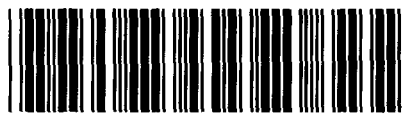




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PROJECT NO. 38068

**REPORT OF INFRASTRUCTURE
IMPROVEMENT AND MAINTENANCE
PURSUANT TO SUBSTANTIVE RULE
§25.94**

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**BEFORE THE
PUBLIC UTILITY COMMISSION
OF TEXAS**

**ONCOR ELECTRIC DELIVERY COMPANY LLC'S
ANNUAL REPORT OF INFRASTRUCTURE IMPROVEMENT AND MAINTENANCE
PURSUANT TO SUBSTANTIVE RULE § 25.94**

COMES NOW Oncor Electric Delivery Company LLC ("Oncor" or "Company"), and files this Annual Report required by the 16 Tex. Admin Code § 25.94 ("TAC") (the "Rule") relating to Infrastructure Improvement and Maintenance. The Rule requires that by May 1st of each year, an electric utility must file with the Commission a report containing a description of the utility's activities related to: (1) identifying areas in its service territory that are susceptible to damage during severe weather and hardening transmission and distribution facilities in those areas; (2) vegetation management; and (3) inspecting distribution poles. The Annual Report must also include a summary of the utility's activities related to preparing for emergency operations.

Oncor's Annual Report for 2019 is organized in the same format as the Rule. Within this report, Oncor has included numerous references to guidelines, policies, and procedures related to its programs. These materials will be made available for Staff review upon request.

I. REPORT SUMMARY

Oncor is committed to providing safe, reliable, and cost-effective service to all customers. As such, Oncor is actively engaged in programs to improve the performance and hardening of its electrical system in all weather conditions.

As discussed below, Oncor's construction standards, operating priorities, Smart Grid deployment, and distribution maintenance programs serve to protect and harden critical infrastructure during severe weather.

II. ONCOR'S ACTIVITIES RELATED TO IDENTIFYING AREAS IN ITS SERVICE TERRITORY THAT ARE SUSCEPTIBLE TO DAMAGE DURING SEVERE WEATHER AND HARDENING TRANSMISSION AND DISTRIBUTION FACILITIES IN THOSE AREAS

Oncor has a diverse service territory including East/Southeast Texas, Central Texas, North Texas and West Texas. Only a small area within approximately 100 miles of the gulf coast in Oncor's Southernmost and Southeast service territory is susceptible to named Gulf storms or remnants thereof (hurricanes, tropical storms, etc.). Oncor's system-wide approach to the design and construction of its electrical facilities acknowledges that the types of weather events that can affect **one part** of its System may potentially impact **any part** of its System.

Severe Weather that can impact Oncor's system may include:

- Severe thunderstorms, lightning, flooding, and tornadoes;
- Hurricanes / tropical storms;
- Wind / dust storms;
- Flying debris from weather conditions;
- Ice / Snow Storms; and
- Extreme Heat / Cold.

Severe weather events are at the extremes of the statistical occurrence of weather phenomena. In other words, extreme weather events rarely occur. The National Electrical Safety Code ("NESC") climatic events are based on a 50-year return period climatic event (e.g., extreme wind) or combination of events (e.g., extreme wind on an ice-covered conductor). Even though a 50-year event is only supposed to happen once in 50 years, a 50-year event has a 2% annual probability of occurrence, and several 50-year events can occur in any 50-year period. In fact, several can occur in any five-year period. Extreme weather events that cause wide-spread damage occur on the order of several hundred-year return periods (once every several hundred years).

The NESC is recognized by Oncor as a minimum safety standard. It ensures that Oncor's electric delivery facilities are safe for the public and the personnel who work on or around those facilities. Oncor's Standards are based in part on the most recent revision of the NESC and are reviewed and modified as necessary prior to the effective date of an

NESC revision. The Standards provide for a safe, reliable, and cost-effective electric system design. Oncor's transmission structures are designed to comply with the requirements defined for NESC Grade B construction. All transmission structures, regardless of height, are designed to comply with NESC Rule 250C Extreme Wind loading requirements. Oncor's Distribution Construction Standards are based in part on NESC Rule 250B Heavy Loading Criteria. This loading condition is indicated by NESC for the northernmost sections of our service territory. However, Oncor uses this criteria system-wide to standardize construction, materials, engineering design practices, ease of restoration, leveraged purchasing power, and to provide for public and employee safety. This allows for the design and operation of a system that exceeds NESC guidelines for segments that are closest to coastal areas.

Oncor also uses other hardening methods to avoid or minimize weather-related system impacts. These methods include the integration of containment strategies within our electrical system designs and in our component and material evaluations. The containment strategy is integrated into our Distribution Automation deployment and enables remotely initiated and autonomous isolation of faulted segments (containment). Oncor uses intelligent switches that can coordinate with each other and with substation breakers to reduce the amount of time required to locate a fault as well as protect equipment from excessive fault operations. These switches have software installed, that provides a means for switches to communicate with each other on a peer-to-peer basis. This software also provides for the collection and storage of data that tracks conditions on the feeder and tracks events for analysis at a later date. These Smart Grid applications help limit the effects of localized extreme weather events and reduce the time to perform repair and service restoration activities. Oncor has also moved significantly along in the deployment of electronic fuses (single phase reclosers). Additional system hardening activities employed by Oncor are described below.

III. ONCOR'S ACTIVITIES RELATED TO VEGETATION MANAGEMENT

See Oncor's Vegetation Management Reports prepared pursuant to 16 TAC § 25.96 and filed in Docket No. 41381.

IV. ONCOR'S ACTIVITIES RELATED TO INSPECTING DISTRIBUTION POLES

Oncor uses internal personnel and external contractors to conduct its distribution pole inspection program. Oncor employees perform pole and other facility inspections through the course of their day as part of their normally scheduled duties. They are trained to watch for any potential hazards and report system issues that may need correction. Through this process Oncor identifies poles, insulators, and other components for replacement. Each year, Oncor replaces thousands of system components in an effort to provide safe and reliable electric service.

In addition, Oncor has instructed its vegetation management and line contractors to report any conditions related to distribution poles they believe are potential candidates for remediation. Customers also report pole issues to Oncor employees and call centers. These reports are followed up by trained personnel, and repairs are made if warranted.

Oncor also employs external firms to conduct more extensive pole assessments and targeted strengthening of poles. These firms inspect, excavate, and treat designated poles for asset life extension. Poles that require additional work are either reinforced or replaced based on the inspection results. Poles that have been targeted for strengthening as identified during the pole inspections are reinforced with a steel truss driven in the ground and attached to the pole. Any poles identified that cannot be treated or reinforced are scheduled for replacement.

Oncor also replaces a large number of poles each year as a result of infrastructure changes due to facility relocations associated with highway improvements, road widening, and other construction projects, including projects serving a new or an existing customer.

V. SUMMARY OF ONCOR'S ACTIVITIES RELATED TO PREPARING FOR EMERGENCY OPERATIONS

A summary of Oncor's Emergency Operations Plans has previously been filed under Project No. 34202 and is available for Staff's review in Central Records of the PUC.

Listed below are dates and reasons for opening and activating Oncor's System Emergency Center in 2019:

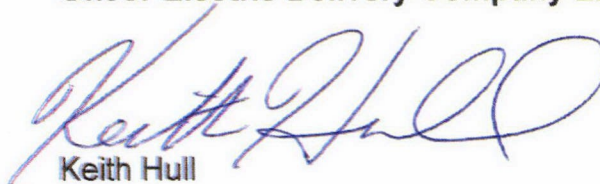
<u>Date</u>	<u>Event</u>
January 30, 2019	National Response Event Drill (by Edison Electric Institute)
April 16, 2019	Spring Storm Drill (by Oncor)
June 9, 2019	Summer Storm
October 21, 2019	October Storm/Tornadoes
October 24, 2019	Winter Storm Drill (by ERCOT)

VI. CONCLUSION

Oncor appreciates the opportunity to provide the information required in this report and is available to answer any questions Staff may have concerning its contents.

Respectfully submitted,

Oncor Electric Delivery Company LLC



Keith Hull

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