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ADDENDUM OF SOUTHWESTERN PUBLIC SERVICE COMPANY TO ITS SERVICE QUALITY REPORT FOR THE 2022 REPORTING YEAR

The Public Utility Commission of Texas (Commission), in Ordering Paragraph No. 5 in its February 28, 2019 Order in Docket No. 48826, *Agreed Notice of Violation and Settlement Agreement Relating to Southwestern Public Service Company's (SPS) Violation of PURA § 38.005 and 16 TAC 25.52, Concerning Reliability and Continuity of Service*, requires SPS to “file a report regarding actions to bring feeders that are found to be in violation of any of its system-wide service quality standards for two or more consecutive years into compliance with the Commission's service quality standards, and this report must be filed as an addendum to SPS's required annual service quality reports, as prescribed by 16 TAC § 25.81.” This Addendum is filed to comply with that requirement.

Two Consecutive Years (One Year Violation)

a. Carson County – CARS7030

- i. Circuit CARS7030 out of Carson County Substation is 69 miles long and in 2022 served 169 customers in the Texas panhandle northeast of Amarillo, between Amarillo and Borger. The terrain is primarily rolling farmland with some smaller canyons at the far reaches of the circuit.
- ii. The feeder performance failure is due to SAIDI (one year). In 2022, twenty-five events impacted this line. Twenty-one of these events impacted specific overhead transformers or were behind small tap fuses and impacted four customers or less. Three events were on larger fused taps affecting 17 and 19 customers. One breaker level event was caused by a pole fire. The outage occurred at 3:00 AM and took approximately five hours to restore resulting in 49,198 Customer Minutes Out (CMO). This single event represents 80% of the total CMO on this circuit for the year and without this event, the feeder would have been well within the 300% SAIDI threshold.
- iii. In 2022, ten corrective action and system improvement work orders were completed to replace cables (1), replace crossarms (1), replace poles (1), replace transformers (3), perform O&M repairs (2), install capacitor (1), and install protective recloser (1) for a total spend of \$101,381.76.

b. Cedar Lake East - CEDES910

- i. Circuit CEDES910 out of Cedar Lake East Substation is 20 miles long and in 2022 served 25 customers in rural West Texas east of Seminole. The terrain is primarily flat farmland and low scrub brush.
- ii. The feeder performance failure is due to SAIDI (one year). In 2022, eight events impacted this line. Of these events, four were feeder level events. Three of these were due to broken poles and one was due to a failed switch at the substation. These four outages averaged 2,400 CMO each and totaled 9,807 CMO which represents 94% of the total circuit CMO for the year.
- iii. In 2022, six corrective action and system improvement work orders were completed to perform priority pole replacements (4), perform system rebuilds including pole and crossarm replacements (1), and replace overhead switch (1) for a total spend of \$33,371.17.

c. Lockney Rural - LOCRLA140

- i. Circuit LA140 out of Lockney Rural Substation is 22 miles long and in 2022 served 63 customers in rural West Texas east of Plainview. The terrain is farmland and low scrub brush with limited paved road access.
- ii. The feeder performance failure is due to SAIDI (1 year). In 2022, twelve events impacted this line. Eleven of these events impacted specific overhead transformers and affected two customers or less. The one remaining event was a breaker level outage due to a broken pole. This event occurred at 11:35 PM during a high wind event and took approximately five hours and thirty-five minutes to restore resulting in a total of 21,440 CMO. Due to the low customer count on this feeder, this single event caused the circuit to exceed the 300% SAIDI threshold.
- iii. In 2022, twenty-six corrective action and system improvement work orders were completed to replace lightning arresters (2), repair cables (2), replace crossarms (12), install fault indicators (1), perform O&M repairs (6), replace transformers (2), and to fund contractor labor for system improvement work on the feeder (1) for a total spend of \$74,398.65.

d. Lipscomb – LPSB2580

- i. Circuit 2580 out of Lipscomb Substation is 166 miles long and in 2022 served 1,041 customers in the northern Texas panhandle between Lipscomb and Follett. The terrain is low scrub brush and rolling farm and ranch lands with limited paved road access. This circuit is extremely long and rural, making it subject to adverse impacts due to lightning and wind, and is 40 miles from the nearest SPS service center.
- ii. The feeder performance failure is due to SAIDI (1 year) and SAIFI (1 year). In 2022, 63 events impacted this line. None of the events were breaker level outages that affected all customers. Faults were able to be isolated with reclosers and overhead switches and in many cases restoration from the backup feed from Skunk Creek substation was completed to mitigate the impact of the events. Four events were the most impactful outages each contributing 30,000 CMO or greater. These were caused by floating conductor, poor conductor sag, phase down due to lightning strike, and a failed recloser control. These four events all occurred during wind, rain, lightning, and extreme cold events.
- iii. In 2022, 50 corrective action and system improvement work orders were completed to repair cable (5), replace cable (8), replace crossarms (1), perform O&M repair (7), perform overhead line relocation (1), replace poles (3), perform priority pole replacements (24), and replace transformers (1) for a total spend of \$394,066.88.

Three Consecutive Years (Two Year Violation) – SAIFI & Four Consecutive Years (Three Year Violation) – SAIDI

a. Channing – CHAN1564

- i. Circuit CHAN1564 out of Channing Substation is 24.9 miles long and in 2022 served 29 customers in the Texas panhandle, northwest of Amarillo. The terrain is primarily flat farmland.
- ii. The feeder performance failure is due to SAIDI (3 years) and SAIFI (2 years). In 2022, eleven events impacted this line. Seven of these events impacted specific overhead transformers and affected three customers or less. One breaker level event occurred as a result of a floating and broken center phase resulting in 16,956 CMO which accounts for 37% of the total circuit CMO for the year. This event occurred during a snowstorm that impacted the entire northern Texas panhandle region, which contributed to the extended restoration time of approximately 31 hours. The remaining three events were behind Recloser 1A60 and were the result of floating phases (4) and lightning (2).
- iii. In 2022, twenty-two corrective action and system improvement work orders were completed to replace lightning arresters (1), replace crossarms (10), repair down guy (1), perform O&M repair (8), replace poles (1), and replace transformers (1) for a total spend of \$30,929.91. To further increase the reliability of this line, projects to replace additional crossarms as well as install ductile iron poles approximately every fifth pole to provide additional strength to mitigate floating and downed conductors have been proposed by Area Engineering in 2023 as action items from the Feeder Performance Improvement Program (FPIP). This circuit has also been identified for the initial implementation of fault location, isolation, and service restoration (FLISR) capabilities. This will involve the installation of two new reclosers to allow switching to be performed to isolate faults and restore service remotely.

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