

Questions from Novatus Energy, LLC on ETT West Texas Arms Project

Our intent is to provide additional insight to the currently-posted outage schedule for the ETT CREZ area outages. These outages are in ERCOT's Outage Scheduler software and have been discussed through the ERCOT stakeholder process. Due to contract and confidentiality agreements, no commercial terms or confidential information will be provided by ETT. However, ETT commits to answer any question that it is legally able to address about the progress of the West Texas Arms Project.

ETT Notice posted to the ERCOT Wholesale Market Subcommittee. The answers were posted on the ETT Website on 10-02-19:

- 1. What is the financial viability of whichever companies are responsible for fulfilling warranty claims? Is there any risk of these warranty claims causing the responsible companies to go bankrupt?**

Answer: ETT is confident the settlement requirements effectively securitized. Due to contract confidentiality agreements, ETT is unable to disclose the security requirements of the settlement agreement. We commit to provide any information about the repairs that we are contractually allowed to share.

- 2. Is there sufficient supply of arms and other components to allow the work to proceed on schedule?**

Answer: ETT communicates regularly with manufacturers, and we believe that existing orders and planned deliveries will keep ETT's current outage schedule on track.

- 3. At the WMS meeting, Kip said "it is not practical" to complete the work this year. With enough crews and funds, it seems it should be practical. Was Kip implying it's an economic, physical, or other practicality?**

Answer: Outages on multiple 345kV lines would impact the reliability of the ERCOT system. ETT's timeline is based on weather, labor availability, and manufacturing schedules. This region is rich with wind gusts that make it commercially viable for wind farms but difficult to maintain a consistent repair schedule.

Our team of project supervisors and engineers have hundreds of years of combined experience in this field. 20-plus crews work on inspections and replacements at any given time. We devote approximately 90 people to this project every day.

We develop, train, and keep strong teams so that we have consistency, continuity, and low turnover. The low turnover of craft labor means we improved efficiency by approximately 25% since the project's inception.

4. Why is nighttime work under lights not being considered given that the lines are out overnight? Why couldn't more work be accomplished?

Answer: As discussed at the June 15, 2017 ETT workshop on the CREZ outages, hot work and night work would not be implemented due to extreme danger to work crews that could not be mitigated to our satisfaction. Work is scheduled six days a week, ten hours per day, and occasional Sundays depending on weather, safety, landowner permissions, and equipment availability.

AEP, ETT, SMG and the contract companies involved continue to evaluate the safety of hot work and nighttime work. The group determined collectively that those conditions present a danger for crews and equipment given the type of work that needs to be done.

Additionally, "wind out" conditions are more likely in the evening, reducing the productivity of working at night.

ETT will thoroughly evaluate stakeholder suggestions about completing the work in a safe and timely manner.

5. What was the justification for returning the Tesla to Jim Treece line to service August 10 to August 21? Does ETT expect to be able to return the line to service again this year? Or next year?

Answer: Work on the Tesla to Jim Treece line was completed on August 10, 11 days ahead of schedule due to crew efforts and good weather and the line was returned to service. The work on the Tesla to Jim Treece line is complete with arm change out and flange weld repairs. ETT does not anticipate any more CREZ arm related outages to this line.

6. Please provide an updated summary of wind out events through September 2019 when the lines were returned to service.

Answer:

- 11/21/2017: Riley (R)-Edith Clarke (EC) – Thanksgiving and forecast wind out (return to service for 6 days).
- 12/1/2017 – 11 A.M.: Handed back R-EC for mobilization to EC-Cottonwood (CW) (energized 3 days early).
- 12/21/2017: Placed EC-CW line in service for Christmas and bad weather forecast.
- 1/4/2018 – 1 P.M.: Took R-EC line out of service (delayed one day). We were originally scheduled to receive the outage on 1/3/2018 but weather projections delayed taking the outage on time.
- 3/21/2018 – 11 A.M.: Returned R-EC to service upon request from ETT. Another line had an emergency outage so ETT requested return to service for R-EC for 6 days.
- 3/27/2018: R-EC out of service (return to outage scheduler plan).
- 4/19/2018: Returned R-EC back into service 1 day early.

- 4/24/2018 – 1:45 P.M.: Took Clear Crossing (CC)-Dermott (D) line out of service. Originally scheduled to begin the outage on 4/23/2018; delay based on wind out projection.
- 7/3/2018: Returned to service CC-D for the 4th of July (one day early due to wind out projection).
- 11/20/2018: Returned to service CC-D until 11/26/2018.
- 12/19/2018: Returned to service CC-D.
- 4/18/2019: Returned to service CC-West Shackelford (WS) until 4/23/2019.
- 7/16/2019: Returned to service Tesla – Jim Treece until 7/31/2019. (Arm replenishment and weather reliability due to peak load.)
- 8/10/2019: Returned to service Tesla – Jim Treece until 8/22/2019. (Return to service ahead of schedule.)

7. When is the next ETT update to market participants scheduled and for which committee?

Answer: ETT will be providing an update to the ERCOT Board of Directors on October 8, 2019 and in the 4th quarter to CMWG or WMS upon discussion with the Committee Chairs after the ERCOT Board of Directors meeting.