DRAFT

Scheduled Outage Coordination[1]

September 19, 2006

General Goal:

ColumbiaGrid will participate in the existing NWPP Coordination of Scheduled Outages Procedure to assist the Functional Agreement Parties in complying with Balance Authority and Transmission Operator requirements to coordinate outages in a manner that maintains system reliability, reduces the hours of operation under constrained conditions, facilitates an open, transparent and responsive decision-making process, and in other ways contributes to optimal use of the transmission system.

Observations:

1. The existing NWPP Coordination of Scheduled Outages Procedure (the Procedure) has worked well for the region. It has provided a consistent approach to the mutual sharing of scheduled outage information between operating entities. This sharing of information allows reliability entities to model the combined effect of these various outages and make informed decisions on the operation of the region. Though it has served the region well, improvements can be made to the Procedure. In addition, the participation of an independent entity such as ColumbiaGrid can increase the credibility of the Procedure for all.
2. BPAT has been the major contributor to the Procedure – from leading the effort to establish the Procedure within the NWPP to playing the lead role in the NWPP Coordinated Outage Group Subcommittee (COGS). In addition, the BPAT technical staff performs much of study work necessary to determine the system impacts of the proposed outages. BPA performs this role, not only for outages within its own system but also, in whole or in part, for many of the smaller transmission operators that have interconnected facilities with BPAT.
3. BPAT's involvement in the Procedure has been necessitated due to the Procedure's impacts to BPAT facilities by many of the significant outages in the region. Within the Procedure, BPAT is identified with almost all significant facilities as either the owner/operator or as an entity to be notified.
4. Recognizing the regional nature of the Procedure, BPAT, as a major transmission operator within ColumbiaGrid, has expressed a commitment to identify and turn over to ColumbiaGrid a significant portion of its responsibilities relating to the Procedure.
5. Many transmission operators expect the number of transmission outages to increase over the next 2 years as transmission owners catch up on maintenance backlogs.

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[1] Does ColumbiaGrid have ultimate decision-making authority – or will it just coordinate and make recommendations?

6. Because it will be a neutral, third-party organization, ColumbiaGrid is well positioned to facilitate information exchange among the Functional Agreement Parties within the Procedure while keeping market sensitive information confidential.
7. The WSM database that is included in the ColumbiaGrid "Visibility" initiative should benefit from ColumbiaGrid's role in the Procedure.
8. The current Procedure does not incent the transmission owner/operator to adjust a scheduled outage(s) when a transmission customer(s) is impacted.
9. When the Procedure was developed, there were no requirements for the PNSC to actively participate prior to real-time. Recent NERC Reliability Standards require the Reliability Coordinators (such as the PNSC) to be aware of and to study the reliability impacts of proposed outages. These requirements, and other efforts such as the WECC's Reliability Coordination Initiative, will impact the Procedure and will need to be considered in any changes to the Procedure.
10. Any improvements or redesign effort should encourage participation in the Procedure.

Perceived Enhancements:

1. Ensure that all scheduled outages in the region are entered into the NWPP COS system within the timeline prescribed by the Procedure.
2. Include generation outages in the Procedure to provide a more accurate assessment of the system. In addition, this will create the opportunity to minimize resource impacts by reducing duplicate outages to critical facilities (for example, transmission facilities connected to generation projects could be maintained at the same time as planned unit outages).
3. Minimize phone calls and e-mails between entities by having ColumbiaGrid play a central role in coordinating outages.
4. Investigate the use of an automatic processing tool such as CROW.
5. Enhance the Procedure to promote more interaction between transmission owners, operators, and customers.
6. Establish more refined criteria for making outage scheduling decisions, particularly with respect to decisions made to resolve scheduling conflicts and the consideration given to the financial impacts to both transmission operator and transmission customer. Investigate the modification of existing tools or procurement of additional tools to address this issue.
7. Provide a more open and transparent Procedure while keeping market sensitive information confidential.
8. Provide a more active and robust scheduled outage planning Procedure that will accommodate time frames beyond today's 45 days Procedure.
9. Refine the Procedure to provide a ranking system for high risk, high cost infrastructure or maintenance projects to minimize costly cancellations.

Suggested Role for ColumbiaGrid in Scheduled Outage Coordination:

First Tasks[2]:

1. Participate in the Procedure on behalf of the Functional Agreement Parties
   1.1. Attend appropriate meetings
   1.2. Where appropriate, assume the role of Path Coordinator as defined within the Procedure
   1.3. Pull out COS information prior to 45-day process; analyze potential impacts on Functional Agreement Parties; coordinate
   1.4. Specific to the Procedure:
   - In cooperation with Path Operators (TOs, and TOPs), produce and maintain the List of Proposed Outages, with estimated OTC limits (see Procedure A.3).
   - Produce the draft outage plan (see Procedure A.4.[illegible]).
   - Ensure that available market, generation, and load information is incorporated.
   - Distribute the plan to the Path [illegible]rators[b2]
   - By way of scheduled meetings, announced conference calls, other means, facilitate review and possible adjustment of the outage draft plan by Path Owners.
   - ColumbiaGrid should ensure that all viewpoints, including transmission customers', are presented and considered in decision-making Procedure (Procedure A.4.b and A.4.c).
   - Work with Path Operators to create and distribute a final outage plan (Procedure A.5).

   1.5. Changes to the final outage plan 30 days prior to the Outage Month:
   - For the Parties, continue to enter all proposed or modified outage information in the NWPP COS (Requirement B.2)
   - Continue to receive outage requests from Transmission Operators (Procedure B.1)
   - Work with Path Operators and transmission owners to determine if a proposed change to the final outage plan will impact path capabilities (Procedure B.2 and B.3).

     [illegible]e path capability is unchanged or increased (Procedure B.3.a),planned outage should be approved. Ensure Path Operators are notified.

     If path capability is decreased (Procedure B.3.b), ensure that all path owners, transmission operators are notified

     [b3]Planned outages are subject to several possible changes through the Procedure (unexpected equipment failure, Fires. Crew shortages, Ect. CG can facilitate the sharing of information with their outage coordination tool.
   - Receive comments and facilitate discussion as required. Document Procedure used and considerations made in determining whether the outage should

[2] Stages can be concurrent.

proceed. *Decision needs to be based on specific criteria and instruction. Need more input on this.*

- If the outage is acceptable ensure transmission operators and path owners are notified.
- Work to gather outage information of Significant Generation Facilities (Procedure B.3.[illegible]).

2. Facilitate the Coordination of Scheduled Outages among the Parties prior to the NWPP 45 Day Outage Procedure.
    - Continual [illegible]ning[b5] Procedure *[intent is to "beef up" current annual planning Procedure; need more specific suggestions]*
    - Assist and, to the extent practical, assume current BPAT responsibilities for analyzing proposed outages for system reliability impacts.
    - Inventory and develop a catalogue of outages for footprint of participating entities *(is this where purchase/implementation of CROWS might fit)*
    - Help path operators' communicate the impacts of proposed outages with specific emphasis on the following:
        - Improve responsiveness, transparency, and interactive nature of the Procedure
        - Work to make ColumbiaGrid the main point of contact for transmission customers affected by proposed outages. Help transmission customers provide input concerning proposed transmission outages.
        - Develop and help implement a procedure to give timely and informative explanation to transmission customers as to why decisions were made.

Second Tasks[3]:

1. [Parties (including BPAT) and ColumbiaGrid, in consultation with the NWPP members and staff, shall develop transition plan that describes how ColumbiaGrid will assume all coordination responsibilities regarding scheduled outages within the footprint of the Parties. Plan to include:

    - Scope of ColumbiaGrid's authority and activities
    - How ColumbiaGrid will assume the study work associated with analyzing the impacts of proposed outages.
    - Division of responsibilities among ColumbiaGrid and the Parties regarding interface with the NWPP's Coordination of Scheduled Outage Procedure
    - How ColumbiaGrid will coordinate planned outages among the Functional Agreement Parties.
    - Schedule
    - What, who, when and how
    - Parallel operations?

[3] Stages can be concurrent.

- *What else needs to go here? We will probably need to develop a skeleton plan [what do we want to accomplish as part of ColumbiaGrid doing more – do a timeline (start out relying on staff, put together plan for assuming more central role (including studies), and further migration] just to budget ColumbiaGrid*

2. Determine the degree to which ColumbiaGrid assumes the central role of coordinating regional scheduled outages for the Parties as described by the plan *[activity before entering into NWPP CO - could be role of analyzing the data and making sure that gets input back into the process]*

3. ColumbiaGrid will do all of the underlying studies (need to develop transition plan)

3. ColumbiaGrid should establish more refined criteria for making outage scheduling decisions, particularly with respect to decisions made to resolve scheduling conflicts and the consideration given to the financial impacts to both transmission operator and transmission customer.