Regional Planning Update

November 19, 2009 ATC Customer Meeting



Objectives

- Provide updates on the following regional planning efforts:
 - Eastern Interconnection Planning Collaborative
 - SMARTransmission Study
 - Regional Generation Outlet Study Phase I/ Upper Midwest Transmission Development Initiative
 - MISO targeted study of congestion south of Lake Michigan



EIPC

- ATC is among 23 planning authorities in the Eastern Interconnection that have formed the Eastern Interconnection Planning Collaborative
- EIPC in September submitted a proposal with DOE for funds to conduct interconnection-wide planning in response to a DOE funding opportunity announcement
- Interaction with stakeholders:
 - In late August/early September ATC conducted conference calls with stakeholders to review EIPC effort
 - EIPC Webinars describing the proposal held Oct. 13 and 16
 - Development of the stakeholder process and Stakeholder Steering Committee structure underway
 - EIPC stakeholder listserv created
 - A narrative of the proposal and other information about the EIPC is located at <u>http://eipconline.com/</u> and on ATC's Website: <u>www.atc10yearplan.com</u>



EIPC

- DOE selection expected in mid November
- If DOE approves the funding requested, preparations will get underway to initiate work in accordance with the proposal and DOE contract, which would be expected by Dec. 31
 - A base amount of approximately \$21 million was requested, which includes analysis of two scenarios
 - ATC also would serve as a subcontractor with approximately \$500,000 of expenditures over the threeyear course of the project that would be reimbursed by DOE funds



SMARTransmission Study

- The SMARTransmission Study is a comprehensive study of the transmission needed in the Upper Midwest to support renewable energy development and to transport that energy to consumers. ATC is among a group of transmission owners sponsoring the study
- Analysis is underway and the study will be done in two phases:
 - Phase One: Identifying the Alternatives (reliability)
 - Steady State Analysis
 - Develop several alternatives
 - Develop performance metrics
 - Identify top performing alternatives
 - Phase Two: Societal Benefits Evaluation (economic)
 - Security Constrained Economic Dispatch
 - Develop Societal Benefits Metrics
 - Evaluate top performing alternative
 - Provide final ranking



SMARTransmission Study

- Meetings have been held with RTOs to get their input and two stakeholder meetings were held – Oct. 6 and Nov. 12 – to review the study and assumptions and to answer questions and hear feedback
 - Additional stakeholder feedback requested provide to ATC or to info@smartstudy.biz
 - Draft conceptual designs will be posted on Web site soon.
 - It is anticipated that another meeting will be held via web conference Dec. 3 to review proposed conceptual designs
- Study is scheduled to be completed in the first quarter of 2010
- The outcome of the SMARTransmission Study will be used as inputs into regional planning processes
- Information about the SMARTransmission Study is located at <u>www.smartstudy.biz</u> and on ATC's Website: <u>www.atc10yearplan.com</u>



RGOS

- MISO RGOS Phase I is focused on identifying transmission needed to meet RPSs in WI, MN, IA and IL
- RGOS I is being used by the Upper Midwest Transmission Development Initiative, which includes WI, MN, IA, ND and SD
- There is 15 GW and 25 GW of new wind generation in the UMTDI footprint being analyzed, plus 6.8 GW in the "15 GW" design and 3 GW in the "25 GW" design of new generation for IL. There also is 6 GW added for planned and existing wind MISO-wide (modeled for 2019)
 - For the "15 GW" designs this is a total of 27.8 GW of total wind generation
 - For the "25 GW" designs this is a total of 34 GW of total wind generation



RGOS

- At this point there are four 345 kV and ten 765 kV designs, including some that include HVDC, being considered
- It is expected that MISO will complete a summary of the detailed analysis results in November, but it will not include results of stability analysis
 - Stability analysis results expected in December



Targeted Study of South of Lake Michigan Congestion

- As part of the MTEP 10 planning cycle, We Energies requested MISO to conduct a targeted planning study into increasing congestion issues south of Lake Michigan that are believed to be creating such problems as redispatch of generation in southeast Wisconsin
- The intent of the planning study is to identify short-term and long-term – transmission solutions to address the congestion
- It was requested that PJM participate in the study, given that it is believed that constraints and contingent elements located outside of MISO are related to the problem



Targeted Study of South of Lake Michigan Congestion

- MISO has decided to broaden the overall study scope to address congestion issues across seams with other RTOs and transmission providers
 - However, MISO during the MTEP 10 cycle will still focus on the south of Lake Michigan congestion issues as part of the broader study
- MISO is developing the study scope, which likely will be discussed at the MISO Sub-Regional Planning Meetings in early December



Questions?

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