Proposals to address congestion

For several months, BPA and the region’s utilities have been discussing approaches to addressing growing congestion on the Northwest transmission system.

In April, BPA published a white paper, Challenge for the Northwest, which provided context, definition and history of the problem and, in a very conceptual form, outlined some possible approaches for the region to look at and discuss. The paper also invited other proposals.

Following that, BPA participated with the region in workgroups to come up with potential solutions. Also, a Congestion Management Steering Committee was set up and, with extensive workgroup input, has come up with recommended tools.

On Sept. 7, BPA is hosting a public workshop (8:30 a.m. to noon, BPA HQ Rates Hearing Room) to provide an overview of the proposed approaches to dealing with congestion, followed by an opportunity for questions and comment. A public comment period will follow.

At the conclusion of this process, BPA will make a policy decision about the direction it will take. The decision will be published as a “final chapter” to the white paper.

The following recommendations are designed for implementation in 2007. Other tools that would require longer-term implementation also are under consideration.

Limiting nonfirm schedules

While BPA has limited firm transmission sales, historically it has sold as much internal network nonfirm as requested and worked around sporadic congestion problems. But now that the system is increasingly stretched, this is not a sustainable solution.

In the past, BPA has not been able to determine how much available transfer capability (ATC) is being used on the network and thus how much remains available to market. New OATI software should help automate short-term ATC, and, by using the deeming approach to model the system, BPA will be able to develop a flow-based ATC. The key is knowing how much ATC is available and stopping nonfirm when the limit is hit. This will involve calculating ATC every hour.

In terms of reliability, limiting internal network nonfirm schedules proactively reduces the potential for congestion and limits the system’s exposure to...
operating transfer capability (OTC) exceedences. The reliability improvements gained under this approach appear cost effective when compared to commercial market impacts.

Implementing this option will depend on customers providing accurate scheduling data and will require testing to determine the level of accuracy. While the initial model should be in place by the summer of 2007, a refinement of the process and data could be needed based on the performance model. Changes would be phased in and could require some changes in scheduling practices.

**Within-hour reliability redispatch**

Redispatch is aimed at reducing flows on congested paths without negative effects on other paths. If a path goes over OTC, instead of going to a curtailment calculator and cutting schedules, BPA would first try to redispatch federal and nonfederal generation based on voluntary bids. Such redispatch may prevent application of curtailment calculators or emergency dispatcher actions.

In terms of reliability, this would be a reactive operation. Within-hour redispatch of federal and nonfederal generators would be used to reduce flows on cutplanes that are congested. Redispatch should be effective within 10 minutes. There would be no distinction between firm and nonfirm schedules for redispatch purposes because schedules would not be affected.

Price would be determined by the generation owner, and BPA must decide if the cost and availability of redispatch would meet the within-hour criteria. If they don’t, the fallback is curtailment. Contracts would be needed between BPA and participating generators.

This would be a pilot program applying to four cutplanes in the I-5 corridor – South of Allston, Paul-Allston, North of John Day and North of Hanford. Generation would be increased or decreased to alleviate north to south constraints. If the approach proves valid, it can be broadened. BPA also is exploring load control as an additional option for reducing flows.

**Interim approach**

This approach could apply until the option to limit nonfirm schedules is tested and solidified. In the event of an OTC exceedence, BPA would stop scheduling nonfirm on the affected path for the following hour. This would be applied to the four paths listed in the preceding paragraph.

**How to Comment**

Comments, including those on impacts of any of these tools on customers’ business systems, will be accepted through Sept. 15, 2006. You can provide comments at the public meeting on Sept. 7, 2006. Written comments can be sent to: Bonneville Power Administration, Public Affairs Office - DKC-7, P.O. Box 14428, Portland, OR, 97293-4428. Send an e-mail to comment@bpa.gov, and submit your comments on-line at: www.bpa.gov/comment, or fax them to (503) 230-3285. You can also call us with your comment, toll free at (800) 622-4519. Please note all comments will be posted in their entirety on BPA’s external Web.