



*Your Northwest renewables utility*

December 4, 2015

Submitted via email: [techforum@bpa.gov](mailto:techforum@bpa.gov)

Bonneville Power Administration  
905 NE 11<sup>th</sup> Avenue  
Portland, OR 97232

Re: **Snohomish County PUD No. 1 Response to BPA's Questionnaire on Transmission Load Service and ATC**

Public Utility District No. 1 of Snohomish County ("Snohomish") appreciates the opportunity to provide feedback on the important issue of how BPA will craft its new long term Available Transmission Capability (ATC) Methodology. As part of this process, BPA has requested that customers respond to a number of questions via a distributed questionnaire.

Snohomish is qualifying that its responses to BPA are, at this point, preliminary. The technical nature of the topics requires information beyond what BPA provided to customers as part of the questionnaire, or during the November 17, 2015 workshop. BPA should consider Snohomish's responses to be preliminary in nature until such time as BPA staff is able to provide additional clarifying information. Snohomish can theorize about the potential benefits or drawbacks of a particular course of action, but short of having solid information regarding implementation costs and the effects on real ATC, Snohomish lacks sufficient information upon which to provide informed and final responses.

By way of example, Snohomish's response to **Question 8** at this time (inquiry regarding further data), is to recommend that BPA staff develop a matrix detailing the various options presented in the questionnaire, along with any suggestions received from customers through this initial comment period. For each option, the matrix would outline potential costs of implementation, necessary upgrades to systems/procedures, and the expected effect on overall ATC. BPA providing supporting information by individual flowgates is preferred. Any other benefits of a particular methodology can also be included or cited in this matrix.

**Question 1: Do you agree that BPA should continue to use 1-in-2 NCP load forecasts, for those loads BPA forecasts, within Planning ETC studies? If not, why and what would you propose is used instead?**

Snohomish suggests BPA continue its 1-in-2 NCP seasonal load forecast studies, and then select a load forecast based on the most conservative seasonal study. Doing so will help reflect the seasonal variation in loads that is experienced on the Federal Columbia River Transmission System.

**Question 2: What assumptions should BPA make for the modeling of wind resources?**

Snohomish urges BPA to use historical peak generation amounts, capped by nameplate, for its long term wind capacity forecast. Basing wind production off of weather-adjusted historical production will provide a stronger indicator of future production versus a flat percentage adjustment.

**Question 3: What assumptions do you prefer for the modeling of non-wind non-Federal resources?**

Snohomish suggests a two pronged approach to non-wind, non-federal resources. For generation that has an established period of operation (for example, resources that have been generating for five or more years), BPA would model those generators based on historical output and peaks, capped by contract demand. For generation with no established period of operation, BPA would assume the transmission contract demand, up to the nameplate of the generation. Along with these metrics, BPA should establish a process by which it routinely reviews and benchmarks the non-federal resources interconnected to the BPA BA to ensure resource forecasts used for planning purposes accurately reflect the assumptions used in the ATC Methodology.

**Question 4: Do you agree that BPA should model more variation in FCRPS output, by encumbering ATC for the higher of "stressed" Upper Columbia output, Lower Columbia output, and Lower Snake output individually?**

BPA should model the FCRPS output using more recent historical data (subsequent to the large penetration of wind in BPA's BA) to help inform what disaggregation of the FCRPS should be "stressed." While performing these "stress" tests, BPA should also look to strike a balance between simplicity of method and the accuracy of the forecast. BPA should strive to be as accurate as possible, while avoiding the diminishing returns of a highly complex methodology.

**Question 5: What are customers preference for balancing generation to load and export in the ATC base cases?**

Snohomish simply does not have enough information to comment on this question. Snohomish does request further study of a merit order logic model for balancing. How would a merit order dispatch logic function when market prices are low? When market prices are high? When generation is high during the typical spring runoff period?

**Question 6: Do you agree that encumbrance of ATC for aggregate regional load growth is acceptable or do you think that each customers' individual load growth should be represented, knowing that the latter option will likely require automation with a higher cost, longer implementation timeline and only moderately different results in the final ATC values?**

As a general rule, Snohomish is supportive of more accuracy when forecasting for ATC values, which suggests individual load growth would be the preferred alternative. However, more information would be required, detailing how much automation would be required, what costs are involved, and to what degree this level of granularity would affect the final ATC values. Without this information, Snohomish cannot evaluate whether the investment to incorporate individual load growth is worth the benefit.

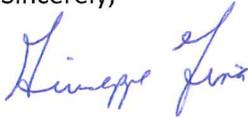
**Question 7: Do you have an opinion on how an uncertainty margin, beyond that already included in TTC calculations, should be calculated?**

Any uncertainty margin calculated should represent the potential inherent errors in the load and resource forecast, as well as any known system modeling uncertainties. Simply building in error via an arbitrary percentage of flowgates' TTC seemingly has no evaluative rigor.

**Conclusion**

Snohomish looks forward to continuing the dialogue on how to craft BPA's long term ATC Methodology. If BPA has any questions about the responses provided above, please do not hesitate to contact Ian Hunter by email at [irhunter@snopud.com](mailto:irhunter@snopud.com) or by phone at (425) 783 - 8309.

Sincerely,



Giuseppe Fina  
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