

Post-Workshop Comments of PacifiCorp on Regional Solutions to Congestion Management

PacifiCorp appreciates the opportunity to provide Bonneville Power Administration with the following comments on the April 2006 paper titled “Challenge for the Northwest: Protecting and managing an increasingly congested transmission system” (the “White Paper”) PacifiCorp agrees with Bonneville Power Administration that congestion management is a regional problem and that development of solutions must be based upon regional consensus. PacifiCorp also approves of the process selected to develop solutions, namely creation of a small technical development team under guidance of the Regional Policy Committee to explore near term and mid term solutions to regional congestion management. PacifiCorp looks forward to working with Bonneville Power Administration and other stakeholders to craft regional solutions to the problems identified in the White Paper.

Bonneville Power Administration has asked customers to identify potential near term and mid-term solutions to the congestion management issues identified in the White Paper, but has provided only limited information concerning the root causes of the problem. Later in these comments, PacifiCorp will offer some ideas for potential solutions. In order for stakeholders in the region to have a better understanding of the magnitude of the problem, however, Bonneville Power Administration must provide additional data concerning the excursions above operational transfer capability described in Appendix A to the White Paper. For each of the incidents identified in Appendix A, Bonneville Power Administration should quantify the non-firm schedules (in number of discrete schedules and in total megawatts) and the extent to which firm schedules needed to be curtailed. If only non-firm schedules were subject to curtailment, there may be no need for any near term solution more drastic than cutting non-firm schedules¹.

On the other hand, PacifiCorp also recognizes that at some point there will be an event which will require Bonneville Power Administration to curtail firm schedules. PacifiCorp also recognizes that Bonneville Power Administration should have adequate tools in place to manage congestion of any magnitude.

Principles for addressing congestion solutions

In the White Paper, Bonneville Power Administration proposes principles to guide the search for solutions to congestion management problems. These principles are 1) keeping the system safe (operating the system reliably at the least cost to consumers); 2) complying with tariffs National Electric Reliability Council and Western Electric

¹ If only non-firm schedules were curtailed in any of these examples, Bonneville Power Administration should consider whether the other dispatcher actions (bypassing series capacitors, requesting phase shifter operation and generation redispatch) were cost-effective responses to addressing the incidents listed in Exhibit A.

Coordinating Council requirements; and 3) ensuring a commercially adequate transmission system at least cost to consumers. PacifiCorp agrees that these principles will be important in guiding the regional discussion towards solutions to the congestion management problems. PacifiCorp, however, believes that there are additional principles which are equally important to those listed above.

The fundamental principle in designing a solution should be: “Load will be served.” Bonneville Power Administration and its customers exist for the primary purpose of serving their customers demands for safe and reliable energy. Continuing to serve those customers should be the primary guiding principle in developing solutions to congestion management.

The principles should also define “least cost to consumers.” Any economic analysis of potential solutions should consider the cost to all of Bonneville Power Administration’s transmission customers not only the costs borne by Bonneville Power Administration. The principles should also be straightforward in identifying which consumers are being considered in determining whether a solution is “least cost”. The region must come to terms with which customers are going to be considered in determining the “least cost to consumers.” The solution with the “least cost to consumers” will likely be different depending upon which classes of customers are protected.

Another principle which should be considered in forming a solution is avoiding unfair cost shifts between customer classes. Those classes of customers receiving the benefit of a congestion management solution should also bear the cost. Clearly, there are costs associated with providing a safe and reliable transmission system. It is only fair that the customers who benefit from the system’s increased safety and reliability should bear those costs. On the other hand, a solution which provides benefits to one group of customers, but imposes the costs of those benefits disproportionately onto a different group of customers will not be acceptable to stakeholders in the region.

When listing its principles for addressing congestion, Bonneville Power Administration notes that it would consider seeking modifications to its tariffs or the reliability standards and criteria “in circumstances where it appears consistency significantly compromises reliability or least cost.” PacifiCorp believes that changes to Bonneville Power Administration’s tariffs or the reliability criteria should be considered only as a last resort, and then only if the proposed changes would be consistent with the tariffs and reliability standards and criteria applicable to the other transmission providers throughout the Western Electric Coordinating Council. A regional solution can not be achieved if the Bonneville Power Administration continues to attempt to address congestion management by unilaterally imposing new business practices upon its customers, especially when the new business practices are not consistent with those of other Balancing Authorities in the region. When parallel and loop flows on the regional transmission system contribute to congestion on Bonneville Power Administration’s internal flowgates, the Bonneville Power Administration can not solve the problem on its own, but requires the cooperation of other transmission providers in the region. Bonneville Power Administration’s existing flow based methodology for establishing

available transmission capacity over its internal flowgates ignores the problems associated with loop flow over its system.

Potential criteria for testing solutions

In the White Paper, Bonneville Power Administration suggests potential design criteria for testing proposed solutions. PacifiCorp believes the list of criteria used to evaluate solutions should be expanded to include:

- Solutions must ensure that loads in the Northwest will continue to be served.
- Solutions must be regional in scope – any solutions must be applied to all Balancing Authorities in the region and address any parallel or loop flow issues.
- Solutions should conform to prevailing practices in the region to avoid creating additional seams between Bonneville Power Administration and other Balancing Authorities.
- Solutions should be no more complicated or expensive than necessary to achieve the desired result.

In addition to expanding the list of criteria used to test potential solutions, Bonneville Power Administration and other stakeholders should prioritize or rank the importance of each criterion. Some of the items in the list of criteria will be more critical than others. Potential solutions should not be adopted unless they satisfy the most important of the criteria.

Solutions

PacifiCorp believes that the solutions identified in “Approach 1: Curtailment with enhancements,” while perhaps necessary in the short term do not represent optimal mid or long term solutions. The disadvantages Bonneville Power Administration lists for this approach include:

- Forcing Bonneville Power Administration and its customers to operate at a higher state of readiness;
- Failing to provide tools to relieve congestion when it does occur; and
- Failing to place a higher value on firm over non-firm access to the transmission system as required by tariff.

Balanced against the sole advantage of allowing Bonneville Power Administration to continue to accept all non-firm schedules, the disadvantages of “Approach 1” effectively preclude further discussion or consideration.

PacifiCorp agrees that Bonneville Power Administration needs additional tools and methods to manage congestion on its internal paths. PacifiCorp also approves of Bonneville Power Administration's efforts to create a regional dialog on congestion management and to solicit customer involvement in developing short and mid term solutions to manage congestion. PacifiCorp believes that a small technical development team should be formed under guidance of the Regional Policy Committee to explore near term and mid term solutions to regional congestion management. PacifiCorp would like to be included in any working or technical groups formed to identify and develop solutions to congestion management. PacifiCorp offers the following suggestions of near and mid term solutions for consideration by Bonneville Power Administration and its other customers.

Near Term Solutions

Curtailment Calculators

PacifiCorp agrees that the curtailment calculators for the Paul-Allston and South of Paul flow gates are a good interim step towards relieving congestion on those paths. PacifiCorp, however, believes that the calculators should be modified to curtail customers' use of those paths based upon customers' firm reservation rights, not based upon the actual schedules at the time. Bonneville Power Administration's practice in allocating curtailments has been to curtail firm schedules on a pro rata basis against customers' current schedules on a path without regard for whether customers have fully scheduled against their firm rights. In order to conform to the practice of other transportation providers in the region, Bonneville Power Administration should change its practice to allocate curtailments based on the transmission customers' reserved rights. Transmission customers who have not fully scheduled against their firm rights have already reduced the congestion on a constrained path by limiting their schedule. Those customers should not be further penalized by having their schedules cut pro rata with other customers who have fully scheduled against their firm rights. Instead, Bonneville Power Administration should curtail schedules pro rata on the basis of the customers' firm reservation. In this way, the customer whose schedule is causing the greatest impact will be affected the most.

Bonneville Power Administration should also include the Bonneville Power Administration Power Business Line resources and loads in the curtailment calculator. Failure to include the Power Business Line loads and resources in the curtailment calculator would violate the non-discrimination principle of Bonneville Power Administration's Open Access Transmission Tariff.

Other Near Term Solutions

PacifiCorp looks forward to working with Bonneville Power Administration and other stakeholders to identify other Near Term solutions to congestion management. Among options the working group should consider as Near Term solutions are the following:

- Limit sales of non-firm transmission over flowgates which may be subject to congestion due to equipment outages or other de-rates.
- Explore generator redispatch agreements for the purpose of relieving congestion. Bonneville Power Administration should identify generation facilities that can be called upon to mitigate congestion on particular flowgates. Once the critical generators are identified, Bonneville Power Administration should attempt to negotiate agreements for the redispatch of those generators when its flowgates are congested. If a potential contract represents a least cost solution to congestion, then the associated costs should be imposed on the customers who derive the benefit.

In addition, as stakeholders in the region work with Bonneville Power Administration to develop better congestion management tools, Bonneville Power Administration needs to improve its communication with other market participants in real time. For example, Bonneville Power Administration could provide market participants with real time information on the physical loading on the Paul-Allston and South of Allston flowgates. This information would not only enable customers to see for themselves problems developing on Bonneville Power Administration's system, but would also allow customers to approach Bonneville Power Administration with opportunities for redispatch or other measures that would help relieve impending congestion.

Mid Term Solutions

PacifiCorp agrees that interim solutions to address congestion management problems in the short term may not be the most effective or cost efficient over the medium to long term. Accordingly, PacifiCorp looks forward to working with Bonneville Power Administration and other customers to develop more permanent solutions.

Among the longer term solutions that should be considered are:

- Bonneville Power Administration should take advantage of the Western Electric Coordinating Council path rating process to define and publish the total transfer capability and operational transfer capability limits on internal flowgates.
- Bonneville Power Administration should request that internal flowgates be included in the Western Electric Coordinating Council loop flow mitigation plans in order to permit customers to view the physical loading of the paths on "WebSAS" so that customers might be able to offer Bonneville Power Administration proactive measures in reducing operational transfer capability during times of constraint.

PacifiCorp also anticipates that discussions within the working group will lead to additional potential solutions.

Conclusion

PacifiCorp agrees with Bonneville Power Administration that existing operational tools are inadequate. A regional solution that solves the congestion management problems facing Bonneville Power Administration can not be achieved if Bonneville Power Administration continues to unilaterally impose new business practices and procedures upon its customers. The process that Bonneville Power Administration has initiated – a regional dialog among all interested parties – offers the best opportunities to develop solutions that will satisfy the region’s competing interests fairly and equitably. PacifiCorp believes a small technical development team should be formed under guidance of the Regional Policy Committee to explore near term and mid term solutions to regional congestion management. PacifiCorp looks forward to working with Bonneville Power Administration and other stakeholders to identify, review, refine and, eventually, implement solutions to the region’s congestion problems.