A March 2007 fact sheet explained three approaches BPA is developing to resolve congestion on its transmission system – reliability redispatch, interim (or bridge) and hourly ATC methodology. The fact sheet also announced that the agency would run a pilot program to test the reliability redispatch methodology in summer 2007. The pilot program will take place from June 26 through Sept. 30, 2007.

The reliability redispatch pilot program

The goal is to reduce congestion without curtailing schedules by directing specific generators, based on voluntary bids, to adjust their output. BPA and participating generators within the BPA control area successfully tested the concept twice in December 2006.

The pilot program’s primary focus is on relieving congestion on four network flowgates (transmission paths) on the BPA grid – two on the I-5 corridor (Paul-Allston and South-of-Allston) and two in central Washington (North-of-Hanford and North-of-John Day).

BPA has developed a methodology and procedure that will calculate the required movement of generators to relieve flowgate congestion based on each generator’s flowgate impact and the cost of each bid. It will provide BPA dispatchers with a list of effective actions they can request generators (limited to five calls in total) to perform to implement the redispatch. BPA has provided training to bidders, dispatchers and schedulers from potential participants.

The program will archive information to calculate the financial settlement for any redispatch provided and for use when evaluating the performance of the pilot program. In the interest of collecting sufficient data to allow a meaningful evaluation of the pilot program, BPA will simulate up to three events during the summer if no actual operating transfer capability (OTC) events require use of the reliability redispatch methodology during the pilot program.

BPA has executed pilot program agreements with BPA’s Power Services, Eugene Water and Electric Board, PPM Energy, Calpine, TransAlta, Suez Energy North America and Snohomish PUD.

In the fall, BPA will hold a public meeting to present its evaluation of the pilot program and to gather information that will help shape future development. The ultimate goal is to develop a redispatch approach that could be expanded to include generation from the entire region.

Interim (or bridge) approach

Along with the pilot program for the reliability redispatch, BPA will implement the interim approach.

When BPA discovers that the operating transfer capability (OTC) of a flowgate has been or is about to be exceeded, BPA Transmission Services schedulers will refuse all new hourly reservations that will adversely affect the flowgate for the two hours after the exceedance or until the dispatcher is assured that the system is sufficiently stable.
Hourly ATC methodology approach

In the future, BPA wants to develop a way to extend its ability to forecast network flow levels in advance of the operating hour and, as a result, determine available transfer capability (ATC) and the impact of hourly sales on that ATC. With this information, BPA could refuse the specific nonfirm and hourly firm transmission schedules that would cause flows on the system to exceed the operating transfer capability of specific flowgates.

BPA will continue to work on methods and models that correlate schedule information with actual flows, but this is a very complex project and much remains to be done. BPA will present a status report on its work on this approach at the fall 2007 public meeting on the pilot program.