Operations, Scheduling, and Reliability Seams Issues List

Seams Issues Buckets: Six Buckets were defined for the purpose of categorizing Seams Issues: within the buckets, some issues were defined as either internal issues within the RTO boundaries or external seams issues that crossed between RTOs. The buckets are defined as follows:

0) We don't know and need guidance
1) Not an RTO issue (thanks, but no thanks)
2) Needs to be solved, but not seams. Goes to another work group.
3) Not seams but hand off to existing organization, not the RTO
4) Not seams but hand off to new organization
5) The RTO must solve it once it is established
6) It is ours to solve. Come up with a solution, or a process to solve it.

0) We don't know and need guidance bucket.

- Identify Roles and Responsibility for Reliability among the RTOs, the TOs, RTO customers, and generation suppliers. The question is, who is responsible for reliability? Will the RTO be the backstop? How will the RTO manage their responsibility? Will others also have responsibility?

1) Not an RTO issue (thanks but no thanks).

- Coordinate operational planning to address regional power supply adequacy caused by extreme summer heat or Arctic Express conditions. Is this clearly a market function?

2) Needs to be solved, but not a Seams Issue. Goes to another work group.

- Implementation/Legal: Common treatment of generation resources connected to the RTO grid and RTO control area. This implies a standard contract with suppliers of generation services including but not limited to generation dispatch on either side of the seam boundary.

- Implementation Work Group. Computer program protocols & computer systems

3) Not a seams work group issue, but hand off to existing organization- Not RTO.

- Clarify roles and responsibility between the RTO and NERC/NAERO and WSCC/WIO. A recommendation will be made by WICF.

- Compliance Issues:

1) Use common methods and capacity numbers at the borders between RTOs External Seams Issue

2) Coordinate Market closing times and scheduling timelines and protocols. Coordinate Ramping of schedules (e.g.: hourly schedule changes start at 00:50 and continue to 00:10, unless otherwise coordinated)

3) Common mechanisms to share information on line flows, voltages, scheduling and tagging for tracking schedules and flow across interconnections. (Data/Criteria - System data gathering for Control center information & telemetry)

4) Common reliability standards (NERC WSCC, NWPP,etc)

5) Adopt common methodology for rating facilities.

4) Not seams issue but hand off to new organization

- Coordinated planning to maintain capacity at the interconnection i.e., Regional OTC studies and Agreement on Mitigation policies. This issue could be taken up by WIO.

5) The RTO must solve once it is established

6) It is a seams work group issue to solve. Come up with a solution or a process to solve it.

- Internal Seams issue: The RTO should decide whether to post a single path vs. posting multiple owner capacity within a path. The RTO must solve this or rely on guidance from the Path Allocation Task Force.

- Market Interface between RTOs: Communication procedures for dispatch of reserve service power products i.e., On Demand Obligation Energy and 10-minute Dispatch of supplemental energy. This topic could be expanded to include other types of ancillary service products that are dispatched across the seams, i.e. boundaries between control areas and RTOs to ensure the ability to transact business across the seams. The WMIC could provide some guidance in this area, but the RTOs should also address this issue in the tariffs.
- Coordinate Operating and Curtailment procedures at the seams. For a nomogram involving more than one transmission path and more than one

RTO, a good model to consider would be the PATF Curtailment procedure. For paths that are operated in series, such as the PACI facilities north of COB and PACI facilities, south of COB, decisions need to be made on curtailment protocols so that market impacts can be minimized. Currently, cuts are made based on market economics and capacity shares north of COB. This can result in double cutting for a contingency.

- Coordinate planned outages that impact transfer capacity at the seams. This is both an internal seams issue between RTO and non-RTO members in the Northwest and an external seams issue between RTOs.

- Common Dispatch and Scheduling Communication procedures for emergency or N-1 conditions., i.e., procedures for meeting Reliability criteria like OTC.. Unloading transmission facilities within 10 minutes requires close coordination between RTOs.

- Meaningful and effective Interconnection Agreements between the RTO and the TOs and between the RTO and other interconnected parties.

- Devising equitable ways to deal with parallel flow among internal RTO members or between internal RTO and non-RTO members who share capacity within a single path. The RTO should look at options such as flow-based solutions as an alternative to contract path methods. An internal seams issue.

- WSCC Unscheduled Flow Mitigation Procedures – The RTO should review with the intent to modify to improve financial equity among path users. External seams issue. The RTO may need to work with existing organizations to effect changes.

- Market mechanism employed to handle congestion at the seams with the intent to mesh various congestion models. This issue needs more definition by the congestion management seams group. Need to follow the procedures, follow the money, i. e., who pays, and who benefits from congestion management procedures. This could be a rate and tariff design issue that needs to be handled by the Reciprocity group.

- Regional RAS and reliability safety nets. Remedial action schemes will cross RTO boundaries. Should agreements be in place to capture existing and future participation in RAS and/or safety nets. Possible Implementation Team issue.

6/5/00