

backgrounder

Northwest AC Intertie/California-Oregon Intertie curtailment change

The Bonneville Power Administration and the California Independent System Operator (CAISO) have agreed to a change in the procedures for curtailing power on the Northwest AC Intertie/California-Oregon Intertie (COI) when power flows exceed operational transfer capability (OTC), the industry threshold for safe and reliable operation. AC Intertie/COI would be curtailed only after all other methods such as DC circulation and counter-scheduling had been attempted and flows still remained above OTC.

BPA has agreed with CAISO and the Sacramento Municipal Utility District (SMUD) that they are to initiate a curtailment on the AC Intertie when energy flows on the COI exceed OTC for flows from north to south. Formerly, BPA took all the in-hour and next-hour cuts when the cause of the curtailment was north of the California-Oregon Border (COB). BPA will continue to implement curtailments when energy flows on the COI exceed OTC for flows from south to north.

When curtailments are initiated by CAISO or SMUD, the pool of candidates for the curtailment will include CAISO and SMUD transmission schedules in addition to those schedules coming from the north. CAISO and SMUD will cut all north-to-south schedules pro rata. CAISO and SMUD do not distinguish transmission tagged north of the COB as firm and nonfirm for southbound flows; therefore, Intertie customers who schedule nonfirm and firm on COI on BPA's system may experience firm cuts before nonfirm (SMUD does first curtail transmission tagged as nonfirm south of COB). Overall, this procedure benefits BPA customers, because it spreads the cuts among all Northwest AC Intertie transmission providers and eliminates past issues of double cutting some schedules, where more megawatts are curtailed than are actually required to return flows to within OTC.



The change in the COI curtailment procedures was a consequence of SMUD's new status as an adjacent control area as of December 2005. The Western Electricity Coordinating Council requires that flows be brought into limits within 20 minutes of exceeding the OTC. The curtailment change is the result of all parties' efforts to maintain the reliability of the Northwest AC Intertie and the COI to assure flows are brought back to limits within 20 minutes.

New curtailment procedure for north to south operation

1. BPA and CAISO dispatch agree on the amount of curtailment via the phone (only have to agree with CAISO because it is the southern path operator for the COI).
2. BPA enters the amount of the curtailment which creates dynamic signals to CAISO and SMUD.



- The amount of the dynamic signal is based on the 2/3 – 1/3 split which follows the Owner's Coordinating Operation Agreement's approved allocation of curtailments between Pacific AC Intertie and the California Oregon Transmission Project respectively.
 - BPA, CAISO and SMUD will immediately change generation to follow the dynamic signals. BPA will reduce generation while CAISO and SMUD will increase generation.
3. The BPA generation dispatcher calls Transmission Business Line real-time scheduling to notify it of the amount of the curtailment and the reason for the curtailment. BPA scheduling does not take any action – it monitors tags.
 4. BPA generation dispatcher calls the Power Business Line real-time scheduling and notifies it of the amount of federal generation that is being ramped down. PBL scheduling may adjust generation patterns due to the ramp down of generation.
 5. SMUD and CAISO will curtail via e-tag the amount of schedules required by the dynamic signal reduction. This curtailment will include BPA customers and customers using shares of other owners of the Northwest AC Intertie Path (Portland General Electric, PacifiCorp, Seattle, Snohomish, Puget, Tacoma, and Power Resources Co-op) and non-federal participants as identified below.
 - SMUD will perform curtailments pro rata, first schedules with transmission tagged as nonfirm south of COB, then schedules with transmission tagged as firm south of COB.
 - CAISO will curtail market schedules pro rata. These are the NFU (New Firm Use) schedules. In parallel, they will curtail the ETC (Existing Transmission Contracts) according to their ETC instructions.
 6. BPA schedulers accept a curtailment notification received via e-tag curtailments and implement the

corresponding schedule reduction in the Real Time Operation Dispatch System.

7. Once the schedule curtailments are complete, BPA schedulers phone BPA generation dispatchers to ramp out the dynamic signal and implement any additional changes to the curtailed controller totals.

New curtailment procedure for south to north operation

1. BPA and CAISO dispatch agree on the amount of flow reduction (BPA has to agree only with CAISO because it is the southern path operator for the COI). This is done via a phone call.
2. BPA enters the amount of flow reduction that creates dynamic signals to CAISO and SMUD.
 - The amount of the dynamic signal is based on pro rata cuts of Northwest AC Intertie service from BPA with nonfirm before firm.
 - BPA, CAISO and SMUD will immediately change generation to follow the dynamic signals. BPA will increase generation, and CAISO and SMUD will decrease generation.
3. BPA generation dispatcher calls BPA real-time scheduling to notify it of the amount of the curtailment and reason for the curtailment. BPA scheduling will perform the curtailment (as it does today) pro rata nonfirm and if needed pro rata firm.
4. BPA generation dispatcher calls TBL real-time scheduling to notify it of the amount of the federal generation to be ramped up. PBL scheduling may adjust generation patterns due to the curtailment.

The new procedures are for in-hour and next-hour operations. These new procedures provide for an orderly and quick resolution to mitigate reliability risk. No changes have been made to future-hour curtailment procedures for the COI.

For more information call 1-800-622-4519.