

August 16, 2013

TechForum

Bonneville Power Administration

Subject: Comments on Proposed Sequencing and Impacts of Commercial Projects

After reviewing meeting materials and participating in the discussions Northern Wasco County People's Utility District (NWCPUD) submits these comments on the subject of Transmission Services' customer forum on July 24th and conference call on August 8th. NWCPUD has previously expressed concerns about the potential unintended consequences of changing multiple components of its transmission business practices in a short period of time, e.g. Short-term Preemption and Competition. NWCPUD appreciates that BPA has now engaged in a process to identify and mitigate any adverse impacts on customers as it proceeds with this initiatives. While there are some residual concerns, the current sequencing proposal with alterations suggested during the public meeting and conference call, is a reasonable course to take. Mid-course corrections may be necessary based on interim evaluation of impacts. And other measures, not brought to fore, may be worth exploring.

Managing Firm Hourly Sales (MHFS)

MHFS impacts will likely affect customers most immediately of all the commercial projects discussed. While the impact of this project affects commercial activity, NWCPUD understands that the objective of this project is to improve system reliability and operational security. Such an effort should take priority over purely commercial or regulatory objectives.

The chart on page 7 of the 7/24/13 presentation indicates that hourly redirects – which are not subject to AFC checks – support a significant amount of marketing activity for customers that, through commercial transactions, need to align paths for physical delivery of commercial transactions. While this activity generally supports economic efficiency through market mechanisms, it may have become a backstop for many customers who have been unwilling, or unable, to line up physical paths prior to preschedule when the hourly firm reservation window opens.

As a load serving entity with long-term firm transmission, NWCPUD is concerned that its curtailment priority may be matched by an hourly firm reservation conceived for an opportunity transaction of short notice and duration. NWCPUD supports MHFS from the perspective that it will likely decrease risk of firm curtailments – the first item on the potential customer impacts

list. That opportunity transactions may be placed on the margin with non-firm transmission is appropriate if the firm path is fully subscribed by longer term reservations.

Implementation of MHFS should focus on methods that can accurately estimate the utilization of existing transmission commitments – including long and short-term firm reservations – and protect the firm value of those reservations. While the urgency to implement MHFS and the complexity of the Short Term ATC Methodology (STAR) mean that both efforts will not be deployed concurrently, STAR will likely result in refinements that improve transmission path utilization through more accurate estimates of path loadings. In the interim, customers that can, will likely gravitate away from hourly firm reservations and make longer term commitments of resources to loads, or utilize non-firm transmission with explicit recognition of the greater risk such transactions may have.

An issue that was not fully fleshed out the customer meeting concerned contingency reserve obligations in instances where a non-firm transmission segment is contained in the physical path. On further reflection, the contingency reserve obligation is associated with the source (generator) side of path (e.g. 5% for hydro), thus the interconnection should remain whole for reserves in spite of the non-firm segment. However the sink BA may require that its operating reserves (balancing, regulating, etc.) be augmented for such a transaction. This topic may deserve additional consideration among balancing area authorities in order that increased use of non-firm service does not adversely impact reliability. With current e-Tagging standards it is possible to transfer the reserve obligation to the sink BA for example.

Short-term Competition and Preemption (PCM)

PCM appears to be a project that provides no reliability or operational benefits, but is a product of commercial desires and regulatory policy. In its earliest conception, NWCPUD expressed great concerns about PCM and the potential adverse reliability outcomes if applied to hourly firm reservations. As the first chronological item for implementation, NWCPUD believes that BPA's phased PCM implementation, which excludes redirects on an interim basis, will be less disruptive to customers than a sudden full blown implementation of PCM in monthly, weekly, daily and hourly service increments. BPA should proceed cautiously by allowing monthly requests subject to PCM to run their course into the first day of use (scheduling and e-Tagging) prior to implementing PCM for weekly requests, and so forth with daily. If PCM is applied to monthly reservations on September 1, it should wait until the first reservations affected by PCM have progressed to use for delivery in early November prior to implementing weekly PCM.

Delivery of 3rd Party Balancing Reserve Service

In its proposal, BPA intends to acquire balancing reserves from 3rd parties to assist with integration of variable energy resources (VERs). These reserves would be delivered to a "centroid" on firm PTP transmission service provided without a reservation charge. The transmission reservation would not be subject to AFC checks (so they would be confirmed immediately on submission but not encumber flowgate capacity), and would participate in firm curtailments for congestion management. NWCPUD believes that the probability of curtailment of other firm reservations may be remote due to the amounts of balancing reserves

that may be acquired, but in principle, NWCPUD finds it unacceptable that a "no-charge" reservation could contribute to firm curtailments of long-term firm reservations. And if the demand for balancing reserve service increases, the proposal may establish bad precedent for future acquisitions.

Balancing service is shorthand for the generators used to replace the loss of output of a variable energy resource. A firm redirect is an analogous product used widely by customers for resources that are not variable, but must be replaced for any number of reasons (outages, economics, etc.), but firm PTP customers can typically make these changes over a much wider time domain than balancing service provided to VERs. While a firm PTP redirect has no additional cost (the parent reservation charge covers this), it is subject to AFC checks and may be refused if the system capacity is oversubscribed. Furthermore, the flowgate capacity associated with the parent reservation is released when the redirect is confirmed. In the BPA proposal, balancing reserve delivery service is easier to acquire than a firm redirect, but creates additional firm curtailment exposure. It is almost like selling unlimited hourly firm at no cost.

NWCPUD suggests the following:

- BPA should supply balancing reserve service using a non-firm path to the centroid if
 the path is provided at zero cost. Such a product could be defined with NERC priority 6
 or less to ensure that it does not cause firm pro-rata curtailment of committed firm uses
 by other customers.
- BPA should also define the "centroid" in order that customers can have a more tangible perspective on flowgate impacts that these reservations may have.
- The reservations for Balancing Reserve Service must be posted to OASIS.
- If BPA decides to implement it proposal as drafted, it should provide firm customers
 assurance that its dispatch of balancing reserve service can be performed with system
 security constraints that protect firm reservations and minimize redispatch costs.

With the increased use of VERs, 3rd party balancing reserve service will be needed to augment the federal system. NWCPUD supports BPA's efforts to bring 3rd party balancing reserves into the mix of resources available, but is concerned that they not be provided unduly preferential rights to reserve transmission service. Integration of VERs is primarily a commercial matter that, if poorly executed, can have unintended reliability impacts.

NT Redispatch

NT redispatch has reliability attributes that are important for consideration. Dispatchable resources that can contribute to system security, such as the FCRPS, are essential to all transmission customers. Conversely, selecting resources that are poorly suited for redispatch could have adverse reliability consequences.

NWCPUD generally understands the conditions for NT redispatch and recognizes that the majority of its resources – embodied in the FCRPS – are already subject to redispatch under

the OATT and various implementing agreements. To this extent that additional, or more economical, resources for NT redispatch may be available, BPA should ensure that they are dispatched within their physical constraints according to economic dispatch principles. The initial list of DNR criteria for NT redispatch listed on page 5 of the 7/24 presentation constitute a reasonable list of physical and economic constraints defining the potential pool of redispatch participants. The elements of pricing, compensation and deployment appear to be absent however.

15-Minute Scheduling

NWCPUD is skeptical about the value of allowing 15-minute schedules, but understands that there is a regulatory mandate that transmission providers support this form of service. A superior form of service would consist of dynamically transferring the VER to the attaining balancing authority thus relieving BPA of the burden of balancing that resource. The VER and its counterparty would contain such costs without any third party involvement.

But given the circumstances and the imminent implementation of 15-minute scheduling, NWCPUD has the following comments and suggestions:

- As proposed, transmission reservations should be hourly or longer. It would be a battle
 of diminishing returns to contemplate ATC management in smaller granularity.
 Discounted transmission is often available in the BPA secondary (resale) market so
 there is little point in slicing and dicing the primary market any further.
- MHFS should be implemented prior to 15-minute scheduling to ensure that spontaneous firm requests do not result in a raft of firm curtailments.
- BPA should post the number (count) and volume (kWh) of schedules conducted under Intra-hour (30-minute) and 15-minut scheduling to track whether this regulatory mandate is truly fulfilling its objective.
- Because 15-minute scheduling involves interchange under NERC standards, BPA must ensure that all systems are fully developed, integrated and tested to ensure system reliability and compliance with applicable standards.

Short-term ATC Methodology Automation (STAR)

NWCPUD believes that STAR will help BPA achieve its goals, as listed on page 5 of the presentation, and provide optimal economic utilization of its transmission assets within physical constraints. A significant amount of transmission service is provided using short-term firm transmission reservations for a variety of reasons given the seasonality of dispatch patterns in the region. Current methods for managing short-term reservations may push customers to the hourly service increment given the absence of AFC checks and certainty that requests will be accepted and confirmed. As stated in the comments on MHFS, this can have adverse impacts on customers that make longer commitments to reservations. Measures to improve efficient and reliable use of transmission capacity will benefit customers and mitigate impacts of other projects that BPA is implementing. With that, the main concern is that the timeline places

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implementation out into 2016. MHFS as an interim practice may need to be informed by early results from the STAR effort.

Other Suggestions

As you know, I have been a proponent of multi-parent redirects or other forms of redirects that all customers to commit reserved capacity in forward periods to meet their commercial objectives. This tool is no longer on the BPA list of commercial initiatives, so I will assume that it has fallen out of favor. As customers move away from hourly firm reservations (and the AFC free pass that goes with it), they will need to find ways to align transmission paths with commercial contract obligations. Use of non-firm transmission will expose many transactions to curtailment risk with potential for liquidated damages to the seller. While that may be a reasonable approach, it is not widely understood by risk management overseers.

Under current ATC/AFC methods, the customer must match one-for-one flowgate rights from the parent path to flowgate impacts on the desired child path to successfully request redirect service over constrained paths (AFC = 0). Yet flowgate capacity is often available on secondary markets (resales) and if a customer could purchase unused capacity and redirect multiple MW of parent reservations for the desired child reservation, BPA would still be able to manage the scare AFC and customers may be able to manage transmission positions that are firm and aligned with their commercial needs.

Cumulative Impacts

The objective of these projects should be to improve service to customers and allow BPA to better manage the finite capacity of its power system. Should actual utilization of the transmission system decline (on a capacity factor or other objective basis) for periods when reservations were refused, it may indicate a need for mid-course corrections aimed at greater efficiency. Nevertheless, it is important that BPA implements tools to manage system reservation and usage, without undue discrimination, that ensure reliability and security. The current sequencing proposal, with some modifications to the PCM implementation, appears to be a reasonable starting point for action.

I look forward to future discussions on these topics.

Sincerely,

Kurt J. Conger Director of Power Supply, Transmission and Regulatory Policy