BP-22 rate period costs ensures customers will see no net rate benefits of potential EIM participation without limiting potential risk exposure of financial losses associated with EIM participation. BPA should include benefits of EIM participation in rates based on the best available information.

Q: Please explain how the E3 study already developed scenarios that can be used for a shallow entry.

A: E3 performed a sensitivity analysis in which it “further reduce[d] BPA’s Big 10 Hydro Participation in EIM to the minimum flexibility needed to pass the Flexible Resource Sufficiency Test (FRST).” E3 explained in the benefits study that this limit was determined to be the most representative assumption for minimum flexibility. EIM Policy ROD, Attachment B at 8.

Q: What is the significance of limiting participation to the amount required to pass the flexible ramping sufficiency test?

A: The FRST is one component of the EIM resource sufficiency evaluation, the set of tests designed to prevent EIM entities from leaning on the flexibility and capacity of other EIM entities. The evaluation is designed to ensure each EIM entity can balance its own supply and load prior to fully participating in the EIM. Failing the flexible ramping sufficiency test results in an EIM entity’s net EIM transfer limits being frozen, which can significantly limit the benefits of EIM participation. For example, the E3 analysis found that BPA historic spinning capability resulted in BPA failing the flexible resource sufficiency test in about 15 percent of intervals. In those intervals where BPA failed the
FRST, no EIM benefits were assumed. EIM Policy ROD, Attachment B at 3, n. 2. The significance of limiting Big 10 participation to the amount capacity needed to pass the flexible ramping sufficiency test is that it is the most limited amount of participation BPA could experience without freezing EIM transfers and is therefore a reasonable proxy for shallow entry to the EIM.

Q: Please explain the operational constraints included in the E3 Benefit Analysis.

A: The EIM Policy ROD describes that BPA provided a list of parameters that had to be maintained when E3 performed its analysis. These assumptions, described as conservative by E3, included 24-hour energy neutrality requirement, system feasible min/max limits, EIM-dispatchable capacity limited to available INC/DEC spin capacity at Big 10 projects, and a 75 percent success rate applied to calculated EIM benefits to offset perfect foresight in the PLEXOS modeling. E3 explains the 75 percent success rate can “encompass situations such as if BPA’s bids do not clear the EIM in all intervals, limited market depth at a given price, or if there are unforeseen hydro constraints that were not captured in the historical spinning capability.” EIM Policy ROD, Attachment B at 8. In addition to providing a set of modeling constraints, the EIM Policy ROD describes BPA’s work to verify the dispatch results of E3’s analysis. BPA verified model compliance with all constraints, ensured reasonableness of simulated dispatch, verified simulated net sales positions are within available transmission expectations and performed other evaluations to ensure reasonableness. EIM Policy ROD at 98; Attachment B at 8. In fact, BPA concluded that the constraints enforced to limit EIM economic dispatches in the modeling indicate that the $29 million to $34 million of EIM
benefits “is likely a conservative estimate” of the projected benefits. EIM Policy ROD at
110.

Q: Please explain PPC’s concern with BPA staff’s assessment that if BPA staff had
developed a risk-adjusted version of the E3 study, it would have likely resulted in a
benefit close to the $3.4 million.

A: As explained above, BPA provided E3 with a set of modeling constraints to ensure the
simulated dispatch were feasible and then verified the results. The two operational
factors that BPA staff now highlights as necessitating discounting were explicitly
described in the EIM Policy ROD as factors the E3 analysis took into consideration in
developing its “conservative” benefits estimates. First, the EIM ROD states that BPA
staff verified that simulated EIM net sales positions were within available transmission
expectations. EIM Policy ROD at 98 -99. Second, the E3 analysis did not include any
benefits in intervals where BPA did not pass the resource sufficiency test, approximately
15 percent of intervals. The E3 benefits study described this as conservative because
should BPA join the EIM, “the Big 10 Hydro would be scheduled differently to ensure
that the FRST was passed the vast majority of the time.” EIM Policy ROD, Attachment
B at 3, n. 2. In response to PPC data requests, BPA staff now attempt to qualify the
statement in the official ROD as not considering other factors that may constrain BPA’s
participation, such as transmission or water and system conditions. Similarly, BPA staff
now argues that even though simulated EIM net sales positions did indeed pass a
transmission reasonableness check, it does not guarantee sufficient transmission
donations to EIM in all future cases. See Response to PP-BPA-30-55 and PP-BPA-30-
56, attached to this testimony as Exhibit 3.
PPC believes these are significant after-the-fact changes in the characterization of the E3 analysis relative to the EIM ROD. For example, assuming the FRST scenario is a reasonable proxy for a shallow entry to the EIM and discounting for partial year participation the EIM, would expect to produce $18.3 million per year, over five times the benefits proposed by BPA staff. Staff’s assessment that further discounting for factors such as transmission access and the EIM capacity tests – which, again, were explicitly considered in the E3 analysis – result in benefits of $3.4 million raises concerns that the E3 cost-benefit analysis is outdated and needs to be revisited in order to serve as an accurate proxy for rate case purposes and Phase V decision-making.

Q: What is PPC’s proposal?

A: PPC believes a risk-adjusted EIM benefit based on the E3 analysis used to support the business case is the most appropriate. PPC proposes that BPA include minimum EIM benefits of $11.7 million per year. This results in an assumed net benefit of approximately $8.3 million after considering expected costs. This represents the most conservative year of the FRST scenario pro-rated for partial rate-period participation. The additional conservatism from limiting the benefits to the year and scenario with the lowest gross EIM dispatch benefits will help account for uncertainty of BPA’s potential participation.

Q: Should BPA decide to not join the EIM, or if realized benefits fall below the $11.7 million per year, will the Power business line be materially harmed?

A: Power Services’ risk profile is such that a shortfall of assumed revenues of this magnitude will have no appreciable effect. The two-year TPP for Power Services is above 99.9 percent, with no modeled deferrals out of 3,200 simulation iterations. The
expected value of financial reserves available for risk at the end of the rate period is $390
million, meaning that even if zero net benefit was actually achieved relative to our
proposal, BPA would be expected to be above the 60 days cash on hand FRP threshold.
Not only does our proposal represent the most conservative outcome based on the best
available information, even if it completely failed to materialize there would not be a
substantial adverse impact.

Finally, we note that if BPA does not choose to go forward with EIM
participation, that does not mean that there will not be other opportunities to achieve
some or all of the revenues that we are proposing to include. The primary value from
EIM participation comes from monetizing capabilities of the FCRPS that are not
currently considered in the calculation of net secondary revenues. This includes
characteristics such as within hour flexibility and flexible ramping. Even if BPA does
not participate in the EIM, that does not mean that there will be no chance to monetize
those or other capabilities. Indeed, one obvious reason for not going forward with EIM
participation would be the availability of more attractive opportunities.

Q: Does PPC have any other recommendations?
A: Yes. BPA staff describes that if BPA does join the EIM during the BP-22 rate period,
staff expects some of the revenue uncertainty described to go away and staff will have
greater certainty for future costs and benefits. PPC agrees that actual participation data
will be useful in future proceedings and believes BPA should commit to making data
related to EIM participation costs and benefits publicly available if BPA joins the EIM.
This would ensure customers have transparency around costs and benefits of BPA
participation and will help facilitate the development of a methodology for estimating EIM dispatch benefits in future rate proceedings.

SECTION 4: FUTURE OPTIONS FOR PHYSICAL TRANSMISSION LOSS RETURNS

Q:  What are your recommendations on this topic?

A:  PPC was part of the pre-rate case workshop consensus for maintaining a physical loss return option going forward and particularly for pursuing a concurrent loss return option in the future. We appreciate the technical difficulties and competing priorities described in BPA’s testimony that make it difficult to commit to a specific timeline when this option might be available. With that said, PPC strongly supports the best possible efforts to achieve a concurrent physical loss return option by the BP-24 rate period. To that effect, we recommend that BPA develop and share a workplan towards this goal with customers and provide regular updates on progress through the Quarterly Business Review process, similar to the Grid Modernization initiative.

Q:  Does this conclude your testimony?

A:  Yes.