

**Regional Planning Group
Meeting Notes
November 20, 2015**

Misc. Updates

- Panhandle Study: ERCOT completed IR. Issued report. Took to TAC yesterday. TAC endorsed, will go to BOD on Dec 8.
- 12/4 SSR Workshop. Planning to go through results of frequency scan studies and get into outstanding NPPR issues.
- EOY reports. Constraints and Needs to TSPs by early December. RTP to TSPs by early December as well. Please verify no errors in project descriptions. Spreadsheets with Projects and descriptions posted already. Feel free to comment already. If we hear no changes, they will be considered final.
- Q: Panhandle transfer study status.
 - There are two ongoing studies for the Panhandle region. One is Panhandle detail study to have a consultant help to analyze the proposed WSCR and its criteria. Also will examine the adequacy of the study tools for the Panhandle region under weak grid conditions. The study will be completed in January, 2016 and is expected to be presented at ROS in February, 2016. The other study is to determine the Panhandle operational export limit based on the existing system conditions. This study is expected to be completed by December, 2015 for ERCOT Operations' real time consideration.
- PLWG: working on Additional Planning Reserve Margin Calculation for CDR NPPR.

2016 LTSA Load Forecast

Calvin Opheim presented on the load forecast for the 2016 LTSA.

Q: Assuming amount of PV installed or capital cost?

A: No cost assumed with impact on the load forecast. We met internally and assumed 5% of all premises will be rooftop solar. Adjusted the load to fit that scenario. On resource side I'm sure the costs assumptions were built into that.

Q: When do you think we'll see the actual numbers for the 50/50 Long-Term Demand and Energy Load Forecast Report?

A: 50/50 numbers in that report will be out December 31, but that's different from what's being presented here.

Q: LNG facilities, did you use actual sizes of proposed loads.

A: Yes, worked with contractor (Evan) who provided the train sizes. 150 MW per train and ended up with 4 trains. Two under construction used what they reported. Brownsville we used 3 that have proceeded to environmental impact stage and setting aside three that haven't done that process. Assumed each would only build a first phase (half their size). The one considering self-generation, assumed no participation in the 4 CP and load would not be price responsive. Total came out to around 600 MW.

Q: Population growth between the scenarios. Relatively consistent or it varies?

A: Our model uses premises (residential, commercial and industrial evaluated separately). And then that forecast is put into our load forecast which is used as the driver of future growth in demand and energy

Q: The LNG facilities added to the forecast, have they put down financial security?

A: Remember that this is not ERCOT's official long-term forecast. This is a scenario being analyzed in the long-term study. No they have not put down financial security.

Jeff: Remember that we went through these scenario workshops in July and stakeholders came up with these 8 scenarios.

Q: Did you assume any additional upstream infrastructure? Pipeline upstream loads.

A: No.

Lubbock Integration

Lubbock Power and Light presented on integrating Lubbock into ERCOT.

Q: 466/593, estimate for the city proper?

A: Possible that the other cities will come along with us.

Q: Is there a Cooperative that could switch with you?

A: No connections with South Plains Cooperative, have had no discussions with them, they probably stay where they are.

Q: Previous slide mentioned previous cities. Do they share common distribution system?

A: They have their own distribution system and are not connected with Lubbock at all.

Q: Looking at cases, high wind low load case?

A: Reliability perspective, low wind was worst case. Looked at high from both dynamics and economic assessment.

Q: Slide 22, LP&L generators or retiring them in 2021 case?

A: Some are assumed to be retired. Not all of them. 120 or so MW available.

Q: Slide 27. How are numbers developed around Panhandle buses assumed to be super node. New Lubbock substations fall into that. Are any of new nodes factored into the short circuit ratio for the super node?

A: No.

Q: Did you do sensitivity on Ogallala line?

A: Having Ogallala-Abernathy line did have favorable results, depending on the option.

Q: When you increase wind capacity in Panhandle do you increase incrementally

A: Increased it proportionately.

Q: 345 kV

A: Double-circuit capable, single circuit

Q: Map on 40: did you look at a scenario that tied all three (A&B) but has the same configuration as 8, otherwise?

A: No because the distances aren't very different so the cost won't be impacted much.

Q: What's the installed capacity in slide 50?

A: 4,600. Everything

Valley RPG Project Independent Review Update

Fred Huang presented on the Independent Review of the Valley project.

Q: Slide 5 2021 S-SC case. Running any off-peak winter cases?

A: We did study different load level, including the off-peak winter load level.

Q: Approximately how many MW currently in queue that you're looking at in sensitivity study?

A: That information is in the GIS report and was included in the scope presentation in the previous RPG meeting.

Q: Have synchronous condensers been used as preferred mitigation?

A: We recognize the current issues around Ajo and potentially in other regions. Options, including synchronous condensers, may be tested in the assessment.

ERCOT-MISO DC Tie

MISO approached ERCOT about studying a new HVDC connection between the two systems. ERCOT presented on the draft study scope and asked for stakeholder comments.

Q: Do you know what MISO rates and fees might be?

A: No

Q: MISO south or MISO Midwest?

A: South

2016 RTP Scope

Sandeep Borkar presented on updates to the 2016 RTP scope and next steps.

MISC.

Q: what are plans for PSSE version 34 software?

A: The earliest in MOD is April.