

Regional Planning Group (RPG) Meeting Notes
February 18, 2014

Agenda

- Welcome and Antitrust Admonition
- Introductions
- Miscellaneous Updates
- PLWG Update
- Houston Import Project Study Update: ERCOT Independent Review
- 2014 Long Term System Assessment Scope and Process
- 2014 Regional Transmission Plan Scope and Process
- 2014 Long Term System Assessment Scenario Development Follow-up

Houston Import Project Review Update, by Prabhu Gnanam

- ERCOT completed additional reviews for the comments from stakeholders to provide appropriate responses to the stakeholders.
- ERCOT IR has identified the best option to address both the near-term and long-term reliability needs to serve the load in the Houston area.
 1. Construct a new Limestone-Gibbons Creek-Zenith 345 kV double circuit to achieve 2988 MVA of emergency rating for each circuit. The line length assumed for the cost estimated is approximately 129.9 miles
 2. Upgrade of the substations at Limestone, Gibbons Creek and Zenith to accommodate the terminations of new transmission lines.
 3. Upgrade of the existing T.H. Wharton-Addicks 345 kV line to achieve 1450 MVA of emergency rating (~10.7 miles).
- Next Steps on the ERCOT IR
 1. Houston Import Project EIR final report (Feb. 20, 2014)
 2. Present ERCOT recommendation to TAC (Feb. 27, 2014)
 3. Seek ERCOT Board of Directors endorsement (April 8, 2014)

2014 Long Term System Assessment Scope and Process, by Jeff Billo

- Develop DC study cases for 2024 and 2029 covering a range of scenarios for the use of near-term planners in the evaluation of large transmission additions to the ERCOT system.
- The final 2018 case from the 2013 RTP will serve as the starting point for the study.
- Generation will be added to each scenario as needed to meet the reserve margin target.
- Ancillary services costs will be determined for each scenario by using the KERMIT model.
- The generation mix economics will then be rerun with the added ancillary services to produce an updated generation expansion plan.
- ERCOT is looking at using historic output information to reevaluate the assumption of all hydro-electric units being turned off for all studies.
- ERCOT will reevaluate the assumption that wind plants in the North and West area will be at zero MW and wind plants in the Coastal area will be dispatched at 10% output.
- Generation will be sited in accordance with the ERCOT LTSA Generation Resource Siting Process.
- Load will be evaluated by weather zone.
- Economic Analysis will import the final reliability cases for each year into UPLAN or PROMOD as the starting economic cases. Update the load to the ERCOT 50th percentile forecast plus self-serve load. Add dynamic ratings to transmission lines for existing transmission lines that have dynamic ratings.

2014 Regional Transmission Plan Study Scope and Process, draft 2, by Jeff Billo

Updates to the document based on comments and feedback from TPs.

- Model corrections and updates provided by TPs during the course of the analysis will be documented and included in the study cases. Projects receiving RPG acceptance will be included if determined by ERCOT to have a material impact on the analysis.
- N-1-1 reliability constraints under minimum load conditions for year 2017.
- Transmission outages scheduled for June thru September in the years 2015 through 2020 will be included in the analysis.
- FACTS devices will be turned off for the analysis since they are not expected to contribute during steady state system conditions. Several stakeholders made comments that ERCOT should check with the TSPs regarding this assumption for each FACTS device.
- Depending on the summer temperature assumptions, the dynamic ratings could be either higher or lower than the static rating. ERCOT would have to start making assumptions about temperatures throughout the state and so we are not sure how much value this analysis would add.
- All hydro-electric units will be turned off for all reliability studies. For Reliability analysis, wind plants in the North and West area will be at zero MW. Wind plants in the coastal area will be dispatched at 10% output. ERCOT is still looking into these assumptions.
- Solar plants will be modeled at 50% output for reliability analysis. Solar plants will be dispatched according to URS profiles selected for each plant for economic analysis.
- Generation that is switchable between ERCOT and another grid will be modeled consistent with the information provided to ERCOT under Protocol Section 16.5.4(2).
- The Horse Hollow plant will be modeled as connected to the ERCOT system in West Texas (not connected to the Kendall substation).
- The load will be evaluated using the newest ERCOT forecast. All of the existing DC ties, including CFE will be dispatched based on historic information.
- Large projects will be further evaluated using 2014 LTSA cases if available to ensure project robustness.
- A final report with documentation of reliability and economic projects is targeted to be complete by 11/14/2014.

RTP Assumptions:

- ERCOT will use the SSWG 2014 Data Set B cases as the starting cases for the 2014 RTP.
- ERCOT plans to use a representative year 8760-profile output for each hydro unit in the economic analysis (similar to modeling of wind plants).
- ERCOT will keep summer peak reliability assessment assumption of turning hydro units off.

Next meeting is scheduled for March 25, 2014.