January 21, 2020 RPG Meeting Notes

**Miscellaneous Updates**

Jeff Billo stated that the RTP, Constraints and Needs, and Delaware Basin report were posted to ercot.com in December. The confidential version of the RTP is available on the MIS Secure.

There will be a report update posted on the Panhandle Study by the end of the month.

**RPG Project Submittals**

Sun Wook Kang (ERCOT) presented on the RPG Submittal Expectations. Kang also reviewed RPG Project Tiers and key items to be included in submittals.

Bryan Sams (Calpine): Do Tier 2 projects receive approval from the Board of Directors or TAC?

Sun Wook Kang (ERCOT): No, Tier 2 projects do not need the Board of Directors approval. We conduct an independent review.

**Corpus North Shore Project**

Ben Richardson (ERCOT) provided a status update on ERCOT’s independent review of the Corpus North Shore Project. The Independent Review is scheduled to be complete by Q1 of 2020.

Randy Jones: Option 4 is significantly different than the other three. Does Option 4 provide the same amount of voltage stability and reliability margins as Option 3? Do you believe it will provide the same margin of error?

Ben Richardson (ERCOT): We will provide both thermal and voltage stability margins, for options analyzed, based on our import assessment during our February RPG presentation.

**Valley Import Project**

Muhammad Khan (ERCOT) gave an update on ERCOT’s Independent Review of the AEP and STEC Valley Import Projects. There is no confirmed LNG load in the Valley area. ERCOT will continue to conduct the Subsynchronous Resonance (SSR) Assessment and Congestion analysis.

Clayton Greer (Morgan Stanley): If it a local reactive issue, why are we adding import options? What is causing the voltage collapse?

Muhammad Khan (ERCOT): The lack or reactive support can be fixed by either adding a dynamic reactive device or providing a strong 345 kV source. Results show that adding a 345 kV source provides better performance in the long term

Question: In these studies, were the DC Tie loads curtailed?

Muhammad Khan (ERCOT): Yes, the DC Tie assumptions were same as what has been presented in previous RPGs. They are curtailed for prior outage scenarios

**Frio County Project Scope**

Priya Ramasubbu (ERCOT) introduced the scope for the ERCOT Independent Review of the 7X Energy Frio County Transmission project. This Tier 2 project is an economic-driven project to address the transmission congestion in the Frio County associated with the new solar generation facilities in the area.

Brad Bell: Regarding generation assumptions, what are you utilizing for capacity factors?

Sun Wook Kang (ERCOT): For wind and solar, they are dispatched based on the wind and solar profiles supplied by vendor. As far as hydro, monthly capacity limits are assumed based on review of historical data, so that they are not dispatched more than the monthly capacity limits.

John Bernecker (ERCOT): These are site-specific profiles. Solar generation is dispatched based on county-specific profiles.

Brad Bell: With emerging new technology, the capacity factors have increased and is something that is worth considering.

Brad Bell: There is about 8 GW of solar in the generation interconnection queue. Will ERCOT consider the possibility of all this generation meeting 6.9(1) in the near future?

Clayton Greer (Morgan Stanley): The impact of the generation will rely on the location of the new solar facilities.

Brad Bell: If this gets approved by ERCOT, what are the next steps?

Drew Golder (7X Energy): We met with ERCOT, AEP and STEC to see how we could go forward with this. AEP needs the endorsement from ERCOT.

Drew Golder (7x Energy): How will you determine the cost estimates? Does ERCOT follow up with the TSPs for a more detailed cost estimate for the upgrades?

Priya Ramasubbu (ERCOT): Yes. Once we confirm the need for the project, we will study project alternatives. ERCOT will then reach out to the respective TSPs for detailed cost estimates for each of the upgrade options to make a final determination.

Drew Golder (7x Energy): What if the project meets the 14% first-year revenue requirement for 2024, but does not for 2021?

 Priya Ramasubbu (ERCOT): Depending on the margin by which the project falls short of meeting the first-year revenue requirement, the project may be deferred to a later in-service year.

Bryan Sams (Calpine): How did you define the study area?

Priya Ramasubbu (ERCOT): There is currently no language in the protocols or planning guides that defines the study area. It is determined on a case by case basis. For this project, all recently RPG-approved Tier 1, 2, and 3 projects in the ERCOT South weather zone will be included in the planning models. All Tier 4 projects that are electrically close to Frio County (this eliminates the valley area and counties far away from Frio County) will be modeled.

Bryan Sams (Calpine): I may have some follow up questions on this definition of the study area.

Randy Jones: Why is this project being pursued as a Tier 2 project while there isn’t a stated need for a new CCN?

Jeff Billo (ERCOT): The current nodal protocol section 3.11.4.3 (2) provides the provision to increase the level of review of a proposed project based on stakeholder comments or system impacts of the project.

There was discussion between stakeholders on a scenario that an ERCOT endorsed project would not be picked up by a TSP.

**2020 RTP Update**

Ping Yan (ERCOT) gave an update on the 2020 Regional Transmission Plan and load review. ERCOT will complete load review and finalize RTP load levels by February 14, 2020.

Bill Barnes (NRG): Slide 4, questions on the weather forecasts compared to the TSPs? Is there something ERCOT is missing in their forecast?

Ping Yan (ERCOT): We noticed a couple of the weather zones that have industrial loads that have not been verified by ERCOT yet. ERCOT did lower its load forecast for a few weather zones, and the TSPs had increased their load forecast in a few weather zones.