NLSL Group Comments on BPA's BP/TC-24 Aug 9th, 2024 Workshop

The NLSL Group[1] includes discrete large loads that are expected to result in 1.5-4.5 GWs of BPA's Total Retail Load[2] by 2028. The NLSL Group is focused on developing plans for load service for these customers and believes that existing methods for load service (NR service, Nonfederal resources plus NR Energy Shaping Service (NR ESS)) may not be viable in the future when resource adequacy and day-ahead markets are developed. The NLSL Group has developed a proposal for Market-Enable NSLS Load Service (included in the appendix to these comments), and there are features in this proposal which can help address issues discussed at this workshop.

BPA conducted a workshop on August 9th, where NR ESS was briefly discussed. BPA shared historical information regarding the amount of generation that has been scheduled relative to NLSL load and suggested that this over-/under-scheduling is contributing to errors in near-term load forecasts. BPA's proposed remedy is to increase the penalties on salvage values. Changes to Unauthorized Increase (UAI) charges was also discussed at this workshop.

Relationship of Over-/Under-Scheduling Generation to Load Forecast Uncertainty

The NLSL Group believes that there should be very little load uncertainty associated with over-/under-scheduling generation to NLSL load since:

- NLSL loads can be generally characterized as flat and exhibit less weather-dependent variability than other load types, and, as a result, NLSL loads can be forecasted in the operational horizon with a high degree of accuracy. In fact, organized markets treat load like NLSL load as "non-conforming" load which is treated and forecasted differently than weather-dependent load forecasts.
- Scheduled deliveries of generation to meet NLSL load are established in the pre-schedule horizon and may receive minor adjustments from day-to-day.
- BPA receives after-the-fact metered load and schedule information for each NLSL.

Given these facts, the NLSL Group believes that BPA should be able to develop tools to easily and accurately forecast over-/under-scheduling of energy over any near-term time horizon. The NLSL Group is open to discussing with BPA ways to improving the exchange of load and schedule information, where appropriate to improve these forecasts. Furthermore, the NLSL Group believes that operational tools and processes (such as treating NLSL load as non-conforming load) is a much better approach than tweaking rate products to solve load uncertainty issues.

[1] The NLSL Group is comprised of BPA preference customers who serve or expect to serve retail members and customers that the Northwest Power Act categorizes as "New Large Single Loads" (NLSLs). Member utilities include: Umatilla Electric Cooperative, Northern Wasco County PUD, Grant PUD, PNGC Power, Clatskanie PUD, Harney Electric Coop, Klickitat PUD, Eugene Water and Electric Board, and Benton Rural Electric Association.
[2] Slide 37, https://www.bpa.gov/-/media/Aep/power/resource-program/rp-2023-11-28-public-workshop.pdf

NR ESS Energy

The NLSL Group does not support BPA's proposal to increase salvage value penalties. As mentioned above, the NLSL Group does not believe that tweaking NR ESS is the best approach for dealing with load forecasting issues. Furthermore, BPA offered no estimate on how the new penalty structure would increase scheduling accuracy or proposed a measure for how much error is acceptable. Unless BPA can demonstrate the value of these penalties, the NLSL Group believes this penalty structure should be completely removed from ESS.

For Rate Treatment B, the current method for settling NR ESS Energy charges relies on ICE Mid-day ahead HLH/LLH power price indices and is unnecessarily complex. The NLSL Group believes that there are more appropriate metrics (such as hourly WEIM prices) that better reflect cost causation and encourages BPA to have a conversation about alternatives that will simply the ESS Energy charge calculation and better reflect cost causation.

NR ESS Capacity

BPA states in the slide deck that Customers over-/under-schedule generation to load, in part, to avoid paying for ESS capacity. However, the NLSL Group's hesitancy to purchase ESS Capacity is, in large part, driven by a lack of understanding in how BPA will implement this product. Some questions that NLSL Group members have include:

- Will NR ESS Capacity be treated as qualified capacity for the purposes of NLSL WRAP participation?
- Will NR ESS Capacity be held out of BPA's secondary marketing through the operating hour or will it be released prior to the operating hour?
- How will BPA ensure that a Customer's purchase of NR ESS Capacity be used when NLSL load exceeds generation?
- Does the Federal system have a limit on the amount of NR ESS Capacity that can be supplied?

The NLSL Group looks forward to learning more about how NR ESS Capacity will be implemented.

Unauthorized Increase (UAI) Changes

BPA offered several alternatives to UAI charges that were agreed upon in the settlement for BP-24, and the NLSL Group offers these thoughts:

- It is not clear what problems these proposed UAI changes are intended to solve and to what extent these changes will remedy the problems. Is there any evidence that BPA has faced or will face *"power demands far in excess of its contract obligations and its planned system capability"*. The total Billed Line Counts included in the slide deck

suggest that the total number of UAIs is lower today than in 2012-2016 and relatively stable since 2016.

- Over-/Under-scheduling of generation to NLSL load is done exclusively to avoid UAI charges. As a result, additional penalties will likely increase the amount of over-/under-scheduling of generation to meet NLSL load.
- Some wholesale energy suppliers are no longer responding to solicitations due to BPA's existing UAI penalty structure or are applying significant risk premiums to manage their overall risk exposure. This combination is causing significant concern for Preference Customers serving NLSLs and raising the question of BPA creating a competitive market advantage.
- Should there be a demonstration that BPA is supplying additional power rather than the market (EIM, for example)? If the market is supplying additional power, should UAI even apply?
- How do other utilities/PMAs who participate in organized markets treat UAI?
- Can BPA demonstrate that UAI has in fact harmed either BPA or other preference customers or incurred a cost that should be recovered?

The NLSL Group supports a holistic re-evaluation of UAI charges in the context of implementing best practices used in organized markets in order dis-incent customers from using uncontracted Federal resources to meet load. Until then, the NLS Group prefers to maintain the agreement reached in the BP-24 settlement.

The NLSL Group thanks BPA for the time spent on NLSL issues in BP-/TC-24 and looks forward to future productive collaborations on finding solutions to serving NLSL load. The NLSL Group requests direct engagement with BPA to better understand how its proposed changes to salvage values address BPA's concerns about NLSL scheduling error and to discuss other improvements to NR ESS.

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APPENDIX – Market Enabled NLSL Load Service (NLSL-Mrk)

Preface

The New Large Single Load ("NLSL") Group collectively serve hundreds of MWs of existing loads BPA classifies as NLSLs, with additional hundreds of MWs of expected NLSL load growth during the Provider of Choice contract period.[3] We are seeking to explore with the Bonneville Power Administration (BPA) ways we can modernize BPA's NLSL service options for the next contract period. Our hope is to create additional service options which meet BPA's statutory obligations, align with the existing NLSL policy, minimize risk, and eliminate cost uncertainty for

[3] The NLSL Group is comprised of Umatilla Electric Cooperative, Northern Wasco County PUD, Eugene Water and Electric Board, Grant PUD, Klickitat PUD, Harney Electric Cooperative, Clatskanie PUD, and PNGC Power.

all BPA customers. The following proposal addresses contract and business practice elements tied to the load following product.

Current State

BPA Load Following customers must choose one of two options to serve NLSLs per Section 23.3.6 of the Regional Dialogue contract:

1) BPA serves the entire NLSL at BPA's New Resource (NR) Rate, or
2) The customer serves the entire NLSL by dedicating non-federal resources, plus the potential use of BPA Energy Shaping Services and/or similar shaping services.

Currently, when this service election is made, it is binding for the remainder of the Regional Dialogue contract.[4] Historically, the NR Rate has been higher than both BPA's Tier 1 Rate and Mid-C market prices.

Current Practices

If a load following customer elects to dedicate non-federal resources to serving their NLSL customer/members, the only practical approach is to elect BPA's Energy Shaping Service ("ESS"), potentially including NR Resource Flattening Service.[5] ESS is somewhat similar to BPA-Transmission's Energy Imbalance Service ("EIS") in that BPA-Power applies a set of rate bands (both credits and charges) to any difference between the metered NLSL and the non-federal resources delivered by the customer.

ESS is more complex than a traditional EIS, and customers have been intentionally over-scheduling during Heavy Load Hours to manage the risk of under-delivery of non-federal resources. This minimizes but cannot eliminate the risk of BPA applying Unauthorized Increase ("UAI") penalties (as opposed to BPA-Transmission imbalance charges).[6] Alternatively, customers can purchase capacity from BPA-Power.

Proposed Additional Option – "Market-Enabled NLSL Service"

The NLSL Group proposes for discussion a third option for Load Following customers to serve an NLSL in BPA's Provider of Choice contract called "Market-Enabled NLSL Service" (NLSL-Mkt). To be clear, the two options described above would still be available. NLSL-Mkt would add a third option for Load Following customers to select when serving an NLSL. The objective of this option is to provide a path for NLSL service that is aligned with the existing energy imbalance market ("EIM") as well as anticipating the development of a day-ahead market ("DAM") during the next contract period. As markets develop, we believe this approach could be expanded to ensure that all BPA customers receive comparable service while minimizing cost and planning uncertainty.

Here are the key elements of the proposed third option:

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[4] BPA is obligated to serve the NLSL if a customer elects service under the NR Rate. BPA may have to acquire additional resources if the obligation under the NR Rate exceeds its system capability, less BPA's other existing statutory and contractual commitments.

[5] Regional Dialogue Contract Exhibit D, Section 1.5.

[6] Currently, Load Following customers are exempt from BPA-Transmission's Energy Imbalance charges since this service is embedded in the Load Following product.

- Election is specific to each NLSL (e.g., a customer may select NLSL-Mkt for one NLSL, and NR ESS for another NLSL). Customers may modify their NLSL-Mkt election consistent with the Tier 2 Rate election deadlines to be codified in the Provider of Choice contract. The NLSL Group feels strongly that one election per contract period proposed in the Provider of Choice policy is too restrictive and proposes that election modification be applied similarly across all customer classes.
- A customer who elected NLSL-Mkt for an NLSL would not be eligible for BPA's NR Rate or BPA's energy shaping products (ESS, NRFS) to serve that NLSL for the duration of the election.
- The Load Following customer would be required to submit NLSL load schedules and schedules for generation to meet that load per prevailing scheduling requirements for the NLSL-Mkt in BPA's Balancing Authority Area and would incur any applicable Energy Imbalance charges.
- BPA-Transmission may need to modify its Energy Imbalance Business Practice to allow for Load Following customers who elected NLSL-Mkt service to be eligible for Energy Imbalance Services (EIS) with capacity charges determined in transmission rates cases and energy settled using the EIM's locational marginal prices.
- Behind-the-meter generation and demand response will receive capacity credit for BPA EIS services and/or EIM/DAM market awards for energy and capacity.[7]
- BPA-Power and the customer would still be required to conduct an NLSL determination process to ensure that the load in question was in fact an NLSL under BPA's NLSL policy and related statutory requirements or BPA may allow for expedited determinations for NLSLs that are similar to loads that have already exceeded the NLSL threshold.

Benefits

- Modernizes NLSL service to reflect current market dynamics without requiring changes to BPA's NLSL Policy or the NLSL provisions codified in the Northwest Power Act.
- Minimizes and simplifies customer and BPA transactional and administrative requirements associated with managing NLSL load service.
- More accurately represents the cost of meeting the difference between metered NLSL and non-federal resources that meet that load.
- Creates data necessary for WRAP participation or exclusion.
- Reduce the need to over-schedule generation to meet NLSL load in HLHs.
- Reduce the risk of NLSLs 'leaning' on the federal system.
- Decrease the probability that BPA would be required to procure additional resources to meet a new NR Rate obligation.
- Decrease the probability that BPA would have to 'stand ready' to meet NLSL-Mkt energy or capacity needs under ESS in the event a customer is unable to deliver sufficient resources to meet its load in any hour or month.
- Load Following customers serving NLSLs face less risk of potential UAI penalties and ESS-driven scheduling practices.

[7] A capacity credit could be similar to self-supply of Balancing Reserves and DR/behind-the-meter generation could be bid directly into an EIM/DAM.

Customer Risks

- Unquantified cost risks and increased administrative requirements from including NLSL-Mkts directly in BPA-Transmission's Energy Imbalance Services using EIM settlements.
- Unquantified cost risks resulting from BPA's potential participation in a DAM.
- Balancing Authorities and market participants would have increased visibility into NLSL load activities.[8]
- Potentially results in more complexity in NT products and services if Load Following customers have different requirements.

Issues Requiring Further Investigation

- A more thorough analysis of how EIM, DAM and WRAP participation would apply to a Load Following customer who elects NLSL-Mkt service. Some 'tabletop' test cases should be run to explore possible ramifications.
- Need to determine how 'Grandfathered Loads'—i.e., those loads included at a single site that also has NLSLs as well—would be separately accounted for in EIM calculation and settlements.
- Details on scheduling and e-Tagging of an NT path in the Physical Path, including congestion credits, would need to be resolved.
- An assessment of how this proposal may impact BPA generation inputs and transmission rate cases. Separate determination of NLSL-Mkt capacity for Energy Imbalance could materially impact the generating reserves and transfer capability that BPA-Transmission must hold. On the other hand, the predictability and high load factor of NLSL-Mkt loads may allow lowering the amount of generating capacity held for balancing reserves for NLSL-Mkt loads.

[8] NLSL-Mkt loads would not be aggregated with other customer load in the BPA BAA as they are today.