



July 27, 2006
ColumbiaGrid Forum

Current Status of
Reliability Functional
Agreement



Deliverable

- Single Reliability Functional Agreement
- Offered for signature by December 15, 2006
- Detailed outline of contents by September 8, 2006



Scope

- Consolidation of NERC Functional Model Roles/Tasks
 - ColumbiaGrid will not assume operational responsibilities until such time as another path operator participates through Functional Agreement or Membership
- Reliability Redispatch
- Visibility



Consolidation of NERC Functional Model Roles/Tasks

- **Near-term Services**
 - Outage Coordination
 - Feasibility/Design Services
 - Analyze and prepare detailed recommendation regarding ColumbiaGrid acting as a Transmission Operator/Balancing Authority
 - Some sideboards
 - Broad direction
 - Iterative process
 - Check-in points
 - Product – sufficient information for participants to determine whether and how to move forward with consolidation
 - Early stage work to provide foundation for design work
 - Independent assessment of benefits of consolidation
 - Inventory of ColumbiaGrid tools supporting other functions



Reliability Redispatch

- ColumbiaGrid leads effort to develop and implement regional redispatch for reliability
 - Initiator
 - Actual or imminent threat of OTC violation
 - Priorities
 - Within hour
 - Hour ahead
 - Will require development of visibility tools



Reliability Redispatch

- Steps
 - Summer 2006
 - Active role in BPA Pilot Project, for example:
 - » Facilitate development of resource stack; conduct ex post evaluations
 - Post-Summer 2006
 - Move forward on evaluation, design, test, and (to extent agreed to by Parties with input of stakeholders) implementation of regional reliability redispatch mechanism
 - Possibilities include:
 - » ColumbiaGrid develops its own pilot project for regional redispatch working from the BPA pilot project (e.g., extend the number of cutplanes)
 - » ColumbiaGrid implements a limited protocol (e.g., limited number of cutplanes, responsibilities split between path operator and ColumbiaGrid)
 - » ColumbiaGrid implements a more comprehensive system redispatch protocol (e.g., entire system, ColumbiaGrid assumes more responsibilities)



Flow-Based Visibility

- Information about what is happening on the ColumbiaGrid system and why, both in real-time and on a predictive basis
- Development of regional database and appropriate analytical tools
 - Being independent of market interests and with appropriate protections for confidential or sensitive information, ColumbiaGrid in good position to
- ColumbiaGrid's Analysis would have application for a number of ColumbiaGrid functions (reliability, commercial, planning and expansion)



Flow-Based Visibility

- Real-time
 - Without duplicating existing efforts (WECC/PNSC), assist Parties in supporting those efforts, identifying any gaps, and making recommendations on how those gaps might be filled, including what role ColumbiaGrid might have
 - For example, re current WECC initiative, could ColumbiaGrid provide service for individual TOs with respect to historic data collection?



Visibility – Day-Ahead and Hour-Ahead

- Day-ahead and hour-ahead look
 - Objective – develop predictable ranges of forecasted generation data and forecasted load data
 - ColumbiaGrid will evaluate and develop recommendation in open stakeholder process
 - Identify what data is needed
 - Load
 - Generation
 - Transmission
 - Identify what parties have obligation to provide data (not necessarily from schedules)
 - Identify what analytical tool(s)/model(s) should be used



Visibility – Day-Ahead and Hour-Ahead

- Detail ColumbiaGrid's role in collecting, compiling, and analyzing information
 - Detail distribution of modeling results taking into account confidentiality concerns
- Agreement should acknowledge that TOs' business practices might need to be modified