Wind Integration Study Identifies Challenges, Solutions to Adding More Wind Energy to Regional Electric Grid

The recently released SPP WITF Wind Integration Study, conducted by Charles River Associates, found that enhanced electricity reserves and major transmission reinforcements are needed to integrate higher levels of wind generation into the SPP transmission system and energy markets. If the needed transmission upgrades were completed, there would be no significant technical barriers or reliability impacts to integrating wind energy levels up to 20%. Currently, approximately 4% of the region's electricity is generated by wind. To accommodate increased west-to-east flows while meeting SPP's electric reliability standards: For the 10% case, new transmission lines totaling 1,260 miles of 345 kV and 40 miles of 230 kV lines are needed. For the 20% case, an additional 485 miles of 765 kV, 766 miles of 345 kV, 205 miles of 230 kV, and 25 miles of 115 kV lines are needed. Read the full news release or download the study.

January 2010 Meetings

**Board of Directors-Members Committee:** The Board of Directors/Members Committee meeting included a few action items, but primarily focused on efforts related to transmission expansion and cost allocation. The rosters for all SPP organizational groups were approved, as is done annually. Nick Brown provided a summary of activities in 2009, as well as 2010 corporate goals.

**Economic Studies Working Group:** In January the ESWG completed its work on the ITP 20-Year Assessment Scope and endorsed it. The group then turned its focus to modifying the futures document that will be utilized during this year’s ITP study. For Priority Projects, the ESWG provided guidance on a number of aspects of the study including wind placement and additional benefit metrics. The group was provided information about KEMA’s analysis to determine new benefits of EHV transmission expansion.

**Human Resources Committee:** The HRC received a report from SPP management detailing SPP’s corporate performance in three quantitative areas; i) cost control, ii) stakeholder satisfaction, and iii) operational performance. Additionally, SPP management provided a qualitative analysis of the 2009 fiscal year highlighting areas of success and low performance. The HRC debated the management report and determined a recommended funding level for the SPP Performance Compensation Plan for 2009.

**Market and Operations Policy Committee:** The MOPC meeting was preceded by an educational workshop on the Mid-Level Design of planned Future Markets. Significant actions during the MOPC meeting dealt with needed transmission service screening study Tariff language; a review of the Wind Integration Task Force Study, which generated several new efforts; review and endorsement of actions from the 2009 STEP report; a number of market protocol changes; and the first Business Practice Revision. Also, the MOPC passed a motion to continue to pair Aggregate Studies.

**Market Working Group:** The MWG met once in January, reserving one and a half days for current business activities, and two and a half days for future markets design activities. The group received an update on SPP staffing, the impact of FERC Order 719, a recent SPP market price volatility issue, market monitoring activities, and other working groups/committees. The MWG reviewed outstanding Protocol Revision Requests (PRRs) as well as the semi-annual review for all active PRRs. The group continued the development and review of the post-operating day and settlement activities protocols. SPP staff provided a future markets protocol review schedule with details on the planned dates for review of each protocol section, including those outstanding design topics that need to be discussed in more detail.

**Operations Training Working Group:** The Job Task Analysis (JTA) taskforce continues developing the JTA for the Transmission Operator, Generator Operator, and Balancing Authority job roles. Group representatives met with the Operating Reliability Working Group to hand off the OTWG’s work on identifying an emergency communications solution for the SPP region. The group discussed the upcoming System Operations Conferences. Although the conferences are full, those interested in attending are advised to get on waiting lists in case there are cancellations. SPP staff provided a status report on the Learning Management System (LMS), which is on track for implementation by the end of March. SPP will deliver the first of two Train-the-Trainer workshops the week of February 1.
Regional State Committee: The RSC continued its oversight of cost allocation for transmission, and made near-final policy decisions/recommendations that will allow SPP to finalize the Tariff language necessary to implement the much anticipated Highway/Byway cost allocation methodology. The RSC received reports on Priority Projects, the Integrated Transmission Plan, and the Wind Integration Task Force Study.

Regional Tariff Working Group: The RTWG approved a new attachment to the Tariff to implement a screening study for use in evaluating Long-Term Service Request options or proposed delivery point transfers. They also accepted SPP staff’s findings of no unintended consequences in the 2009 STEP. The group continues to review Attachment J and Attachment O changes to implement the highway/byway cost allocation methodology and plans to begin reviewing changes necessary to implement the ITP in February.

System Protection and Control Working Group: The SPCWG finalized a study scope to contract PowerTech Labs to conduct an assessment to confirm that SPP is still in compliance with the latest SPP under frequency load shedding (UFLS) program with the addition of three Nebraska entities in the SPP footprint. The UFLS standard drafting team continued making revisions to the third draft of SPP’s UFLS regional standard, and responded to comments received from the second UFLS regional standard draft.

Transmission Working Group: In January the TWG discussed and endorsed the ITP Year-20 Assessment scope and the Priority Projects Phase II Reliability Report. The group also approved SPP’s 2009 TPL Compliance Report, which will be given to the SPP RE staff.

Other Meetings

Cost Allocation Working Group
Operating Reliability Working Group
Regional Entity Trustees
Strategic Planning Committee

February Meetings

February 1 - OTWG Teleconference
February 1 - SPCWG Net Conference
February 1 - Model Improvement Task Force
February 2 - Sub-Regional Planning
February 2 - Economic Studies Working Group
February 2 - Business Practices Working Group Meeting
February 3 - Cost Allocation Working Group
February 3/4 - Transmission Working Group
February 3 - Regional Entity Trustee Meeting
February 4 - Regional Tariff Working Group
February 8/10 - Market Working Group Meeting
February 8 - Quarterly Compliance Forum
February 9 - Finance Committee Meeting
February 10 - SPP Priority Projects Workshop
February 12 - Markets and Operations Policy Committee WebEx/Teleconference
February 15 - Presidents Day
February 16 - Generation Working Group Conference Call
February 17 - Change Working Group
February 18 - ORWG Conference Call
February 18/19 - Regional Tariff Working Group
February 18 - Settlement User Group Meeting
February 22/24 - Market Working Group Meeting
February 24 - Cost Allocation Working Group
February 25 - Regional Tariff Working Group
This is a summary of recent SPP organizational group meetings. For more information about a group, please visit SPP.org and select that committee on the Org Groups page. Documents are located in the left column.

Please contact Emily Pennel in the Communications Department with questions or comments about The Org Report.

SPP Calendar
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