



Allison Mace
Bonneville Power Administration

October 20, 2024

Re: 2024 BPA Resource Program Review

Dear Allison:

Thank you and Eric for running through the resource program optimizer yesterday. We have been waiting for the opportunity to engage in this incredibly important program. Here at Klickitat PUD, more than 15% of our power purchases are already through BPA's Tier 2 product. Over the course of the last BPA contract our electric load growth exceeded 40%. The impacts of the results of this model will impact tens of millions of dollars of wholesale power purchases for our customers through the next contract period. With this mind, we have been, and will continue to be, somewhat aggressive in trying to ensure that the appropriate peer review of the model and the overall program is successful.

We are thankful this review can start now, even if we wish we could have engaged sooner. I am offering the following questions and comments and I sincerely hope that they are given due consideration, especially since decisions based on that model will be paid for, in part, by Klickitat PUD customers. Our county average family income is in the bottom 20% of counties in Washington State, so controlling costs and maintaining reliability is of particular concern to us as service providers.

I respectfully offer the following thoughts and comments.

1. This overview specifically excluded discussion on reliability metrics and I understand that the intent was to review the model, not the constraints. However, I want to be very clear that the 18 hour reliability metric used is not sufficient. It is just not relevant in a world where multi-day extreme cold and extreme hot weather events are occurring as frequently as they do. I will state that a model that does not solve for the actual conditions we are seeing will deliver results that are wrong, even if the model is perfect. I have heard comments, including from the Power Council, that stringent reliability requirements lead to results that are expensive or would require resources that they do not want built. However, a resource plan should inform decisions and should not be designed to deliver predetermined results. A true multi-day metric is required.
2. There are only two zones for transmission constraints and costs. This clearly is not accurate and will not return correct solutions. I also did not see a constraint that would

provide solutions based on the real timeframes for transmission builds to occur. We all know that major transmission build times are in excess of ten years. The location matters with respect to timing, cost and wildland fire and other risks.

3. I do not believe that the capacity values that are assigned to wind and solar are correct. I think I have heard in previous discussions that WRAP capacity numbers are being used. These values are not applicable to multiday events. We are all familiar with the January 2024 cold weather event. There was no wind or solar in the BPA's BA for more than 5 days during that time. None. Facts, like extreme cold in the Gorge happens when there is no wind and the area is socked in with cloud cover, need to be included in analysis. Winter storms that bring high winds are not the extreme cold events in this area.
4. There is no declining ELCC for solar or battery storage, and it not clear there are recurring replacement costs as panels and cells need replacing. This under-estimates the actual cost of production.
5. The model does not integrate with the hydro system. Given the magnitude and limitations of the hydro system, and the magnitude of new resources that are forecast, this seems a fundamental part of any model in solving for new resources.
6. The net resource cost used a fixed revenue value. That is just not correct and yet plays a major role in the model solutions.
7. Market purchases do not distinguish between day ahead or real time pricing and do not include capacity value. This again is not correct and affects the resource choices differently. This will drive incorrect valuations of different resources and therefore incorrect results.
8. While I understand there is a "dummy resource" that allows for problem solving or trouble shooting when the model cannot return a solution, I do not see where system reliability is questioned during this analysis. If the model does not solve, there is cause for concern about whether the resources necessary for a reliable system are being considered or that they are valued correctly.
9. The model assumes that at some high enough price, there always is energy available. Clearly, this is incorrect and is a major flaw. Resource availability during extreme weather events is never guaranteed. Think about the Texas freeze and the availability of their natural gas fleet. This is literally a dangerous assumption and will drive incorrect solutions when the system just will not solve and should not solve without the addition of some other resource with different capacity attributes.
10. Natural gas is not included in the model. This makes no sense. Much of BPA's service territory does not restrict natural gas. Why is BPA making an assumption that gas is not an option? It is an option that must be considered to inform decision makers of the impacts of their decisions, even if some people or organizations wish to not discuss the option at all. I realize that it is being considered outside the model. That in and of itself is concerning on the direction rules are being implanted in building this model in the first place.
11. The presentation stated that BPA has yet to finalize policies on the treatment of carbon emissions, yet this model expressly excludes natural gas. That is not appropriate. This model should provide information on various resources that are available for

consideration. I am pretty sure most in the industry agree, including senior BPA executives, that natural gas is necessary for a stable, reliable electric system in at least the coming 10 or so years of transition. It is therefore completely inappropriate to not include natural gas explicitly for the attributes it has. California, who is seen as the “thought leader” on renewable power grids, is still over 40% natural gas and they still have reliability issues. We must learn from this and build relevant and accurate models that lead to reliable and cost-effective systems. If policies then prevent the inclusion of certain resources, then those resource decisions can be made in full knowledge of the impacts of those decisions. The model is not the appropriate place to make those decisions.

12. In addition to the above statement, we all know there is mounting pressure to remove natural gas pipelines at a time when more are necessary. I do not believe we are doing our jobs in working for benefit of our society if this fact is not demonstrated and decision makers can then make their decisions with full knowledge of the implications of those decisions. If BPA does not do this, who will?

I met with BPA resource program staff over a year ago and again with resource program staff and senior BPA executives about six months ago with many of these concerns. They have not been addressed and from what I heard yesterday, they will not be addressed for at least two more years. While I appreciate the amount of work done to complete the model, I do not understand. There is acknowledgment of the model’s shortcomings. I therefore am asking again that resources be brought to bear to address these issues and address them quickly. Resource acquisition will take time and I am concerned BPA is already behind in cost effectively acquiring the necessary resources to supply their Tier 2 obligations and further delays will increase the costs to our region’s rate payers.

Thank you for offering to take comments, Allie. I hope these honest and direct thoughts are taken as constructive feedback from an industry professional who cares as deeply about my responsibilities as you do.

I would very much like to continue further discussions on these important topics. Thank you again.

Respectfully,

A handwritten signature in black ink, appearing to be 'J. Smith', written over a horizontal line.

Jim Smith
General Manager
Klickitat PUD

Cc Ryan Egerdahl, BPA Resource Program Manager