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June 20, 2025

Chairman Thomas Gleeson
Commissioner Kathleen Jackson
Commissioner Courtney Hjaltnan
Public Utility Commission of Texas
1701 N. Congress Ave.
Austin, TX 78701

Re: Notice of Open Meeting Presenters on Southwestern Public Service Company's
Application for Approval of Its Transmission and Distribution System Resiliency Plan
in Public Utility Commission of Texas Docket No. 57463

Honorable Chairman and Commissioners:

On December 31, 2024, Southwestern Public Service Company (SPS) filed an application for approval of a system resiliency plan with the Public Utility Commission of Texas, pursuant to Public Utility Regulatory Act § 38.078 and 16 Texas Administrative Code § 25.62.

This letter is to notify you that Brooke Trammell, SPS's Regional Vice President of Regulatory and Pricing, and Jaren Taylor of Vinson & Elkins will appear on behalf of SPS at the June 20, 2025, open meeting to present and answer questions regarding SPS's system resiliency plan.

We appreciate the opportunity to present before the Commissioners and discuss SPS's system resiliency plan. Please contact me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads 'Stephanie G. Houle'.

Stephanie G. Houle
Lead Assistant General Counsel
Xcel Energy Services Inc.
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214.793.6168

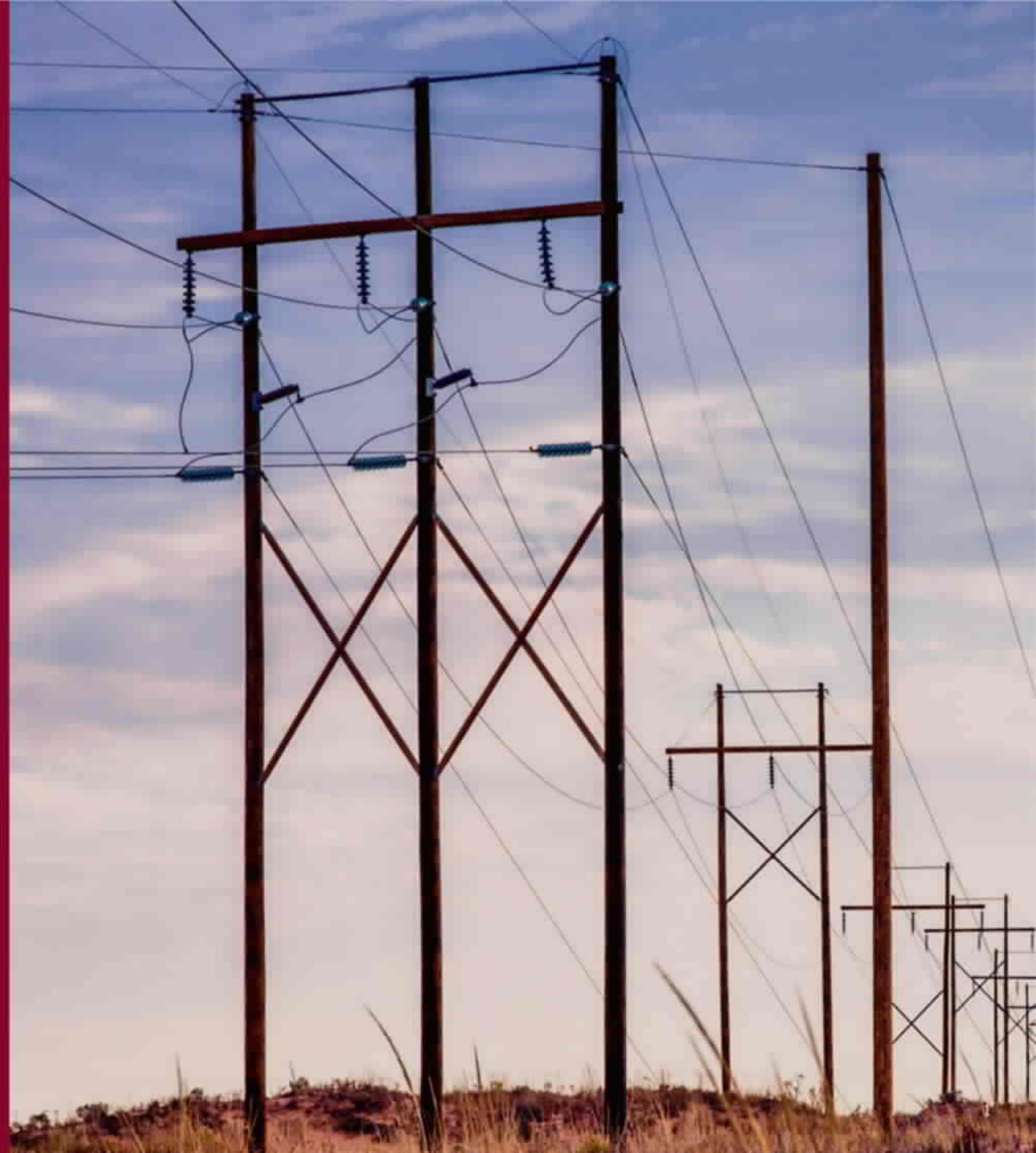


SOUTHWESTERN PUBLIC SERVICE COMPANY SYSTEM RESILIENCY PLAN

June 20, 2025



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System Resiliency Plan | EXECUTIVE SUMMARY

Quantified Benefits

SPS SRP 2025					
Measure	Total Estimated Spend	Capital Investment	O&M	Average BCR	% CMI Improvement
Distribution Overhead Hardening	\$247.1M	\$247.1M	\$ –	4.7	57%
Distribution System Protection Modernization – Mainline Automation	\$90.1M	\$90.1M	\$ –	4.2	37%
Distribution System Protection Modernization – Lateral Reclosing	\$2.1M	\$2.1M	\$ –	1.8	21%
Communication Modernization ¹	\$112.7M	\$112.7M	\$ –	N/A	N/A
Wildfire Mitigation ²	\$36.6M	\$19.8M	\$16.8M	N/A	N/A
Total	\$488.6M	\$471.8M	\$16.8M	3.4³	N/A

¹ Communication Modernization enables the full effectiveness of the Mainline Automated Reclosing Deployment program. The combined BCR for Communication Modernization and Mainline Automated Reclosing Deployment is 1.8.

² 1898 & Co. did not perform a benefit-cost analysis or otherwise evaluate the Wildfire Mitigation measure.

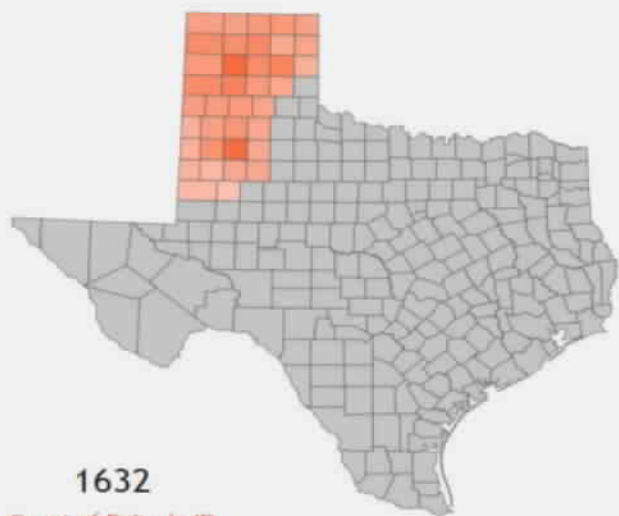
³ Represents the average BCR value for all measures with quantified benefits.



System Resiliency Plan | WEATHER-BASED RESILIENCY RISKS

1898 & Co. Analysis of Weather-Based Resiliency Events

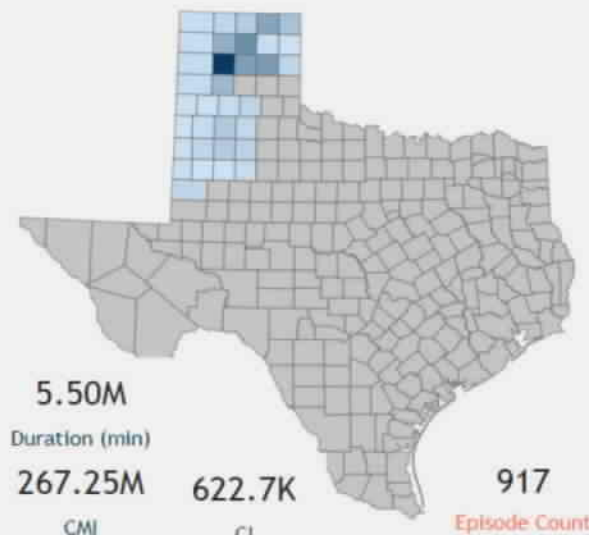
NOAA Storm Location



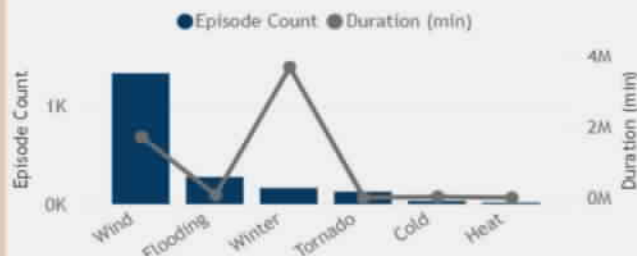
Storm Classification



Outage with NOAA Storm



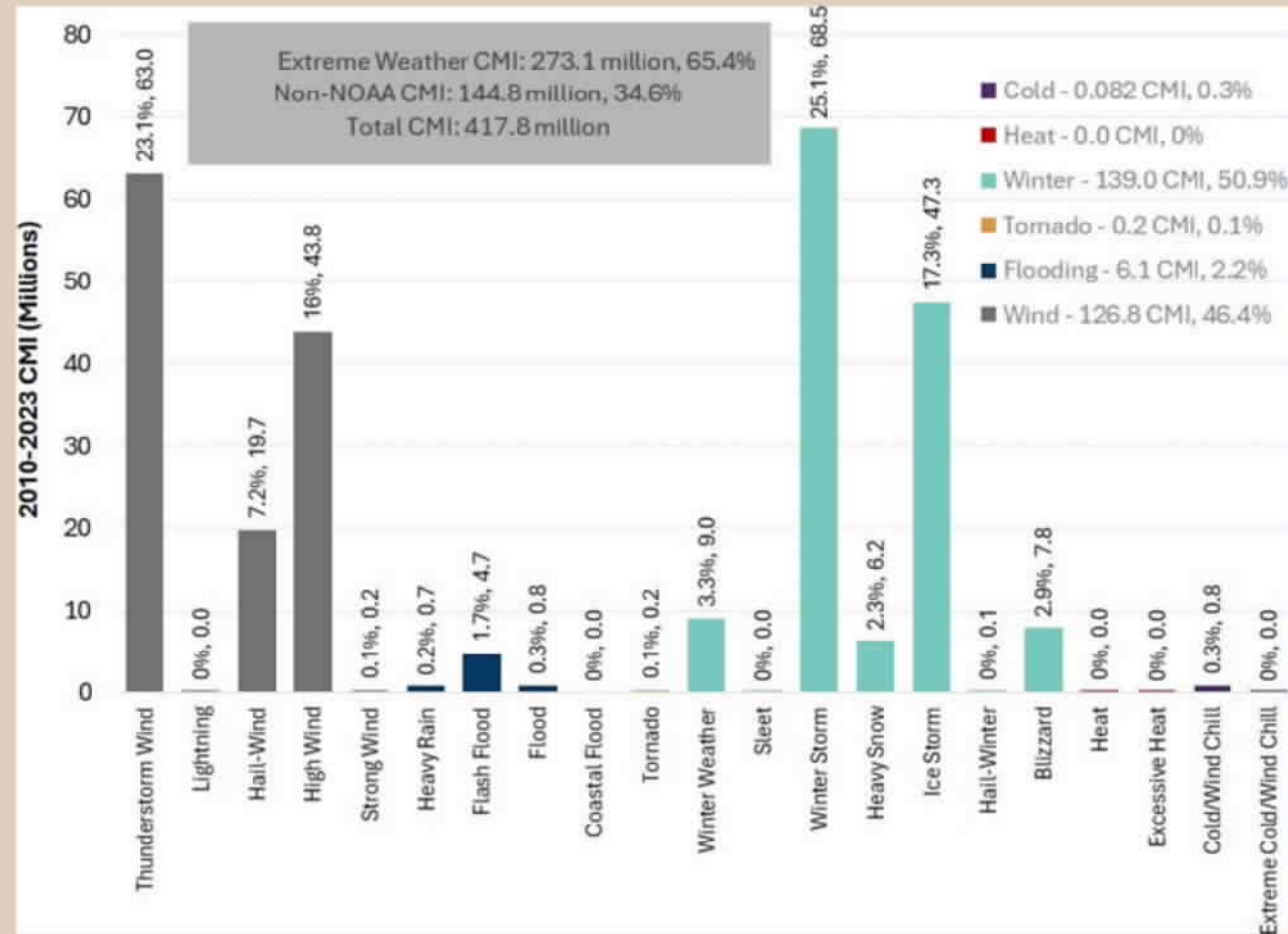
Outage Storm by NOAA Classification



- 1898 & Co. analyzed the weather-based resiliency events that impact SPS's service area.
- Weather-based resilience events in the SRP fall into 6 NOAA-defined categories: Wind, Flooding, Winter, Tornado, Cold, Heat
- 1,632 weather-based resiliency events were recorded in counties served by SPS between 2010 and 2023. 917 of those events resulted in customer outages.
- Wind events are the most frequent, while winter events have the greatest per-event outage impact.

System Resiliency Plan | WEATHER-BASED RESILIENCY RISKS

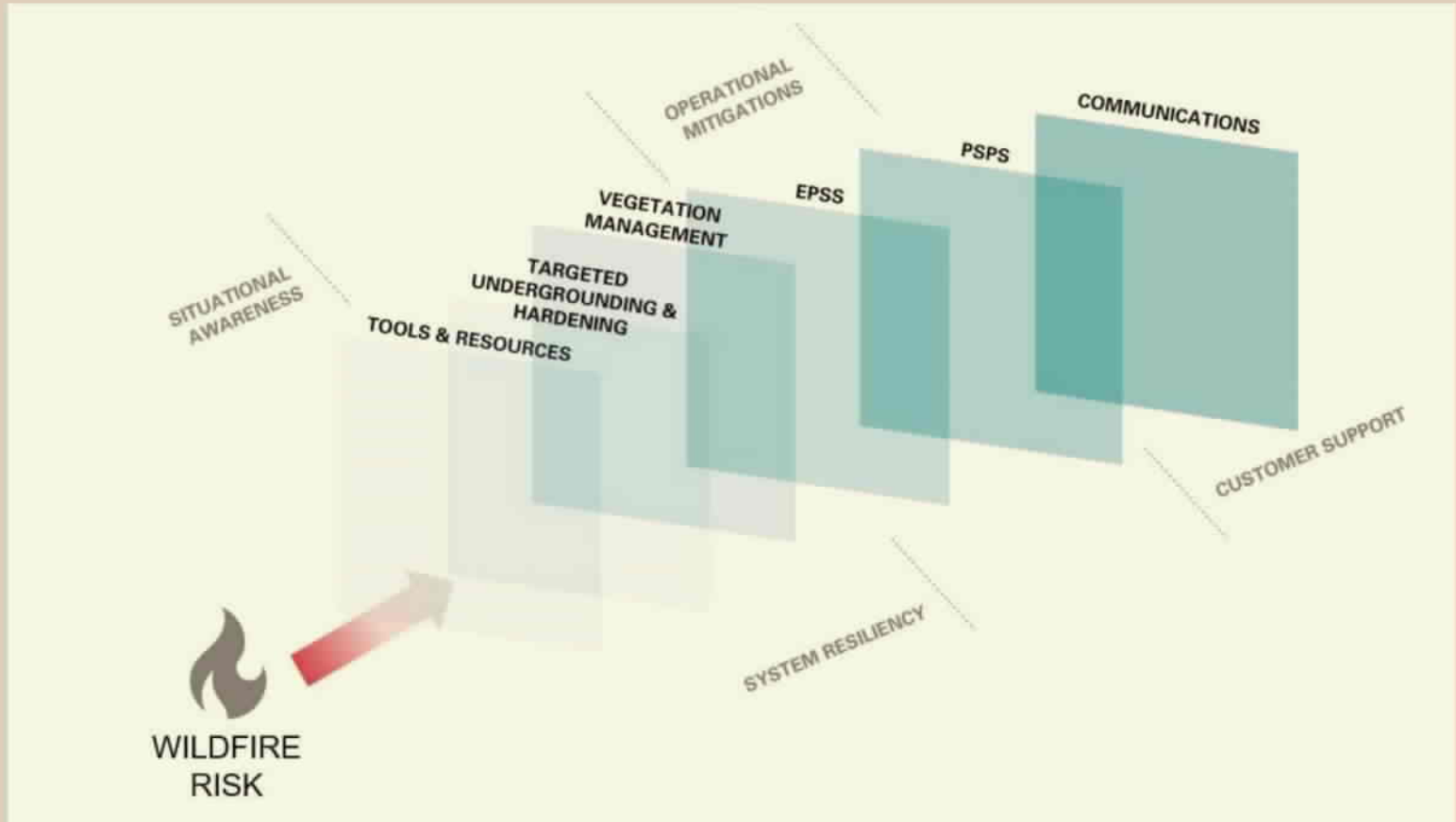
1898 & Co. Analysis of Weather-Based Resiliency Events



- 1898 & Co. mapped historical weather-based resiliency events to outages on the SPS system.
- Weather-based resiliency events accounted for 273.1 million CMI—65.4% of all CMI on the SPS system—between 2010 and 2023.
- Weather-based resiliency events were responsible for 273.1 million CMI during that period.
- Wind and Winter events accounted for 97.3% of all CMI associated with a weather-based resiliency event on the SPS system.

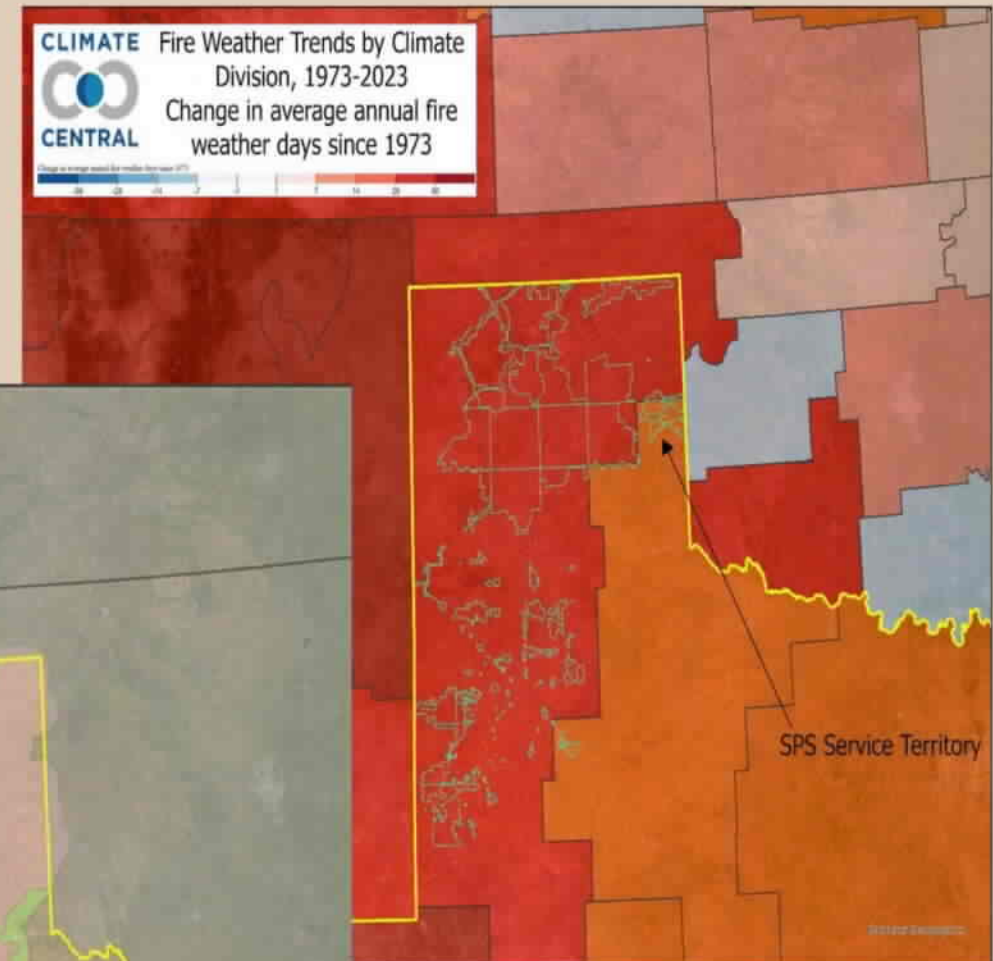
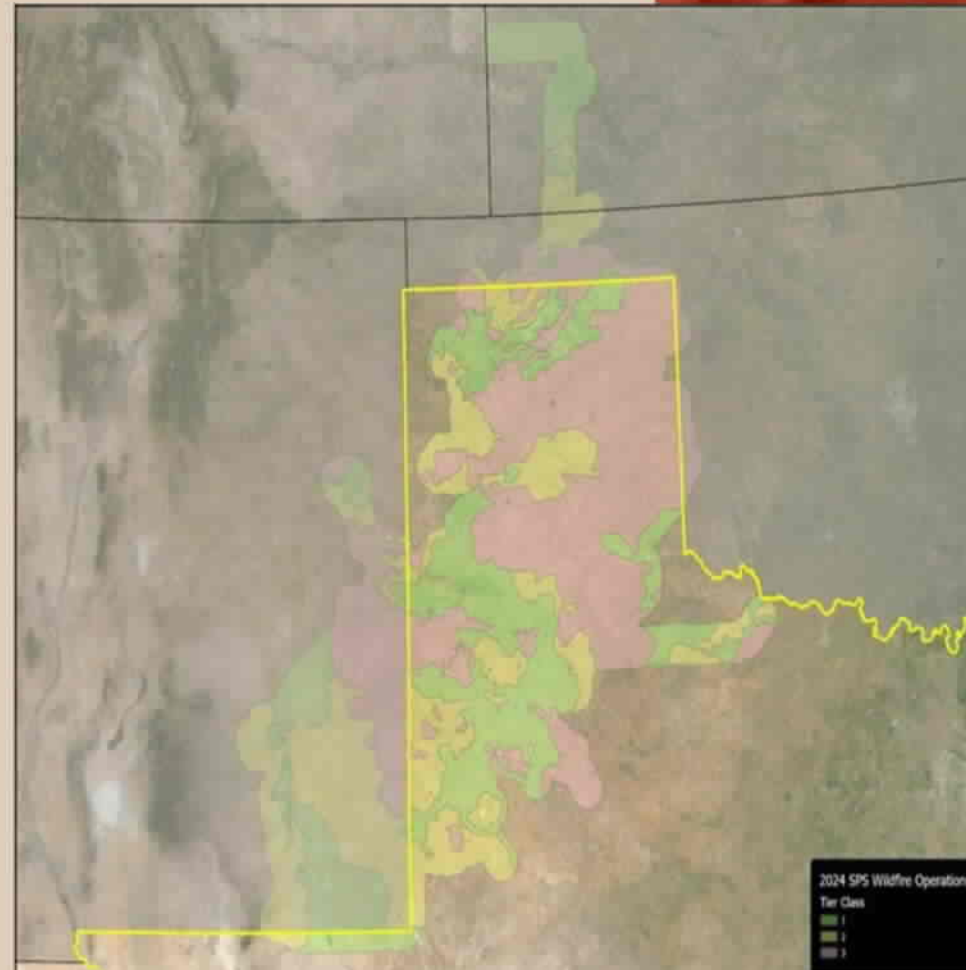
MITIGATION

Layers of Defense



System Resiliency Plan | WILDFIRE RISK

- Weather changes and other factors have increased wildfire conditions across Texas over the last 50 years. SPS's service area is almost entirely in the part of Texas that has experienced this increase.
- Increase in fire-weather days over the last 50 years:
 - 34 day increase in the High Plains
 - 20 day increase in the Rolling Plains
- Testimony of EDM's Ryan Brockbank demonstrates that improved situational awareness, grid hardening, and other proposed activities are consistent with leading utility practice and regulator expectations.



System Resiliency Plan | WILDFIRE RISK

Wildfire Mitigation

WF Situational Awareness

- Wildfire risk maps
- Weather stations
- Weather & Fire Science Modeling
- Pano AI cameras

WF Physical Mitigation

- Defensible Space Around Poles
- Wood substation conversion
- Transmission wildfire detailed inspections

Weather-based Resiliency

Distribution Overhead Hardening

- Pole replacements/installations
- Pole trussing
- Conductor replacements
- Line transformer replacements
- Wildfire pole wraps
- Expulsion fuse replacements
- Wildfire arrestor replacement

Distribution System Protection Modernization

- Communications-enabled sectionalizing reclosers and tie reclosers on mainline
- Fault indicators
- Communications-enabled substation breakers and relays
- Install non-expulsion fuses on taps
- Implement EPSS
- Replace lateral fuses with reclosers

Communication Modernization

- Private cellular (pLTE) network
- OPGW
- Substation RTUs



RESILIENCY MEASURES

Distribution Overhead Hardening
Distribution System Protection Modernization
Communication Modernization



System Resiliency Plan | DISTRIBUTION OVERHEAD HARDENING

Measure Description: Rebuild overhead distribution lines to highest hardening standard under the NESC (Grade B construction) by replacing/reinforcing aging poles, conductors, and transformers. Wildfire-specific mitigation activities in areas of heightened wildfire risk.

Resiliency Events Mitigated: Wind, Flood, Tornado, Winter, Heat, Cold, Wildfire

Total Estimated Cost: \$247.1M

Evidence of Effectiveness and Expected Benefits:

- Average BCR of 4.7 for projects included in the SRP and minimum BCR of 3.25
- Estimated 57% reduction in CMI and 76% reduction in restoration costs

Estimated Scope of Work	
Activity	Count
Pole Replacements and Installations	10,494 Poles Replaced
Pole Installations (Long Span Length Mitigation)	5,151 Poles Installed
Pole Trussing	1,672 Trusses
Primary Conductor Replacements	761.2 Miles
Open Wire Secondary Replacements	5.4 Miles
Line Transformer Replacements	486 Transformers
Pole Wraps	14,264 Wraps
Wildfire Transformer Fuse Replacements	452 Fuses
Non-Expulsion Fuse Replacements	173 Arrestors

System Resiliency Plan | DISTRIBUTION SYSTEM PROTECTION MODERNIZATION

Measure Description: Install reclosers and communications equipment on mainline feeders; upgrade substation breakers and relays to support EPSS, sectionalization, load transfer, and remote monitoring/control. Replace lateral fuses with reclosers. In wildfire-prone areas implement fault indicators, EPSS upgrades and wildfire fuse replacements.

Resiliency Events Mitigated: Wind, Flood, Tornado, Winter, Heat, Cold, Wildfire

Total Estimated Cost: \$92.3M

- Mainline Automated Reclosing Deployment - \$90.1M
- Lateral Reclosing Deployment - \$2.1M

Evidence of Effectiveness and Expected Benefits:

- Mainline Program – Avg. BCR 4.2 (min 0.9); 37% CMI reduction; 68% restoration cost reduction
- Lateral Program – Avg. BCR 1.8 (min 0.9); 21% CMI reduction; 100% nuisance outage restoration cost reduction

Estimated Scope of Work	
Activity	Count
Sectionalizing Recloser Installations	402 Reclosers
Sectionalizing Recloser Replacements	53 Reclosers
Tie Recloser Installations	226 Reclosers
Existing Recloser Communication Installations	28 Communication Installs
Substation Relay Panel Replacements	65 Relays Replaced
Substation Relay Panel Reconfigurations	86 Relays Reconfigured
Substation Breaker Replacements	16 Breakers
Fault Indicator Installations	963 Fault Indicators
EPSS Feeder Upgrades	151 Feeders
Wildfire Fuse Replacements	2,567 Fuses
Lateral Recloser Installation	62 Lateral Reclosers



System Resiliency Plan | COMMUNICATION MODERNIZATION

Measure Description: Build out SPS's private communications network by installing 49 private cellular (pLTE) towers, 83 miles of optical ground wire and 4 substation remote terminal units; migrates SPS's OT communications to the private network. Reduce SPS's reliance on public cellular networks which do not cover vast stretches of SPS's service area.

Resiliency Events Mitigated: Wind, Flood, Tornado, Winter, Heat, Cold, Wildfire, Cybersecurity

Total Estimated Cost: \$112.68M

Evidence of Effectiveness and Expected Benefits:

- The Communication Modernization measure is required to enable EPSS, sectionalization, load transfer, and remote monitoring under the Mainline Automated Reclosing Deployment program.
- 1898 & Co. modeled the costs and quantified benefits for the Communication Modernization measure and Mainline Automated Reclosing Deployment program together, calculating a combined BCR of 1.8.
- SPS will migrate OT communications to the network and protect them with SPS's robust security framework. This will protect SPS's OT communications from recent, well-documented cyber-attacks on public cellular networks (e.g., Salt Typhoon) that resulted in user communications being intercepted and altered.

Estimated Scope of Work	
PLTE Towers	49
OPGW Line Miles	83
RTU Installations	4
OPGW Terminations	6



System Resiliency Plan | WILDFIRE MITIGATION

Measure Description: Provides greater situational awareness of wildfire risks and mitigates potential ignitions and other risks posed by wildfires. In developing this measure, SPS engaged with EDM to assess wildfire risks, develop mitigation programs, and conduct an independent review of the proposed programs under this measure.

Total Estimated Cost: \$36.6M

Measure Programs:

- **Wildfire Situational Awareness** - Wildfire Risk Maps, Enhanced Meteorology Capabilities, Weather and Fire Science Modeling, and Artificial Intelligence Cameras.
 - \$17.8M capital investment
 - \$2.3M O&M
- **Wildfire Physical Mitigation** - Defensible Space Around Poles (“DSAP”), wood substation conversion, and transmission wildfire detailed inspection.
 - \$1.9M capital investment
 - \$14.5M O&M

Evidence of Effectiveness and Expected Benefits:

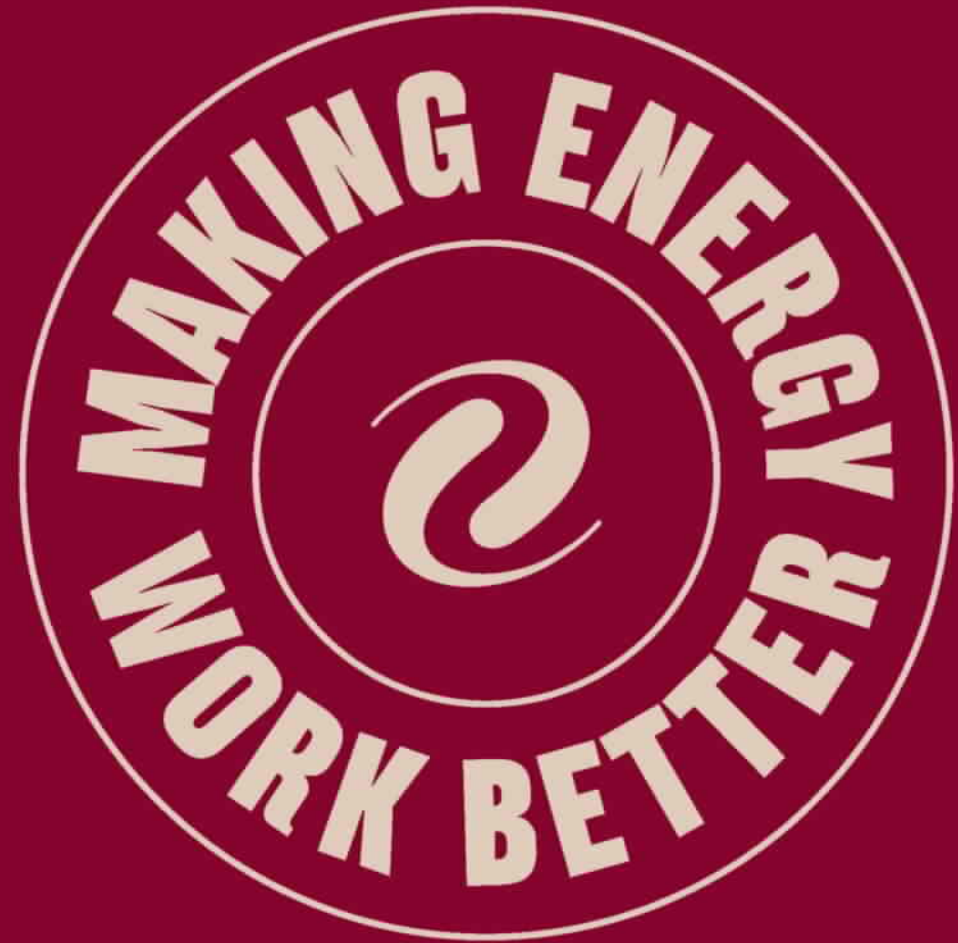
- The Wildfire Mitigation measure will reduce the frequency and duration of customer outages caused by wildfires, reducing restoration costs, and improving overall service reliability for customers. SPS engaged EDM to assist in the development of the SRP and evaluate SPS’s Wildfire Mitigation investments.
- EDM concluded that the programs and activities in the Wildfire Mitigation measure are consistent with leading-utility practices.

Estimated Scope of Work	
Program	Activity Count
Enhanced Meteorology Capabilities	110 Weather stations installed in Tiers 2 & 3
Weather and Fire Science Modeling	Technosylva: Fire Sight & Rave Software in 2025
AI Cameras	79 Pano AI cameras installed in Tiers 2 & 3
Wildfire Tier Maps	Updated Risk Map in 2027
VM Defensible Space Program	Annual Pole Clearing: Tier 3: 5,128 Poles Tier 2: 6,963 Poles
Wood Substation Conversion	4 Substations (Follett, Higgins, Kerrick, Magnolia)
Transmission WF Inspection	Tier 3: Annual Patrols Tier 2: Patrolled every two years

System Resiliency Plan | METRICS FOR EVALUATING EFFECTIVENESS

Metrics for Evaluating Effectiveness					Metrics for Evaluating Effectiveness				
Metric	Distribution Overhead Hardening	Distribution System Protection Modernization	Communication Modernization	Wildfire Mitigation	Metric	Distribution Overhead Hardening	Distribution System Protection Modernization	Communication Modernization	Wildfire Mitigation
Rolling 5-Year Average MED SAIDI	X	X	X		Units Completed in DSAP				X
Rolling 5-Year Average MED SAIFI	X	X	X		Transmission Inspections				X
Storm Restoration Duration	X	X	X		AI Camera Fire Detections				X
Average Hardened Protection Zone (AHPZ) CMI vs Average Protection Zone (APZ) CMI Comparison by County	X				Wildfire Ignitions Associated with Overhead Electric Power Lines				X
					Downed Transmission and Distribution Wires				X
AHPZ Percentage Improvement	X				Wildfire Reports from National Interagency Fire Center				X
RAN Tower Completion			X		On-Cycle Vegetation Management Activities				X
End Device Connectivity			X						

QUESTIONS?



[xcelenergy.com](https://www.xcelenergy.com)