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Questions from Tenaska on ETT West Texas Arms Project

The purpose of these questions and answers 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.

1. **Is it an accurate understanding that a single crew is working at a time on the inspections/replacements?**

   Answer: That is not accurate. There are over 20 crews, totaling 78 individuals, of different craft types in the field on a daily basis working on the program, plus additional support personnel.

2. **What are the working hours that the crew is performing physical work? Is work being performed on weekends and holidays?**

   Answer: Crews are scheduled to work 6 days per week, 10 hours per day, and occasional Sundays, depending on weather and other factors (e.g. safety, landowner permissions, equipment availability, etc.). Some days when the weather is good, crews work longer than 10-hour days to offset time lost on wind out days. The crews will be working during the Independence Day holiday.

3. **Given the recent expansions and additions in the outage scheduler which elongated the outages from May 2021 to December 2021, what is ETT doing to perform the work in an efficient and timely manner?**

   Answer: Some of the improvements include:

   - Addition of scaffolding to improve safety, welding efficiency and quality. Scaffolding also provides higher productivity than using only cranes. Weather-related delays such as wind outs remain the most significant challenge. As discussed in response to Question 11 below, scaffolding allows work to continue in higher wind conditions.

   - Process improvements and improved learning curves due to low turnover of craft labor have improved efficiency 20-25% since the beginning of the project.

   - Addition of document control assistants and reduction of administrative burdens for field personnel and key skill workers.

4. **Contrary to the update posted on the ETT website for June 2019 (http://www.ettexas.com/Content/documents/WTAProjectJune2019statusreportforERCOTStakeholderProcess_Final.pdf), the outages in ERCOT's outage scheduler HAVE deviated significantly from the previously submitted outages discussed in 2017 through the ERCOT stakeholder process. ETT has constantly added incremental outages to the outage scheduler and elongated the schedule. Does the current end of December 2021 now reflect ETT's best estimate of when the inspection and replacement work on all structures and components will be complete? What is ETT's best and worst case scenario for end date?**

   Answer: The outages currently in the ERCOT Market Information System ("MIS") Outage Scheduler reflect the most conservative, anticipated outside date for ETT's completion of the project. Our target for completion of the long section outages is June 2021. There will be much shorter routine maintenance and interconnection outages in future years as part of normal operation. ETT's current plan is to schedule any follow-up work within the normal routine scheduled maintenance barring any unforeseen circumstances or data based on drone inspections and other information.

5. **Is ETT considering incentives to perform the work with more crews/hours targeting completion as soon as possible?**

   Answer: No. Multiple crews are already being deployed. See responses to questions 1, 2 and 12.

6. **Given ETT has stated that it will have an ongoing monitoring of equipment and potential future replacements, is the cost of this ongoing work covered per the warranty?**

   Answer: Cost responsibility is spelled out in our settlement agreements, which are confidential.

7. **ETT informed stakeholders that we would receive quarterly updates. When is the next update scheduled and in what venue will it occur?**

   Answer: The next update will be at ERCOT Wholesale Market Subcommittee ("WMS") meeting on July 10, 2019.

8. **What tools, third party wind forecasts, and processes are ETT using to forecast wind-out days?**

   Answer: National Oceanic and Atmospheric Administration ("NOAA") and an AEP meteorological data service are being used for wind forecasts.

9. Has ETT put lines back in service for "wind-outs"? If so, how many times has this occurred?

Answer: ETT has returned lines to service on several occasions since we began work in 2017:

- 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: Retuned to service CC-West Shackelford (WS) until 4/23/2019.

10. Was there PUC oversight to the settlement agreement (and Non-Disclosure Agreement) with the vendors of the failed components?

Answer: This was a commercial issue. ETT meets with PUCT Staff and Commissioners 3-4 times per year updating them with the progress of this project and other matters affecting the Company.

11. **Per the commentary and picture in the June 2019 update from ETT (http://www.ettexas.com/Content/documents/WTAProjectJune2019statusreportforERCOTStakeholderProcess_Final.pdf), scaffolding is being deployed for weld repairs. Please comment on the efficiency of building scaffolding to nearly the height of the tower for each tower versus using cranes.**

    Answer: Scaffolding has provided several efficiencies for the project as a whole. The scaffolds can be erected quickly so they do not impact the schedule. The scaffolding provides a more stable platform for welding than a bucket truck, which stability improves the quality of both welds and improves the safety for crews. Welders can continue to weld above the 25mph wind limit of the buckets and cranes while on scaffolding, which improves overall productivity of the repair as short duration wind outs are extremely common.

12. **If resources were not constrained, looking at this project, what would ETT need to employ to complete this work by the end of 2019?**

    Answer: Even with unlimited resources, completion of these outages by the end of 2019 would not be feasible.

13. **Has ETT modeled the financial impact of these outages on ratepayers?**

    Answer: No.