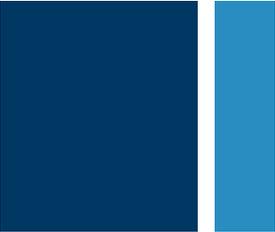


Options to Address Seams Issues on BPA's Southern Intertie

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Key Seams Issues Undermining Value of BPA LTF Service on the Southern Intertie

Issue 1 – BPA does not limit use of Firm reservations on the Southern Intertie during de-rates

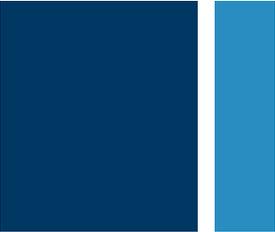
Affected schedules: all Southern Intertie schedules on Firm BPA transmission, whether adjacent TSP is CAISO or another OATT provider

Summary of seams issue: COI and PDCI are currently fully subscribed on a Firm basis in the North-to-South direction. When a path is de-rated – which occurs frequently, especially on the COI – existing BPA Firm reservations will exceed the scheduling limit for that path. Despite having obtained Firm service, not all schedules will be able to flow. This is no different than if BPA had sold more Firm service than the full rating of the path, and is contrary to the principle that Firm service is only “sold once.”

This seams issue undermines the value of BPA Firm service on the Southern Intertie, since the determination of which Firm schedules flow and which ones do not is made by the downstream transmission provider, and not by BPA:

- If the downstream transmission provider is CAISO, CAISO decides which BPA Firm schedules flow by granting market awards solely on the basis of price, and only up to the actual capability of the intertie (*i.e.*, reflecting the de-rated value, and not the full rating).
- If the downstream transmission provider operates under an OATT, the downstream TSP decides which BPA Firm schedules flow by issuing schedule curtailments based on priority on its system, and not based on priority on BPA’s system.

The congestion value of the Southern Intertie shifts to the downstream transmission provider, since service on that system—and not on BPA’s system—determines which BPA Firm schedules flow and which do not.



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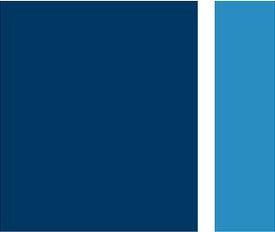
Issue 2 – On the Southern Intertie BPA does not ensure that BPA Non-Firm schedules are curtailed before BPA Firm schedules, and instead defers schedule curtailments to downstream transmission providers

Affected schedules: all Southern Intertie schedules on Firm BPA transmission where the adjacent TSP is another OATT provider

Summary of seams issue: OATT transmission providers generally sell transmission capability more than once, as both Firm and as Non-Firm service. Total schedules using OATT service for both the northern and southern segments may therefore exceed the scheduling limit of a path. When this occurs, schedule curtailments are necessary. Which schedules are curtailed and which ones are not depends on the curtailment priority of the transmission reservation, with Non-Firm schedules curtailed before any Firm schedules are curtailed.

But since the curtailment priority of service on the northern segment of the Southern Intertie may be different than the curtailment priority of service on the southern segment, whether or not a schedule is curtailed depends on which transmission provider issues the curtailments. On the PDCI North-to-South, for example, LADWP generally performs curtailments, and not BPA. This means that service priority on LADWP's southern segment determines curtailment order, while service priority on BPA's northern segment is not relevant to whether or not a schedule will be curtailed.

The congestion value of the Southern Intertie in this case shifts to the transmission provider issuing curtailments, since that is the service priority that determines whether or not a schedule will flow.



Key Seams Issues Undermining Value of BPA LTF Service on the Southern Intertie

Issue 3 – Obtaining a CAISO market award allows BPA Hourly Non-Firm to flow ahead of BPA Firm service on the Southern Intertie

Affected schedules: Firm BPA reservations on the Southern Intertie when selling into the CAISO markets

Summary of seams issue: CAISO awards sales based on the price offered by market participants, subject to transmission constraints. CAISO does not require bidders at its interties to secure transmission service on external systems prior to submitting an offer, nor does it require a day-ahead sale to be e-Tagged by the preschedule deadline. CAISO’s only requirement with respect to external transmission service is for market awards to be e-Tagged by the WECC scheduling deadline of T-20.

BPA Firm transmission priority is of little importance for deliveries on the Southern Intertie to the CAISO market; it is securing a CAISO market award that is critical. When CAISO accepts an intertie offer from a seller without Firm transmission service on the Southern Intertie, it means that an equal quantity of Firm service will be unable to be scheduled, and BPA currently releases this “unused” Firm capacity as Hourly Non-Firm service. BPA’s current practices therefore permit customers to flow to CAISO on the Southern Intertie using Hourly Non-Firm service ahead of customers with BPA Firm service. This renders BPA Firm priority on the Southern Intertie of little or no value for deliveries to CAISO, and inflates CAISO congestion charges.

The congestion value of the Southern Intertie in this scenario shifts to CAISO, since obtaining a CAISO market award – and not investing in BPA Firm transmission service – is what determines who flows on the Southern Intertie.

BPA Rate and Non-Rate Options Address Different Seams Issues on the Southern Intertie

| Option | Effect on Issue 1 <i>BPA does not limit use of Firm reservations during de-rates</i> | Effect on Issue 2 <i>BPA defers curtailments to adjacent OATT providers</i> | Effect on Issue 3 <i>HNF can flow ahead of Firm to sell to CAISO</i> |
|--|---|--|---|
| 11 <i>Status quo</i> | Ineffective | Ineffective | Ineffective |
| 17 BPA proactively limits Firm schedules during line de-rates | Highly Effective | n/a | n/a |
| 16 BPA ensures Non-Firm schedules are curtailed before Firm schedules | n/a | Highly Effective | n/a |
| 15 Do not sell HNF on the Southern Intertie | n/a | Highly Effective | Highly Effective |
| 17 Only release HNF if there is no secondary market for unused Firm transmission | n/a | Highly Effective | Highly Effective |
| 16 Do not continuously update the HNF inventory after the close of preschedule | n/a | Potentially Beneficial | Potentially Beneficial |
| 15 Sell HNF once (no re-sale of partially tagged HNF reservations) | n/a | Potentially Beneficial | Potentially Beneficial |
| 16 Change the time of the release of HNF | n/a | Potentially Beneficial | Potentially Beneficial |
| HNF rate design | | | |
| 12 - Based on historical use | | | |
| 12 - Based on "high value hours" | n/a | Highly Effective | Highly Effective |
| 13 - Based on cost of expansion | | | |
| 13 - Based on "market conditions" | | | |
| HNF rate design | | | |
| 13 - Based on bidding | n/a | Potentially Beneficial | Potentially Beneficial |
| 15 Implement duration competition for HNF on Southern Intertie | n/a | Potentially Beneficial | Potentially Beneficial |
| 18 Collaborative solution with CAISO to share congestion revenues | n/a | n/a | Highly Effective |
| 18 Collaborative solution with adjacent OATT TSPs to coordinate curtailment and scheduling practices | n/a | Highly Effective | n/a |

Numbers in first column refer to slide number in BPA's presentation at October 14 workshop