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APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY FOR APPROVAL OF ITS TRANSMISSION AND DISTRIBUTION SYSTEM RESILIENCY PLAN	**§**	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

SOUTHWESTERN PUBLIC SERVICE COMPANY'S RESPONSE TO TEXAS INDUSTRIAL ENERGY CONSUMERS SECOND REQUEST FOR INFORMATION QUESTION NOS. 2-1 THROUGH 2-41

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EXHIBITS ATTACHED:

Exhibit SPS-TIEC 2-5 (*filename:* SPS-TIEC 2-5.xlsx) 54
Exhibit SPS-TIEC 2-27 (*filename:* SPS-TIEC 2-27.xlsx) 55

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APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY FOR APPROVAL OF ITS TRANSMISSION AND DISTRIBUTION SYSTEM RESILIENCY PLAN	**§**	**BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS**

SOUTHWESTERN PUBLIC SERVICE COMPANY'S RESPONSE TO TEXAS INDUSTRIAL ENERGY CONSUMERS' SECOND REQUEST FOR INFORMATION QUESTION NOS. 2-1 THROUGH 2-41

Southwestern Public Service Company ("SPS") files this response to the Texas Industrial Energy Consumers ("TIEC's") Second Request for Information, Question Nos. 2-1 through 2-41. In accordance with the Commission's *Second Order Suspending Rules* entered in Project No. 50664, SPS has provided notice by email to all parties that SPS's Responses to TIEC's Second Request for Information and accompanying exhibits (excluding voluminous and exhibits provided pursuant to the protective order, if any) have been filed with the Commission and are available for download from the Commission's Interchange website. In addition, SPS has posted SPS's Responses to TIEC's Second Request for Information and all accompanying exhibits (including Voluminous, Confidential and Highly Sensitive exhibits, if any) on SPS's file sharing platform. SPS's notice of service includes a link to SPS's file sharing platform.

I. WRITTEN RESPONSES

SPS's written responses to TIEC's Second Request for Information are attached and incorporated by reference. Each response is stated on or attached to a separate page on which the request has been restated. SPS's responses are made in the spirit of cooperation without waiving SPS's right to contest the admissibility of any of these matters at hearing. In accordance with 16 Tex. Admin. Code ("TAC") § 22.144(c)(2)(A), each response lists the preparer or person under whose direct supervision the response was prepared and any sponsoring witness. When SPS

provides certain information sought by the request while objecting to the provision of other information, it does so without prejudice to its objection in the interests of narrowing discovery disputes under 16 TAC § 22.144(d)(5). Pursuant to 16 TAC § 22.144(c)(2)(F), SPS stipulates that its responses may be treated by all parties as if they were made under oath.

II. INSPECTIONS

If responsive documents are more than 100 pages but less than eight linear feet in length, the response will indicate that the attachment is voluminous ("(V)") and, pursuant to 16 TAC § 22.144(h)(2), the exhibit will be made available for inspection at SPS's voluminous room at 812 San Antonio Street, Suite 310, Austin, Texas 78701; telephone number (737) 770-3412. Voluminous exhibits will also be provided on SPS's file sharing platform.

If a response or the responsive documents are provided pursuant to the protective order in this docket, the response will indicate that it or the attachment is either confidential ("CONF") or highly Sensitive ("HS") as appropriate under the protective order. Access to Confidential and Highly Sensitive materials will be available on SPS's file sharing platform to all parties that have signed and filed the certification under the protective order entered in this docket. Confidential and Highly Sensitive responsive documents will also be made available for inspection at SPS's voluminous room, unless they form a part of a response that exceeds eight linear feet in length; then they will be available at their usual repository in accordance with the following paragraph. Please call in advance for an appointment to ensure that there is sufficient space to accommodate your inspection.

If responsive documents exceed eight linear feet in length, the response will indicate that the attachment is subject to the FREIGHT CAR DOCTRINE, and, pursuant to 16 TAC § 22.144(h)(3), the attachment will be available for inspection at its usual repository, SPS's offices in Amarillo, Texas, unless otherwise indicated. SPS requests that parties wishing to inspect this material provide at least 48-hour notice of their intent by contacting Will DuBois at Wilkinson

Barker Knauer, LLP, 812 San Antonio St., Suite 310, Austin, Texas 78701; telephone number (737) 770-3412; facsimile transmission number (512) 236-6935; email address wdubois@wbklaw.com. Inspections will be scheduled to accommodate all requests with as little inconvenience to the requesting party and to SPS's operations as possible.

Respectfully submitted,

/s/ Stephanie G. Houle
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III. RESPONSES

QUESTION NO. TIEC 2-1:

For each measure listed in Table 1 of the Application, please provide, in "live" Excel format, the full project list evaluated by 1898, including the projects selected for this SRP, as well as those not selected for this SRP. Each individual project listed should include (1) an identifier as to whether or not it is in the proposed SRP; (2) the capital cost; (3) O&M expense; (4) restoration cost benefits; (5) CMI benefits; (6) $CMI benefits; and (7) the benefit-cost ratio (BCR).

RESPONSE:

Please see SPS's response to TIEC RFI Set 1, Question No. 1. The following files produced with that response include the information for items 1-2 and 4-7 in this request:

- TIEC 1-1 Backbone Reclosing.xlsx
- TIEC 1-1 Lateral Reclosing.xlsx
- TIEC 1-1 Distribution Overhead Hardening – Customer Cap.xlsx

Each attachment includes the following fields:

1. "In Plan": TRUE/FALSE designation to define if the project is included in the SRP
2. "Project Cost": capital cost of the project in 2024 $
3. "Restoration Benefit Dollars": restoration cost benefits
4. "Avoided CMI": CMI Benefits
5. "Avoided CMI Dollars": $CMI Benefits
6. "BCR": Benefit-cost ratio

No O&M expenses are associated with the projects evaluated by 1898 & Co.

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-2:

Please provide the SPS's data from the past five years, by year, for the following metrics: (1) customer minutes interrupted (CMI), (2) system restoration cost (SRC), (3) SAIFI, and (4) SAIDI. If SPS has additional published metrics that demonstrate customer benefits regarding reliability or resiliency, please also include data for those metrics from the past five years, by year.

RESPONSE:

See Confidential Exhibit SPS-TIEC 2-2 for the past five years of the following metrics: customer minutes interrupted ("CMI"), SAIFI, SAIDI, and CAIDI.

SPS does not track system restoration costs as requested.

Preparers: Michael Renman
Sponsor: Casey S. Meeks

The following requests pertain to SPS's System Resiliency Plan (Att. A).

QUESTION NO. TIEC 2-3:

Referring to page 12:

a. Please define "nuisance events."
b. Are nuisance events a resiliency or non-resiliency event?
c. Are nuisance events included in the BCR calculations for the Lateral Recloser program?

RESPONSE:

a. A nuisance event, or "nuisance outage," is an outage caused by a temporary fault that is not associated with an equipment failure. The 1898 & Co. report describes nuisance events at Bates pp. 214-215 and 258.

b. Nuisance events are not "resiliency" or "non-resiliency" events. Nuisance outages are often caused by resiliency events, but they can also be caused by non-resiliency events (e.g., if animals or vegetation make contact with conductor).

c. Yes. Please see the 1898 & Co. report at Section 4.2.2.3 (Bates 214-215) and Section 6.2.1 (Bates 258).

Preparer: Jason De Stigter
Sponsors: Jason De Stigter, Brianne Jole

QUESTION NO. TIEC 2-4:

Referring to page 14 and Table 2:

a. For each hardening and protection modernization metric, please explain in detail how the metric will specifically show how the impacts from severe weather events over time are lessened due to these measures.
b. For each wildfire mitigation metric, please explain in detail how the metric will capture how SPS's investments are reducing the impact of wildfires.

RESPONSE:

a. Each of the metrics are detailed below.

- The Underperforming Area Count metric will measure resiliency improvements in underperforming areas of the SPS System. As these susceptible areas of the system are addressed, fewer should reach the underperforming threshold and thereby lower the count over time. This will occur as a result of outages prevented or shortened by the Distribution Overhead Hardening measure and outages that are reduced in extent or duration by the Distribution System Protection Modernization measure.
- The Rolling 10-Year Average SAIDI metric will measure the overall system availability including resiliency events. This number should begin to decrease as the Distribution Overhead Hardening and Distribution System Protection Modernization measures are implemented. This will occur as a result of outages prevented or shortened by the Distribution Overhead Hardening measure and outages that are reduced in extent or duration by the Distribution System Protection Modernization measure.
- The Storm Restoration Duration metric will measure improvements in SPS's ability to restore service after major events. Hardened portions of the distribution system should incur less damage from resiliency events, which should translate into less labor and time needed to perform overall system restoration from resiliency events. The Distribution System Protection Modernization measure will limit the extent and duration of outages and as a result should reduce the time required for damage assessment patrols in system restoration.
- The Average Hardened Protection Zone ("AHPZ") CI vs Average Protection Zone ("APZ") CI Comparison by County metric will measure customer interruptions for protection zones that have been hardened compared with non-hardened protection zones in the same county that likely experienced similar resiliency event impacts. The Distribution Overhead Hardening measure should reduce the occurrence of outages during resiliency events and result in improved (lower) customer interruption results.
- The AHPZ CI Percentage Improvement metric will use the inputs from the prior metric but will estimate the overall performance improvement of hardened protection zones rather than a county level comparison. The Distribution Overhead Hardening measure should reduce the occurrence of outages during resiliency events and result in improved (lower) customer interruption results. Once there is a sufficient sample size to overcome event distribution differences, improvements should be reflected in a

negative percentage value that estimates a percent of outages avoided for hardened lines.

b. Please see page 20 of the Direct Testimony of Anne Sherwood for an explanation of how the "Units Completed in Defensible Space Around Poles" and "Transmission Inspections" metrics evaluate the effectiveness of the Wildfire Mitigation measure in the System Resiliency Plan.

Preparers: Michael Renman, Carolyn A. Lee, Cheriese Marczyk
Sponsors: Casey Meeks, Anne Sherwood

QUESTION NO. TIEC 2-5:

Referring to page 38, please provide a list of each project and its associated capital investment over the last 5 years under the Advanced Capital Projects Initiative. In responding, please identify which projects are hardening and transmission related.

RESPONSE:

The Advanced Capital Projects Initiative was formalized in 2021 to standardize the intake of projects that previously were completed following a local review for Distribution specific projects; none of the projects are Transmission related. The list in Exhibit SPS-TIEC 2-5 is not all inclusive of projects that SPS completes to support our communities but captures the projects associated with the Advanced Capital Projects Initiative.

Preparers: Eran Moore, Brianne Jole
Sponsor: Casey Meeks

QUESTION NO. TIEC 2-6:

Referring to page 54, regarding enhanced powerline safety settings (EPSS):

a. Please explain how 1898 & Co. accounted for the increased interruptions from more sensitive settings as well as disabling auto-reclosing in calculating the BCR.
b. How many days per year does SPS expect to disable auto-reclosing due to high fire risk?

RESPONSE:

a. 1898 & Co. did not account for the more sensitive settings associated with EPSS/disabling auto-reclosing. The quantified benefits and BCR value for the Mainline Automated Reclosing Deployment program only include mitigated outages resulting from equipment failures. They do not include benefits from avoiding nuisance outages on circuit mainlines. Enabling EPSS/disabling auto-reclosing would only affect the benefits associated with avoided nuisance outages. Since those benefits are not included in the BCR calculation, 1898 & Co. did not need to account for the more sensitive settings associated with EPSS/disabling auto-reclosing
b. SPS does not currently have an estimate.

Preparers: Jason De Stigter, Jack Perkins, Carolyn A. Lee, Cheriese Marczyk
Sponsors: Jason De Stigter, Anne Sherwood

QUESTION NO. TIEC 2-7:

Referring to page 59:

a. Please describe a wildfire fault indicator and how it functions.

b. Please provide examples of how a wildfire fault indicator helps identify faulted segments

c. Please describe what "alternative operating of the system" entails and how wildfire fault indicators would function in such scenarios.

d. Please describe the "wildfire conditions" under which the alternative operating of the system would apply.

RESPONSE:

a. A wildfire fault indicator is functionally equivalent to any commercially available fault indicator but in this context comes from the manufacturer with settings that detect faults that are cleared from the system faster than traditional protection schemes.

b. Wildfire fault indicators can provide field crews with a positive indication that a fault was detected downstream during patrol. They would be placed at key points along a feeder, such as locations visible from roadways or where the feeder bifurcates, to direct field personnel to the approximate location where the fault occurred.

c. "Alternative operating of the system" refers to implementation of Enhanced Powerline Safety Settings ("EPSS"). Wildfire fault indicators shorten outage times by indicating a specific, shorter length of line for review. Accordingly, SPS will be able to hone in on where the fault actually occurred more quickly, improving response and restoration times.

d. SPS defines "wildfire conditions," or the criteria for implementation of EPSS, as follows:

- DTN Energy Event Index ("EEI") of "3" or "4"; or
- Fuels Assessment of "Moderate" or higher, AND wind gusts exceeding 25 mph, AND relative humidity less than 20%.

Please note that the EEI is a categorical risk-based forecast for impactful weather hazards, including wind speed, wind gusts, lightning, heavy rains, snow, ice accretion, and wildfires. It provides forecasts three or five days out, which are updated once or twice each day, and is produced by a weather vendor known as DTN.

Preparers: Tyler McGrath, Carolyn A. Lee, Cheriese Marczyk
Sponsor: Anne Sherwood

QUESTION NO. TIEC 2-8:

Referring to page 61 and Table 11, please explain the rationale for proposing a 0.9 minimum BCR for the Lateral Reclosing Deployment program when it does not provide wildfire mitigation benefit.

RESPONSE:

Please see the 1898 & Co. Report at Bates 149 and SPS's response to TIEC RFI Set 1, Question No. 5, for an explanation of considerations in addition to wildfire mitigation benefits that justify projects with a 0.9 BCR. Specifically, the Lateral Reclosing Deployment program provides general safety benefits, improved overall reliability, and improved service quality to areas of lower performance.

Preparers: Jason De Stigter, Jack Perkins
Sponsors: Jason De Stigter, Brianne Jole

QUESTION NO. TIEC 2-9:

Referring to page 76, please elaborate on why installation of optical ground wire (OPGW) requires transmission outages.

RESPONSE:

Installing OPGW requires replacing the static ground wire conductor that is installed above the phase conductors on transmission lines. As a standard practice, SPS does not perform this type of work without taking an outage.

Preparer: Brian Henke
Sponsor: Wendall Reimer

QUESTION NO. TIEC 2-10:

Referring to page 79, please explain the rationale for not performing a BCR analysis of the transmission switch sectionalization program.

RESPONSE:

The highly networked nature of the transmission system makes it more difficult, costly, and time-consuming to model sectionalization benefits for transmission facilities. Outage data for transmission lines is also more difficult to link to customer outages. Further, the benefits of installing transmission switches vary by switch location, are heavily dependent on system conditions and the cause of the outage, and have significant safety benefits.

Preparer: Corby White
Sponsor: Brianne Jole

QUESTION NO. TIEC 2-11:

Referring to pages 79-81 and transmission switches:

a. Will the transmission switches proposed for installation in this SRP be locally operated or remotely operated?
b. Does the current situation SPS is seeking to resolve always involve manual energized work, or in some cases are there existing locally operated switches?
c. Will the work require new yards or expansions of existing yards?
d. How many circuits are part of the scope of work?
e. How many physical locations will have new switches?
f. What are the transmission voltage(s) for this work?
g. Does the work require any circuit extensions? If yes, please explain.
h. What studies will SPS be required to perform before this work can be executed?
i. What approvals will SPS be required to receive before this work can be executed?
j. How many similar transmission switches does SPS currently operate?
k. Please provide in "live" Excel format the O&M expense for the past 5 years for the existing transmission switches.
l. What is the estimated annual ongoing O&M expense to operate and maintain the transmission switches being requested in this SRP?

RESPONSE:

a. The transmission switches proposed for installation in this SRP will be locally operated.

b. At the locations where SPS has proposed to install new switches, manual energized work would be required today.

c. No.

d. The Installation of Transmission Switches program will include six circuits in its scope of work.

e. SPS will install transmission switches on 17 different structures to provide sectionalization for ten transmission taps or substations.

f. All of the transmission switches will be installed on 69 kV circuits.

g. No.

h. None.

i. Any outages necessary to complete an installation will require approval from the Southwest Power Pool.

j. SPS currently operates approximately 500 transmission line switches, of which 230 are 69 kV.

k. Manually operated Transmission line switches, like those proposed in the Plan, have little to no maintenance activities.

l. None.

Preparers: Corby White, Cory Wood
Sponsor: Brianne Jole

QUESTION NO. TIEC 2-12:

Referring to page 81 and mobile substations:

a. Please provide a list of SPS's existing inventory of mobile substations, including size/voltage/configuration details, along with asset age.
b. Please provide in "live" Excel format the O&M expense for the past 5 years for the existing mobile substation fleet.
c. What is the estimated annual ongoing O&M expense to operate and maintain the mobile substations being requested in this SRP?
d. How are mobile substations currently functionalized?

RESPONSE:

a. See below for the list of mobile substations/equipment currently in the SPS fleet, including mobile substations currently on order.

SPS MOBILE SUBSTATIONS

Unit	MVA	HV Ratings (kV)	LV Ratings (kV)	Manufc. Year	Age
Z501	20	117D x 67D	34.5Y x 24.94Y x 12.47Y x 4.16Y	2016	9
Z502	20	115/69	23Y x 13.2Y	1979	46
Z503	10	67D x 34.5D x 23D	12.47Y x 7.2D x 4.16Y x 2.4D	1971	54
Z504	28	117D x 67D	34.5Y x 24.94Y x 12.47Y	2011	14
Z505	56	115	69	2014	11
Z506	28	117D x 67D	34.5Y x 24.94Y x 12.47Y	2012	13
Z509	20	117D x 67D	24.94Y x 12.47Y x 4.16Y	1992	33
Z512	28	117D x 69D	34.5Y x 24.94Y x 12.47Y	2019	6
Z513	28	117D x 69D	34.5Y x 24.94Y x 12.47Y	2020	5
Z514	30	138D x 115D x 69D	12.47Y	2015	10
Z515	14.4	67D x 34.5D x 23D	13.2Y x 4.16Y x 2.4D	2021	4
Z516	14.4	69 x 34.5 x 23	13.2Y x 4.16Y x 2.4D	2022	3
	20	117D x 69D	23Y x 13.2Y	2019	6

SPS MOBILE SUBSTATIONS - On Order

Unit	MVA	HV Ratings (kV)	LV Ratings (kV)	Manufc. Year	Age
	70	115	69	2025	0
	20	117D x 67D	24.94Y x 12.47Y	2025	0
	28	117D x 67D	34.5Y x 24.94Y x 12.47Y	2025	0

	28	117D x 67D	34.5Y x 24.94Y x 12.47Y	2025	0

SPS MOBILE EQUIPMENT

Unit	DESCRIPTION	HV Ratings (kV)	LV Ratings (kV)	Manufc. Year	Age
Z507	20 MVA Regulator Trailer	12.5Y	12.5Y	1992	33
Z511	115 kV Circuit Switcher	115Y	115Y	1992	33

b. SPS does not maintain this data in the requested format. The O&M expense for mobile substation equipment is $36 per month. For 15 mobile substations/equipment, that equates to $6480 per year in O&M costs.

c. See Table 16 in the SRP (Bates 103). All O&M costs reported for the Operational Flexibility measure relate to the Mobile Substation Equipment Procurement program. On-going O&M would be similar to existing units at $36 per month, per unit.

d. Unit Z505 is functionalized to transmission. All other mobile substations are functionalized to distribution. Because all units are stored in Amarillo, TX, all costs are functionalized to Texas and charged to New Mexico customers only if and when they are utilized in New Mexico.

Preparer: Joel Brown
Sponsor: Brianne Jole

QUESTION NO. TIEC 2-13:

Referring to page 95, what is the estimated annual ongoing O&M expense to operate and maintain the 110 weather stations being requested in this SRP?

RESPONSE:

The estimated annual ongoing O&M expense to operate and maintain the 110 weather stations requested in this SRP is $732 per station per year, or $80,520 per year for the 110 stations (not accounting for inflation).

Preparers: Carolyn A. Lee, Cheriese Marczyk
Sponsor: Anne Z. Sherwood

QUESTION NO. TIEC 2-14:

Referring to page 99:

a. Is SPS intending to continue the transmission inspections past the timeframe of the SRP (2028)? If yes, is the cost past 2028 included in this SRP? If no, please explain the benefit of increasing inspections through 2028 and then ceasing.

b. Is SPS intending to seek approval of its Tier 1 transmission inspections in a future SRP or another proceeding? If so, please provide the details of what SPS's proposal.

RESPONSE:

a. The increased cadence of the transmission inspection is expected to continue beyond 2028. The costs for those inspections were not included in the SRP. SPS will evaluate inspection plans to identify areas of opportunity or efficiencies, which may result in changes to patrol miles over time.

b. SPS is not seeking approval for lines classified as Tier 1 in the SRP filing. These are considered to be routine inspections and not incremental as required for SRP inclusion. Approval would be sought with other O&M programs through the rate case process.

Preparer: Patrick Kuretich
Sponsor: Anne Sherwood

QUESTION NO. TIEC 2-15:

Referring to pages 103-104:

a. Which specific program(s) proposed in this SRP will receive the GRIP funding offset?

b. Please confirm that SPS intends to use the entire $7.3 million in GRIP funding to offset costs in this SRP. If not confirmed, please explain which costs will be offset.

RESPONSE:

a. None. SPS received $3.024M in Federal funds from the GRIP program designated for Fire Spread modeling software, which was matched by SPS cost sharing in the amount of $4.327M. These funds were exhausted in 2024 on SPS's fire science modeling developed by Technosylva. The Situational Awareness and Physical Mitigation programs included in SPS's System Resiliency Plan ("SRP") under the Wildfire Mitigation measure are incremental to and build upon the fire science modeling that has been completed. SPS will file an errata correcting pages 103-104 of the SRP and the corresponding section of Anne Sherwood's direct testimony on this point.

b. Not confirmed; GRIP funding will not offset any costs in the SRP. As stated above, SPS received $3.024M in Federal GRIP funding designated for Fire Spread modeling software, and these funds were exhausted in 2024 on SPS's fire science modeling developed by Technosylva. SPS will file an errata correcting pages 103-104 of the SRP and the corresponding section of Anne Sherwood's direct testimony on this point.

Preparers: Carolyn A. Lee, Richard Lain
Sponsors: Brooke Trammell, Anne Sherwood

QUESTION NO. TIEC 2-16:

Referring to pages 105-107, for each proposed metric:

a. Please state whether the metric tracks customer benefits in reduced SRC or CMI. If yes, explain in detail how the metric uses SRC or CMI.
b. Please state whether the metric only tracks the benefits customers will experience during resiliency events (i.e., it does not include benefits from other types of events that are de minimis and/or ancillary). If affirmative, explain in detail how the metric is limited to resiliency events.
c. If the answer to subpart (a) or (b) for a proposed metric is no, please state whether the metric can be adapted or modified from what is presented in the SRP such that it meets the criteria of subpart (a) and (b). If affirmative, please explain in detail the potential modifications.

RESPONSE:

a. None of the proposed metrics track SRC benefits. The Rolling 10-Year Average SAIDI metric directly uses CMI in the calculation of performance results. SAIDI is total CMI divided by the total customers served. None of the other metrics track CMI benefits.

b. The Storm Restoration Duration metric tracks improvements only for Major Event Days as defined by IEEE 1366. Experience has shown Major Event Days to be closely correlated to resiliency events. The other metrics are not limited to resiliency events and will also include benefits from improvements during weather events below those thresholds.
c. Responses for each metric below:

    i. The Underperforming Area Count cannot incorporate subpart (a) and (b).

    ii. The Rolling 10-Year Average SAIDI metric could be modified to track only resiliency events by subtracting normalized SAIDI from Total SAIDI. That modification would leave only the outages associated with Major Event Days which can serve as a proxy for resiliency events.

    iii. The Storm Restoration Duration metric could be adapted to provide a SRC per storm event by replacing the duration term with a cost term. That would result in a metric addressing subpart (a) and (b).

    iv. The Average Hardened Protection Zone (AHPZ) CI vs Average Protection Zone (APZ) CI Comparison by County metric and AHPZ CI Percentage Improvement metric could in theory be modified to utilize CMI instead of CI. However, that change compromises the accuracy of the comparisons made by those metrics partly due to system restoration duration improvements that accrue to customers in non-hardened protection zones. The challenges of limiting these metrics to resiliency event benefits are detailed in the responses to TIEC RFI Set 2, Question Nos. 19 and 20.

Preparer: Michael Renman
Sponsor: Casey Meeks

QUESTION NO. TIEC 2-17:

Referring to pages 105-107, will any of SPS's proposed metrics:

a. Capture and report wildfire events caused by SPS, such as ignitions?

b. Capture and report wildfire events that impact SPS, such as fire-damaged poles or interrupted circuits in mitigating wildfire events?

c. If the answer is yes to subparts (a) and/or (b), please state each metric that meets the criteria of subpart (a) and/or (b) and explain how.

RESPONSE:

a. No.

b. Yes, the Transmission Inspections metric will include the number of high-priority defects identified and remediated, which may include defects associated with wildfire events.

c. Please see answer to part b.

Preparers: Carolyn A. Lee, Cheriese Marczyk
Sponsor: Anne Sherwood

QUESTION NO. TIEC 2-18:

Referring to page 106 and the Storm Restoration Duration metric:

a. Are Major Event Days categorized by resiliency event type similar to the categories used by 1898 & Co. in its analysis?
b. Can a Major Event Day include wildfire events?
c. Can this metric be calculated by resiliency event type using the same or similar categories to those used by 1898 in its analysis?
d. Can this metric be calculated by measure?
e. The math formula does not appear to require data that cannot be gathered in a wildfire event. As such, explain in detail why this metric cannot be expanded to include wildfire events.
f. Does SPS intend to report this metric in its first few years of annual reports during the first several years of investment (2025-2028)? If no, is there a limitation that prevents SPS from gathering or processing the data to make the calculation? If so, please explain the limitation and how that limitation is removed after the first several years.

RESPONSE:

a. No, Major Event Days are not categorized by type.

b. Wildfire events would be included as part of a Major Event Day if the total system outage durations meet the threshold. The events are not included, excluded, or categorized based on the initiating causes.

c. It is possible to report this metric by the broader resiliency event category. However, with a lower frequency of individual resiliency event categories, there may not be enough data points to make a meaningful comparison. Further subcategorization down to the event types used in the 1898 analysis is not possible since multiple types are often experienced as part of the same Major Event Day with a shared single restoration duration value.

d. No, it is not possible to calculate the attribution of storm restoration duration to individual measures.

e. The metric would include any wildfire event meeting the outage threshold for a Major Event Day. However, the restoration performance results are not expected to be significantly attributable to wildfire mitigation activities.

f. The metric can be provided in the first reports; however, the initial results will not provide useful indication of performance. This is a system level metric subject to significant variability of event intensities. A significant portion of system wide hardening needs to be completed before a system level trend can be distinguished from the 'noise' of natural variability.

Preparer: Michael Renman
Sponsor: Casey Meeks

QUESTION NO. TIEC 2-19:

Referring to page 106 and the Average Hardened Protection Zone (AHPZ) CI vs Average Protection Zone (APZ) CI Comparison by County (Hardened Only) metric:

a. Please explain the purpose and impact of the "(Hardened Only)" modifier in this metric.
b. Please define "CI," explain how it is calculated, and explain how it relates to storm restoration cost and/or customer minutes interrupted.
c. Can this calculation be limited to resiliency-related events? If not, explain in detail why this is not feasible.

RESPONSE:

a. The "(Hardened Only)" identifies that this metric only applies to and will only be reported for counties containing hardened protection zones.

b. CI is Customers Interrupted. It is defined as electric service interruptions with a duration greater than 5 minutes. It is related to CMI in that it measures service interruptions, but CI does not include an accrued duration.

c. It is possible to limit the calculation to resiliency-related events. However, these are infrequent by definition and often have concentrated impacts that limit the eligible data points and by extension the meaningfulness of the reporting. Analysis required to match outage events to corresponding NOAA weather event data on an ongoing basis would also increase expenses related to reporting. A version of the metric evaluating performance limited to Major Event Days as defined in IEEE standard 1366 would provide a similar view using existing standard reporting methods.

Preparer: Michael Renman
Sponsor: Casey Meeks

QUESTION NO. TIEC 2-20:

Referring to page 106 and the AHPZ CI Percentage Improvement metric:

a. Can this metric be calculated by resiliency event type using the same or similar categories as those used by 1898 & Co. in its analysis?

b. Can this calculation be limited to resiliency-related events? If not, please explain in detail why this is not feasible.

RESPONSE:

a. This metric is proposed to look at all impacts to the protection zone over the year. It is not currently broken out to be reviewed in the same categories that 1898 leveraged in their analysis. The analysis required to match outage events to corresponding NOAA weather event data on an ongoing basis would increase expenses related to reporting.

b. This calculation could be limited to resiliency-related events. However, the analysis required to match outage events to corresponding NOAA weather event data on an ongoing basis would increase expenses related to reporting. A version of the metric evaluating performance limited to Major Event Days as defined in IEEE standard 1366 would provide a similar view using existing standard reporting methods.

Preparer: Michael Renman
Sponsor: Casey Meeks

The following requests pertain to 1898 & Co.'s Resiliency Investment Study:

QUESTION NO. TIEC 2-21:

Referring to Figure 1-4, how did 1898 & Co. categorize Winter Storm Uri and what was the associated CMI per Event?

RESPONSE:

The "CMI Per Event" values in Figure 1-4 do not include CMI for any outage that occurred during Winter Storm Uri (February 12-18, 2021).

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-22:

Referring to page 20:

a. Does a BCR of 0.9 mean that the customer only recoups 90% of its investment over the life of the investment? If anything other than yes, please explain.

b. Did 1898 & Co. rely on any reports, surveys, or other data in determining that general safety risk and other qualitative considerations provided an additional 10% customer benefit recommended for each of the various types of programs and measures proposed? If yes, please provide the reports, surveys, or other data relied upon.

RESPONSE:

a. No. A BCR of 0.9 means that the benefits quantified by 1898 & Co., when monetized using the DOE ICE Calculator, equal 90% of the net present value of the cost of the investment over its lifetime. As noted in the 1898 & Co. Report, other qualitative considerations that provide benefits to customers were not quantified, monetized, or included in the BCR calculation.

b. No. The 10% qualitative consideration is based on 1898 & Co.'s professional expertise, experience performing risk and resiliency modeling, and understanding of the risks associated with failed electric utility infrastructure. Mitigating safety, wildfire, and cybersecurity risks, improving overall service reliability, and other qualitative considerations provide real, tangible benefits for customers.

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-23:

Referring to Figure 1-5, for each model within (i.e., Resilience Event Simulation Model; Outage Mitigation Resilience and Risk Mitigation Model; and Equipment Failure Resilience and Risk Mitigation Model), please respond individually as to each of the following:

a. Please provide the benefit-cost by project for each measure that ran through this model in "live" Excel format. Note: this request is not seeking the BCR number, but the benefit-cost that this model, by itself, calculated without integration with the other models.
b. Does the model result include non-resiliency event benefits? If yes, provide the benefit-cost that is not related to resiliency events.
c. If the response to subpart (b) is yes, but 1898 & Co. cannot provide the non-resiliency event benefit cost, provide 1898 & Co.'s expert opinion of the non-resiliency event benefit cost percentage, or reasonable range of percentages, that represents the percentage contribution of non-resiliency event benefit-cost to the benefit-cost calculated by this model.

RESPONSE:

a. The referenced sub-models (Resilience Event Simulation Model; Outage Mitigation Resilience and Risk Mitigation Model; and Equipment Failure Resilience and Risk Mitigation Model) estimate benefits for each project but do not include project costs. Costs are estimated in other parts of the Integrated Resilience & Risk Investment Model. Further, the output of these models does not exist in a "live" Excel format and could not be converted to this format without substantial effort and data manipulation.

b. Yes, the model includes both resiliency and non-resiliency event benefits. However, please see the response to subpart a. While resiliency benefits could be separated from reliability benefits within the Integrated Resiliency & Risk Investment Model, the outputs for the referenced sub-models do include a benefit-cost and do not exist in the requested format.

c. Figure 1-3 in the 1898 & Co. Report (Bates 143) depicts the CMI on the SPS system that was mapped to NOAA weather events from 2010 through 2023. This figure shows that approximately 65.4% of the total CMI during this period was associated with a NOAA weather event. Because the model uses historical data to simulate future events, 1898 & Co. would expect resiliency benefit streams in the model to account for approximately 65% of the benefits in the BCR values.

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-24:

Referring to Figure 1-5, please describe in more detail how the benefits from multiple individual models are compiled. Are the individual values simply added together? If not, please provide the mathematical calculation that shows how the benefits from each model are assembled to arrive at a single benefits value.

RESPONSE:

Section 4.0 of the 1898 & Co. report explains the approach to estimate benefits for each of the three analytics models. The results for each measure are shown in Section 6.0. 1898 & Co. ran the Integrated Resiliency & Risk Investment Model for two scenarios, one where each measure's benefits assumed no other measure was being executed and a second scenario where all the measures were assumed to be executed. This is described in Section 6.1.4 (see Bates 255). To avoid double-counting benefits, the results are not simply added together, rather as described in Section 6.1.4, 1898 & Co. decreased the benefits of the Distribution Overhead Hardening measure to account for benefits from the Distribution System Protection Modernization measure. Using the reduced benefits for Distribution Overhead Hardening, the results of the three measures are added together.

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-25:

Referring to page 74, please list each of the periods used (including, but not limited to, 50 years), and identify how each period was used in calculating benefits.

RESPONSE:

1898 & Co.'s evaluation used a 50-year period for Distribution Overhead Hardening and a 25-year period for Distribution System Protection Modernization. These periods were used to define the time horizons for calculating benefits for the respective measures.

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-26:

Referring to page 85, please explain how applying Major Event Days (MED) and non-MED effectiveness is conservative.

RESPONSE:

The modeling includes conservative assumptions that limit the effectiveness (or availability) of system protection schemes during non-MED outages (e.g., a failure of communications equipment) and during MED outages (e.g., a major event causing an outage on neighboring facilities).

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-27:

Referring to page 91, please provide a table in "live" Excel format showing the equipment failure costs for each asset category and each failure type used in this report.

RESPONSE:

Exhibit SPS-TIEC 2-27, which is provided as an attachment to this response, includes all asset categories, the failure types, and the respective equipment failure cost multipliers applied to proactive replacement costs.

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-28:

Referring to Figure 4-11, please define "normal operations" and explain if this includes resiliency events, non-resiliency events, or both.

RESPONSE:

In the context of Figure 4-11, "normal operations" refers to an equipment failure that occurs while the asset is still in service. This is in contrast to equipment being replaced due to, for example, a failed inspection.

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-29:

Referring to Figure 4-19 and page 94, please provide an example calculation using actual data for one asset showing how equipment failure costs are combined with annual probabilities to calculate a "failure cost profile."

RESPONSE:

Please see SPS's Response to TIEC RFI Set 1, Question No. 1. The Excel workbook titled Example Asset Business Case.xlsm includes the calculations for Figure 4-19.

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

The following requests pertain to the Direct Testimony of Brooke A. Trammell:

QUESTION NO. TIEC 2-30:

Referring to page 20, lines 8-20, how does SPS plan to account for resiliency-related transmission invested capital under its SRP?

RESPONSE:

SPS plans to record the resiliency-related transmission capital expenditures in a manner that will readily allow for identification, tracking, and reporting on a monthly basis. Similar to the resiliency-related distribution invested capital, SPS will maintain records of resiliency-related transmission investment that will allow the Commission to fully review the costs in SPS's next base rate case. Upon Commission approval of SPS's SRP, SPS will begin tracking investment in resiliency transmission capital through the use of appropriate FERC accounts, property unit records, SRP-identifiable project structures, and activity codes. An SRP project structure will be assigned to each resiliency-related transmission capital project and will be unique to each resiliency measure and method as defined in the SRP. This tracking will provide for the reporting and reconciliation of the resiliency transmission plant that has been placed in service.

Preparer: Richard Lain
Sponsor: Brooke Trammell

QUESTION NO. TIEC 2-31:

Referring to page 23, lines 11-18, please confirm that SPS will not seek carrying costs on its transmission-related spend under this SRP.

RESPONSE:

With respect to its SRP deferral, SPS confirms no transmission-related spend will be included in the regulatory asset discussed on page 23, lines 11-18.

Preparer: Richard Lain
Sponsor: Brooke Trammell

QUESTION NO. TIEC 2-32:

Referring to page 27, lines 20-23, please provide workpapers detailing cost incurred to date and estimated remaining cost for each contractor, supplier, or affiliate that SPS is proposing to include in the request. Additionally, please provide workpapers demonstrating how SPS proposes to functionalize and allocate this cost.

RESPONSE:

Please see Exhibit TIEC 2-32 for the SRP costs SPS incurred through December 31, 2024, that SPS will request recovery of it in its next base-rate case. SPS has not created workpapers demonstrating how it proposes to functionalize and allocate these costs because this will also be addressed in SPS's request for recovery in its next base-rate case. Periodically, SPS will supplement this response with actual costs incurred.

Preparer: Richard Lain
Sponsor: Brooke Trammell

QUESTION NO. TIEC 2-33:

Referring to page 31, lines 11-12, please reconcile this statement with Application Table 5 which does not show this metric applying to Operational Flexibility.

RESPONSE:

The Storm Restoration Duration metric does not apply to the Operational Flexibility measure. As presented in the Application and the Plan, SPS proposes to evaluate the effectiveness of the Operational Flexibility measure based on the average duration of outage events through the Rolling 10-Year Average SAIDI metric (see pages 82, 105-106 of Plan).

Ms. Trammell's Direct Testimony at page 31, lines 11-12 reads:

> This metric evaluates system improvement from all measures except for Wildfire Mitigation.

Consistent with the rest of SPS's filing, the sentence should be corrected to read as follows:

> This metric evaluates system improvement from all measures except for Wildfire Mitigation and Operational Flexibility.

SPS will file an errata to correctly align the two.

Preparer: Brooke Trammell
Sponsor: Brooke Trammell

The following requests pertain to the Direct Testimony of Casey S. Meeks:

QUESTION NO. TIEC 2-34:

Referring to page 15, line 18, through page 16, line 2:

a. Please elaborate on, and provide an example of, what it means to "adjust the selection of proposed programs within measures."
b. Would SPS have any limit on its ability "to adjust budgets and expenses between measures?"
c. Would SPS's flexibility request allow it to do the following without seeking a good cause exception:
    i. Completely cease execution of a program?
    ii. Completely cease execution of a measure?
    iii. Execute a measure or program at lower cost than projected, and use that money on other measures or programs? For example, install fewer Mainline Automated Reclosers and more Transmission Switches.
    iv. Execute projects with BCRs below what was presented in this SRP?
    v. If GRIP or TEF funding is provided, reallocate money to other measures or spend additional money in the same measure instead of offsetting SRP costs one-for-one?
    vi. Move money between capital and O&M expense?
    vii. Move money such that the allocation between distribution and transmission is different than what was presented in the SRP?
    viii. Add projects or programs that were not included in this SRP, but under an approved measure?

RESPONSE:

a. The "adjusting programs within measures" language is intended to allow flexibility if the scope of a program is found to be covered by another project outside of the SRP. In this case, a program with the next best BCR could be used as an alternate or dollars shifted between measures. For illustrative purposes, if Program A is intended to rebuild Arrowhead 5D85; however, a large storm necessitates the rebuild of this segment of line, the Program A funding to rebuild Arrowhead 5D85 could be shifted to the next available program within the measure, such as a rebuild of Riverview R100.

b. Yes. SPS is not intending to dramatically shift dollars between programs inside of measures or across measures. The desire is to provide flexibility for responding to changes in technology, conditions in the environment, circuit performance, outside programs impacting scope, or market signals. SPS seeks to maximize the positive impacts with the available SRP dollars.

c. While I am not a lawyer, my understanding of 16 Texas Administrative Code § 25.62(e) is that SPS must implement each measure in its approved resiliency plan unless the Commission grants a good cause exception. The flexibility SPS requests is not intended to rise to the level of a good cause exception under this provision, which SPS believes

should be reserved for instances in which SPS determines it may no longer be feasible or beneficial to implement an approved measure in its Plan.

i. Yes, the requested flexibility would allow SPS to completely cease execution of a program under the Plan without requesting a good cause exception – as an example, please see response to TIEC 2-34(a).

ii. No, the requested flexibility would not allow SPS to completely cease execution of a measure without requesting a good cause exception.

iii. Yes, the requested flexibility would allow SPS to execute a measure or program at lower cost than projected and use that money on other measures or programs. "Unused" dollars would be moved should the contemplated scope of any particular program be delivered under budget. The desire is to maximize customer benefit with the total investment approved by the Commission.

iv. SPS presented projects with a range of BCRs in its SRP; it only requested investment approval for projects above a specified BCR for each measure in its application. The requested flexibility contemplates SPS executing the next available project within the list of greatest BCRs if the scope is still valid for execution without a good cause exception.

v. No, the requested flexibility would not allow SPS to reallocate funds received from GRIP or TEF funding to other measures or spend additional money in the same measure instead of offsetting SRP costs one-for-one without a good cause exception.

vi. No, the requested flexibility would not allow SPS to move approved investment amounts between capital and O&M without a good cause exception.

vii. Yes, the requested flexibility would allow SPS to shift approved investment by small amounts between Distribution and Transmission without a good cause exception while still completing the intended scopes of approved programs and measures.

viii. Yes, the requested flexibility would allow SPS to fund the next available program within a measure if the project or program was completed through an outside source of funds without a good cause exception.

Preparers: Eran Moore, Chester Brown
Sponsor: Casey Meeks

The following requests pertain to the Direct Testimony of Brianne R. Jole:

QUESTION NO. TIEC 2-35:

Referring to page 40, lines 3-6, what will be the number of mobile substations, net of retirements, after SPS receives the four mobile substations on order right now?

RESPONSE:

SPS currently does not plan to retire assets while they are still functional. The proposed additions will allow SPS to retire older units as they fail.

Preparer: Joel Brown
Sponsor: Brianne Jole

QUESTION NO. TIEC 2-36:

Referring to page 40, lines 8-19, how many mobile substations are currently installed and supplying power to customers? How many of those are installed due to a resiliency-related event?

RESPONSE:

In 2024, SPS installed 20 mobile substations, with 6 of those being for resiliency-related events. Currently there are 6 mobile substations in service, with one of them being used for a resiliency event.

Preparer: Joel Brown
Sponsor: Brianne Jole

QUESTION NO. TIEC 2-37:

Has SPS ever experienced a resiliency event situation where all of its mobile substations were deployed and it would have benefitted from additional mobile substations? If yes, please describe the resiliency event and provide relevant information that substantiates that additional mobile substations would have provided incremental benefit.

RESPONSE:

SPS has never experienced a single resiliency event that required every mobile substation in the fleet to be deployed in response.

Preparer: Joel Brown
Sponsor: Brianne Jole

The following requests pertain to the Direct Testimony of Jason D. De Stigter:

QUESTION NO. TIEC 2-38:

Referring to page 24, lines 20-22, for 1898 & Co.'s Monte Carlo simulation:

a. Was the "P50" storm frequency used in modeling the BCRs? If no, please identify the storm future probability, or weighted mixture of storm future probabilities, that was used in developing the BCRs.
b. Provide the standard deviation of the Monte Carlo future storm frequency results. If this cannot be provided, please provide a more appropriate measure of the dispersion results. If no statistical results can be provided, please explain in detail why it cannot be provided.
c. Please provide the standard deviation of the future storm probability that was used in developing the BCRs.
d. For each measure, please provide the BCR results for a P10, P50, and P90 storm future.

RESPONSE:

a. No. The Monte Carlo simulation does not generate a P-value for storm futures. P-values are generated for BCRs.

b. As noted above, the Monte Carlo simulation does not generate a P-value for storm futures. In place of this value, 1898 & Co. is providing the mean and standard deviation of total storm counts. Considering all storms, in all counties, across all storm futures considered, the annual average and standard deviation for total storms are 484.194 and 20.660, respectively.

c. See the response to subpart b.

d. As noted above, the Monte Carlo simulation does not generate a P-value for storm futures. Further, since each project's benefits are calculated individually, the storm future that yields the 50th percentile benefit for one project is not necessarily the storm future that yields the 50th percentile benefit for another project. Therefore, there does not exist a BCR by measure corresponding to P10, P50, or P90 storm futures.

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-39:

Referring to page 28, line 3-7, in identifying investments that will provide the "greatest net benefit," is the modeling limited to identifying which investments will provide the greatest net benefits related to resiliency events?

a. If no, please explain what else was included outside of benefits related to resiliency events.

b. If no, how does 1898 & Co. ensure that the proposed SRP investments deliver at least a majority of net benefit related to resiliency events compared to non-resiliency benefits?

RESPONSE:

a. No, the model is not limited to only resiliency events. For additional context, please refer to TIEC RFI Set 2, Question No. 23. As noted in that response, the model includes resiliency and reliability benefits. The statement "greatest net benefits" refers to both of these benefit streams.

b. Please refer to the response to TIEC RFI Set 2, Question No. 23.

Preparers: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

QUESTION NO. TIEC 2-40:

Referring to page 35, line 16, did 1898 & Co. conduct any quantitative sensitivity testing on key variables, such as storm frequency, that impact the BCR results to arrive at the determination that the benefits are conservative? If yes, please provide the variables that were tested along with the results and workpapers in "live" Excel format.

RESPONSE:

As noted in response to TIEC RFI Set 2, Question No. 38, 1898 & Co. did perform a Monte Carlo analysis, which can be considered a sensitivity analysis, for storm futures—a key input into the model. For all other inputs, 1898 & Co. did not perform a quantitative sensitivity analysis.

Preparer: Jason De Stigter, Jack Perkins
Sponsor: Jason De Stigter

The following request pertains to the Direct Testimony of Anne Z. Sherwood:

QUESTION NO. TIEC 2-41:

Referring to page 8, lines 20-22, in which risk tier were the ignition points of the Smokehouse and Reamer fires?

RESPONSE:

The ignition points of both the Smokehouse and Reamer fires were located in Tier 3 wildfire risk zones.

Preparer: Carolyn Lee and Cheriese Marczyk
Sponsor: Anne Sherwood

CERTIFICATE OF SERVICE

I certify that on the 6th day of February 2025, notice of the filing of the foregoing instrument with the PUCT was served on all parties of record by electronic service, in accordance with the Commission's *Second Order Suspending Rules* entered in Project No. 50664.

/s/ Scottie D. Agnew

Notification	Work Order	City	Description	Completion	Cost
12318107	106023037	CROSBYTON	CRSB / Big 4 Regulators /	Sep-21	41,435.08
12593120	106799690	PORTALES	PORTALES/ NEW CIRCUIT TIES + SWITCHES	Dec-21	81,060.54
12484454	107016633	HEREFORD	HERE/S AVE K & FM1259/Z51 REBUILD	Mar-22	476,958.63
12155301	106565393	GROOM	GROOM / RBLD #2 FROM kINGSMILL	Apr-22	971,574.83
12576967	106873097	LOCKNEY	LOCK/CALLAHAN TO BARWISE TIE/RECONDUCT	May-22	678,965.81
11874186	106891973	JAL	JAL/CARPET BOMB/RDRN4605 & POND3585 TIE	Aug-22	1,062,437.19
12931913	107808151	TUCUMCARI	TUCM/N 2ND & W MAIN/CABLE & VAULT RPLC	Dec-22	148,189.60
12626865	107843367	LOVING	LOV/LOSO4C040/RECONDUCT & REFUSE	Dec-22	259,537.76
12485988	106679389	SLATON	SLAT/STRIP MALL/RPLC XFMRS PRI LOOP	Dec-22	174,213.78
12749041	107925821	FOLLETT	FOL/ TX 15 HWY/ RESILIENCY PROJECT	Feb-23	348,123.42
13131055	107947297	BOYS RANCH	CHAN/BOYS RANCH RELOCATE/EDO	Mar-23	643,951.68
12971812	108384840	LEVELLAND	LVL/CR 250 to 260/3 MI EXT	Mar-23	381,099.60
12532759	107528488	FOLLETT	LIPS/HWY 305 LPSB2580/6 MI RECONDUCT PT1	Mar-23	853,133.85
11502068	104052111	AMARILLO	AMA / S WESTERN & LOOP 335 / N OF 335	Mar-23	340,691.94
13034157	109220294	PLAINVIEW	PLVW/ P220 & P210/ 1 MI RECONDUCtor	Jun-23	96,004.81
12709707	108791691	PAMPA	MCL / SUBSTATION / SECOND FEEDER	Jun-23	825,635.73
12532760	108683231	FOLLETT	LIPS/HWY 305 LPSB2580/7 MI RECONDUCT PT2	Aug-23	690,308.74
12931939	108256899	PAMPA	PAMPA/KING5100 BILLY ISSUES/RECONDUCTOI	Aug-23	1,245,653.99
13330223	109851012	PAMPA	PMPA/KING5110/HWY 152/NEUTRAL RPLC	Sep-23	90,664.67
12971818	109186326	BUSHLAND	BUSH/PORTLEN CEMENT PLNT/29 POLE RPLC	Sep-23	121,775.16
12940738	108794600	AMARILLO	AMA/S WHITAKER TO FM1151/RECONDUCTOR	Sep-23	775,278.71
13043259	108791584	AMARILLO	BUS / I40 & BLESSEN RD / RECONDUCTOR	Oct-23	502,417.75
13420292	109470298	PAMPA	PAMPA/HWY60 & TIGNOR/REBUILD + REC 1<(>&	Oct-23	832,944.18
13734198	110429871	WHITE DEER	STORM/CONWAY/CO RD O/MIDPSANS	Oct-23	41,685.51
11502069	104052116	AMARILLO	AMA / S WESTERN & LOOP 335 / HWY BORE	Nov-23	192,616.73
13298039	109115783	PAMPA	PAMPA/HWY60 & TIGNOR/REBUILD + REC PT 3	Nov-23	247,965.94
13503227	108865112	CANYON	CANYON/HWY-60/RECON - ARNOT FEEDER TIE	Nov-23	567,697.13
12525132	106721304	CARLSBAD	CBAD/CBAD HIGH SCHOOL UPGRADE/UG EXT	Nov-23	96,744.95
12690972	107400327	AMARILLO	AMA / PAVILLION / UG REBUILD	Dec-23	393,954.19
13749112	110188771	FRIONA	FRIO/FRIO2432/RELO SWITCHES	Dec-23	46,120.83
13777154	109932048	AMARILLO	AMARILLO/LOOP 335/RECONDUCT 2 MI	Dec-23	353,507.83
12971813	109207627	PAMPA	MOBEETIE/FM 1046/2.5 MI RECONDUCTOR	Dec-23	518,758.53
13369122	109264695	PAMPA	PMPA/KING5105/PARALLEL LINE REBUILD	Dec-23	1,233,872.04
13734201	110016698	PANHANDLE	STORM/CARSON CO/CO RD 14/XARMS+POLES	Dec-23	186,829.24
11591668	110536539	MULESHOE	MULESHOE/HWY84/NEW LINE AND ALT FEED	Dec-23	80,026.58
13734195	110154717	PANHANDLE	STORM/PANHANDLE/HWY-207/XARMS	Jan-24	181,184.27
13330865	109969128	Freiburg	VEGA/COKE ST AND I-40/4 MILE RECONDUCTOF	Feb-24	664,590.81
12931915	109565003	OLTON	OLTN/1ST & AVE M/RECONDUCTOR EXT W 5 MI	Feb-24	920,767.94
13367094	109305991	AMARILLO	AMA / FM 2219 FEEDYARD REBUILD / 3 MILES	Aug-24	449,180.07

Asset Cohort	Failure Type 1 Name	Failure Type 2 Name	Failure Type 3 Name
Wood Pole: No to Low Vegetation Density - Street Access	Inspection Based	Blue-sky Failure	Not in Use
Wood Pole: Low Veg Vegetation Density - Street Access	Inspection Based	Blue-sky Failure	Not in Use
Wood Pole: Medium Vegetation Density - Street Access	Inspection Based	Blue-sky Failure	Not in Use
Wood Pole: High Vegetation Density - Street Access	Inspection Based	Blue-sky Failure	Not in Use
Wood Pole: Very High Vegetation Density - Street Access	Inspection Based	Blue-sky Failure	Not in Use
Wood Pole: No to Low Vegetation Density - No Street Access	Inspection Based	Blue-sky Failure	Not in Use
Wood Pole: Low Veg Vegetation Density - No Street Access	Inspection Based	Blue-sky Failure	Not in Use
Wood Pole: Medium Vegetation Density - No Street Access	Inspection Based	Blue-sky Failure	Not in Use
Wood Pole: High Vegetation Density - No Street Access	Inspection Based	Blue-sky Failure	Not in Use
Wood Pole: Very High Vegetation Density - No Street Access	Inspection Based	Blue-sky Failure	Not in Use
Steel mono-Pole: Pole (D) - Street Access	Inspection Based	Blue-sky Failure	Not in Use
Steel mono-Pole: Pole (D) - No Street Access	Inspection Based	Blue-sky Failure	Not in Use
Concrete mono-Pole: Pole (D) - Street Access	Inspection Based	Blue-sky Failure	Not in Use
Concrete mono-Pole: Pole (D) - No Street Access	Inspection Based	Blue-sky Failure	Not in Use
Other Material mono-Pole: Pole (D) - Street Access	Inspection Based	Blue-sky Failure	Not in Use
Other Material mono-Pole: Pole (D) - No Street Access	Inspection Based	Blue-sky Failure	Not in Use
Overhead Primary: Backbone Standard Wire	Inspection Based	Blue-sky Failure	Not in Use
Overhead Primary: Backbone Small Wire	Inspection Based	Blue-sky Failure	Not in Use
Overhead Primary: Lateral Copper	Inspection Based	Blue-sky Failure	Not in Use
Overhead Primary: Lateral AL Small Wire	Inspection Based	Blue-sky Failure	Not in Use
Overhead Primary: Lateral AL Standard Wire	Inspection Based	Blue-sky Failure	Not in Use
Line Transformer: Pole Top	Deteriorated + Overloaded	Not in Use	Not in Use
Overhead Secondary: Open Wire	Deteriorated + Overloaded - Load Flow Analysis	Deteriorated + Overloaded - Blue-Sky Failure	Not in Use
Overhead Secondary: Covered	Deteriorated + Overloaded - Load Flow Analysis	Deteriorated + Overloaded - Blue-Sky Failure	Not in Use
EM Relay D-Circuit Protection	Inspection Based	Equipment Failure - Expected	Equipment Failure - Extreme
Digital Relay D-Circuit Protection	Inspection Based	Equipment Failure - Expected	Equipment Failure - Extreme
Solid State Relay D-Circuit Protection	Inspection Based	Equipment Failure - Expected	Equipment Failure - Extreme
Air Magnetic D-Circuit Breaker	Imminent Failure Expected	Equipment Failure	Equipment + Environmental
Oil D Circuit Breaker	Imminent Failure Expected	Equipment Failure	Equipment + Environmental
Gas D-Circuit Breaker	Imminent Failure Expected	Equipment Failure	Equipment + Environmental
Vacuum D-Circuit Breaker	Imminent Failure Expected	Equipment Failure	Equipment + Environmental
Recloser	Inspection Based	Equipment Failure	Not in Use
Wood Pole: Truss	Inspection Based	Blue-sky Failure	Not in Use

Failure Type 4 Name	Failure Type 5 Name	Restoration Cost, Reactive/Restoration Capital Costs, (Proactive Replacement Cost Multiplier), FT1	Restoration Cost, Reactive/Restoration Capital Costs, (Proactive Replacement Cost Multiplier), FT2
Not in Use	Not in Use	1.2	1.25
Not in Use	Not in Use	1.2	1.25
Not in Use	Not in Use	1.2	1.25
Not in Use	Not in Use	1.2	1.25
Not in Use	Not in Use	1.2	1.25
Not in Use	Not in Use	1.25	1.35
Not in Use	Not in Use	1.25	1.35
Not in Use	Not in Use	1.25	1.35
Not in Use	Not in Use	1.25	1.35
Not in Use	Not in Use	1.25	1.35
Not in Use	Not in Use	1.2	1.25
Not in Use	Not in Use	1.25	1.35
Not in Use	Not in Use	1.2	1.25
Not in Use	Not in Use	1.25	1.35
Not in Use	Not in Use	1.2	1.25
Not in Use	Not in Use	1.25	1.35
Not in Use	Not in Use	1.1	1.1
Not in Use	Not in Use	1.1	1.1
Not in Use	Not in Use	1.1	1.1
Not in Use	Not in Use	1.1	1.1
Not in Use	Not in Use	1.1	1.1
Not in Use	Not in Use	1.2	N/A
Not in Use	Not in Use	1.1	1.25
Not in Use	Not in Use	1.1	1.25
Not in Use	Not in Use	1.3	1.5
Not in Use	Not in Use	1.1	1.3
Not in Use	Not in Use	1.3	1.5
Catastrophic Failure - Additional Collateral Damage	Catastrophic Failure - Significant Collateral Damage	1.4	1.6
Catastrophic Failure - Additional Collateral Damage	Catastrophic Failure - Significant Collateral Damage	1.4	1.6
Catastrophic Failure - Additional Collateral Damage	Catastrophic Failure - Significant Collateral Damage	1.4	1.6
Catastrophic Failure - Additional Collateral Damage	Catastrophic Failure - Significant Collateral Damage	1.4	1.6
Not in Use	Not in Use	1.5	2
Not in Use	Not in Use	1.2	1.25

Restoration Cost, Reactive/Restoration Capital Costs, (Proactive Replacement Cost Multiplier), FT3	Restoration Cost, Reactive/Restoration Capital Costs, (Proactive Replacement Cost Multiplier), FT4	Restoration Cost, Reactive/Restoration Capital Costs, (Proactive Replacement Cost Multiplier), FT5
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
1.5	N/A	N/A
1.3	N/A	N/A
1.5	N/A	N/A
1.6	1.6	1.6
1.6	1.6	1.6
1.6	1.6	1.6
1.6	1.6	1.6
N/A	N/A	N/A
N/A	N/A	N/A

Southwestern Public Service Company

SOAH DOCKET NO. 473-25-09020
PUC DOCKET NO. 57463

APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY FOR APPROVAL OF ITS TRANSMISSION AND DISTRIBUTION SYSTEM RESILIENCY PLAN

The Following are provided on Share File:

Exhibit SPS-TIEC 2-2(CONF)
Exhibit SPS-TIEC 2-32(CONF)