

Exploration of Redirect Flexibility to Support Customer Requests to Modify Contract Commitments

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OATT Redirects (Section 22.2)

- Most NOS participants who are developing new generation projects made commitments to take transmission service in NOS without having a buyer or known sink for that generation.
- These participants need redirects to make the service useful for another project or to enable transfer of the reservation to another customer who would then use it.
- Redirect rights provide an extremely valuable flexibility for BPA's customers to support their evolving business needs.
- BPA's ability to grant redirects is fairly constrained.

Interest in Redirect for PTSA Reform

- A number of customers are interested in using redirects in the PTSA reform process
- Based on AFC, redirect ability is significantly constrained
- Therefore, discussions include
 - CF Redirects
 - Shrinking Redirects
 - Two-Parent Redirects

NAESB Redirect Info

- BPA “credits” capacity held by a confirmed reservation against that needed by the redirect request.
- Recently, the Executive Committee of NAESB’s Wholesale Electric Quadrant unanimously ratified draft business practices regarding the crediting of redirects.
- Those standards are in the process of being filed with FERC.

Example of Traditional ATC Redirect Analysis by BPA

- Customer A has a long-term firm reservation for 85 MW on path A that has the following flowgate impacts:
 - Flowgate X impact = 45 MW
 - Flowgate Y impact = 30 MW
 - Flowgate Z impact = 18 MW
- Customer A requests a redirect to path B. The redirect will have the following flowgate impacts:
 - Flowgate X impact = 32 MW
 - Flowgate Y impact = 12 MW
 - Flowgate Z impact = 18 MW
- Assume that, before the redirect request, both paths are constrained (with other requests already in the queue needing this capacity) and the remaining AFC on all three flowgates is 0 MW. BPA grants the redirect request because the net impact of the redirect, calculated by subtracting the impact of the redirect from the impact of the existing service, will either be 0 or an *increase* in AFC (see next slide for chart of this example)

Redirect Example (cont)

Flowgate	MW Impact of Current Service on Path A	MW Impact of Redirect Service on Path B	Additional MW of AFC Released Back to the Queue because of the Redirect
X	45	32	+13
Y	30	12	+18
Z	18	18	0

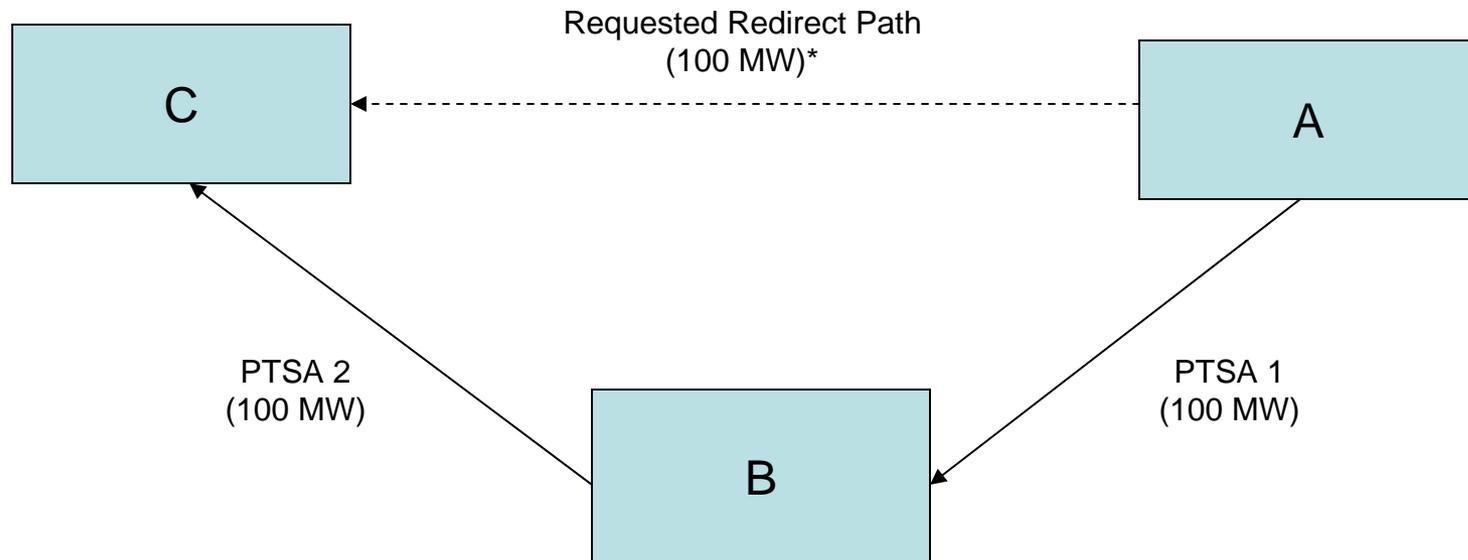
Two-Parent Redirects

- We've found that the flowgate capacity needed for some of these redirects is actually contained in pairs of transmission reservations that customers are seeking to terminate.
- Therefore, we are interested in determining whether there is flexibility to grant redirects based on crediting combinations of two transmission reservations.

PTSA Reform Redirect Proposal

- Pair two transmission reservations (neither of which holds sufficient capacity to enable the redirect on its own) to bring together enough capacity to enable the child redirect being sought. We call this concept “two-parent redirects.”
- BPA has determined that there are three customers that could benefit from such two-parent redirects.
- The resulting demand would be for a portion of the original two parents’ demand amounts (for example two 100 MW reservations could result in a single 100 MW reservation) and the other 100 MW would essentially be terminated (consistent with PTSA principle).
- Capacity unused by the redirect request would then be released back to the market.

Two-Parent Redirect Example



*Note: 100 MW of demand would terminate.

Two Parent Redirect Example

- Assume Flowgates X, Y, and Z are zero
- Customer has current Paths A and Path B
- Customer would like to Redirect to Path C
- Path A does not have sufficient capacity to Redirect to Path C without additional AFC
- Path B does not have sufficient capacity to Redirect to Path C without additional AFC
- Path A + Path B does have sufficient capacity to facilitate Redirect Path C

Two Parent Redirect Example

Flowgate	MW Impact of Current Path A	MW Impact of Current Path B	Total of Path A and Path B	MW Impact of Redirect Service on Path C	Additional MW of AFC Released because of the 2 Parent Redirect
X	15	17	32	32	0
Y	16	10	26	10	+16
Z	20	35	55	50	+5

Benefits of Two-Parent Redirect Proposal

- A customer obtains transmission to deliver power from generation to serve load.
- Two entities are able to transfer PTSAs which they would otherwise seek to terminate. Exit costs to these customers under the PTSA are minimized.
- Additional long-term transmission reservations are created to offset the impact on other ratepayers of potentially lost contract commitment.
- Some additional capacity becomes available to the market IF compared to requiring all existing contract commitments to remain in place.
- More reservations are held by customers that indicate that they will be using them (better optimization of long-term firm transmission capacity and slightly better clarity of system planning assumptions).
- Unique solution enabled by specific circumstances that provides a “win-win” approach for a broad set of impacted parties in a complex situation.

Potential Con of Two-Parent Redirect

- Less additional capacity becomes available to the market IF compared to terminating contract commitments.
- Other customers have transmission requests already in the queue needing capacity on the same flowgates that these redirects need. While the released capacity does not appear to enable an offer to these requests because they need capacity on other flowgates as well, these customers would be in a better position to receive transmission offers in the future if this capacity was released to them.