

BEFORE THE
LOUISIANA PUBLIC SERVICE COMMISSION

IN RE: APPLICATION OF SOUTHWESTERN
ELECTRIC POWER COMPANY FOR: (I)
RECOVERY OF CERTAIN STORM DAMAGE
COSTS INCURRED AS A RESULT OF HURRICANES
LAURA AND DELTA; (II) RECOVERY OF
CERTAIN STORM RESTORATION COSTS ASSOCIATED
WITH THE FEBRUARY 2021 WINTER STORM EVENT
AND (III) EXPEDITED TREATMENT

DOCKET NO. _____

DIRECT TESTIMONY OF

DREW W. SEIDEL

FOR

SOUTHWESTERN ELECTRIC POWER COMPANY

OCTOBER 2021

TESTIMONY INDEX

<u>SECTION</u>	<u>PAGE</u>
I. INTRODUCTION	3
II. PURPOSE OF TESTIMONY	4
III. SWEPCO LOUISIANA DISTRIBUTION SYSTEM OVERVIEW	5
IV. SEVERE STORMS' IMPACT ON THE SWEPCO LOUISIANA DISTRIBUTION SYSTEM.....	6
1. Hurricane Laura	6
2. Hurricane Delta.....	7
3. 2021 Winter Storm.....	8
V. SWEPCO LOUISIANA'S EMERGENCY RESPONSE PLAN (ERP) AND IMPLEMENTATION.....	9
1. The Emergency Response Plan.....	9
2. Preparations Made in Advance of Storms	11
3. Base Camps, Staging Sites, and Materials.....	13
4. Hazard Removal and Damage Assessments	15
5. Restoration Implementation.....	17
6. Safety	19
VI. DISTRIBUTION-RELATED O&M SYSTEM RESTORATION COSTS	20
VII. CONCLUSION.....	23

1 I. INTRODUCTION

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3 A. My name is Drew W. Seidel. My business address is 428 Travis Street, Shreveport,
4 Louisiana, 71101.

5 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

6 A. I am employed by Southwestern Electric Power Company (SWEPCO or the Company) as
7 Vice President of Distribution Region Operations. SWEPCO is an operating company of
8 American Electric Power Company, Inc. (AEP).

9 Q. WHAT IS YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL
10 EXPERIENCE?

11 A. I hold a Bachelor of Science degree in Mechanical Engineering from Texas A&M
12 University and a Master of Business Administration from the University of Texas of the
13 Permian Basin. I also completed the AEP Strategic Leadership Program at The Ohio State
14 University's Fisher College of Business.

15 I first joined West Texas Utilities Co. (WTU) in 1992 and later served as plant
16 manager at Central Power and Light Co.'s (CPL) Victoria Power Station in Victoria, Texas.
17 WTU and CPL were sister companies of SWEPCO in the Central and South West system
18 prior to its merger with American Electric Power in 2000. After the merger, I served as
19 plant manager of SWEPCO's Knox Lee Power Plant and H.W. Pirkey Power Plant in
20 Longview and Hallsville, Texas; respectively, and energy production superintendent and
21 plant manager at Welsh Plant in Pittsburg, Texas. I assumed my current position as Vice
22 President of Distribution Region Operations in 2018.

1 Q. WHAT ARE YOUR RESPONSIBILITIES AS VICE PRESIDENT OF DISTRIBUTION
2 REGION OPERATIONS FOR SWEPCO?

3 A. I am responsible for overseeing the planning, construction, operation, and maintenance of
4 the distribution system. My duties include the oversight and management of service
5 extensions to new customers, the safe and reliable delivery of service to our customers, and
6 the restoration of service when outages occur. My responsibilities also include overseeing
7 SWEPCO's distribution system asset management programs, reliability programs, and the
8 vegetation management program.

9 Q. HAVE YOU TESTIFIED ON BEHALF OF SWEPCO AS A WITNESS BEFORE THE
10 LOUISIANA PUBLIC SERVICE COMMISSION (COMMISSION OR LPSC) OR ANY
11 OTHER REGULATORY COMMISSION?

12 A. Yes. I have testified before the Public Utility Commission of Texas as part of Docket No.
13 51415 and filed rebuttal testimony before this Commission in SWEPCO Docket No.
14 U-35441.

15
16 II. PURPOSE OF TESTIMONY

17 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

18 A. I support SWEPCO's reasonable and necessary distribution-related operations and
19 maintenance (O&M) system restoration costs in Louisiana that were incurred as a result of
20 Hurricanes Laura and Delta in 2020 and the winter storm in 2021 (collectively the Storms).
21 My testimony will discuss the Storms' impact on SWEPCO's distribution system in
22 Louisiana; the Company's Emergency Response Plan and its implementation in response

1 to the storms as it relates to distribution; and the reasonableness of the distribution-related
2 O&M expenses incurred for system restoration.

3
4 III. SWEPCO LOUISIANA DISTRIBUTION SYSTEM OVERVIEW

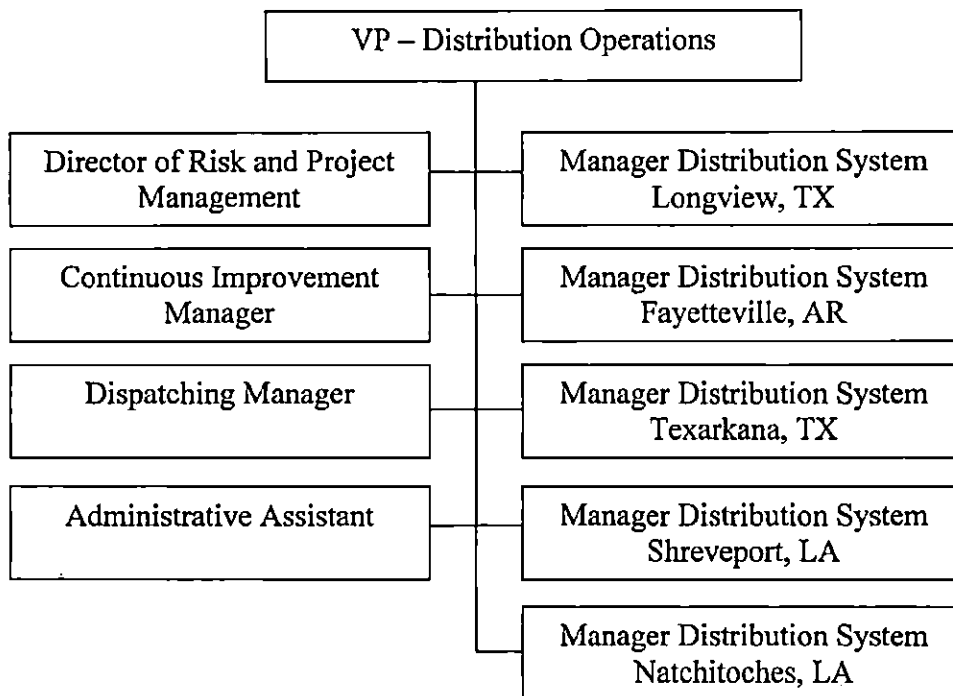
5 Q. PLEASE DESCRIBE THE SWEPCO LOUISIANA DISTRIBUTION SYSTEM.

6 A. The SWEPCO Louisiana service area includes a distribution system of approximately
7 12,500 miles of distribution line including overhead and underground primary and
8 secondary line types. SWEPCO Louisiana's service territory is located in the northwest
9 portion of the state, including Shreveport, and includes a more southern section near
10 Natchitoches, often referred to as the Valley District.

11 Q. PLEASE DESCRIBE THE STRUCTURE OF THE DISTRIBUTION ORGANIZATION
12 FOR SWEPCO LOUISIANA.

13 A. SWEPCO's Distribution Operations organization includes four functional support
14 departments: Risk and Project Management (which includes distribution automation
15 design and installation), Distribution Systems, Continuous Improvement, and Distribution
16 Dispatch. These departments are responsible for distribution system engineering and
17 design activities, resource planning and contracting activities, vegetation management,
18 construction and maintenance, and the operation of the distribution electrical system for
19 the entire SWEPCO service territory, including Louisiana. Figure 1 shows the current
20 SWEPCO Distribution Operations organizational structure.

Figure 1 – SWEPCO Distribution Operations Organization



**IV. SEVERE STORMS' IMPACT ON THE
SWEPCO LOUISIANA DISTRIBUTION SYSTEM**

1. Hurricane Laura

Q. PLEASE DESCRIBE HURRICANE LAURA.

A. Hurricane Laura made landfall near Cameron Parish in Louisiana as a Category 4 hurricane on August 27, 2020 with maximum winds of 150 miles per hour (mph). This made Laura one of the strongest hurricanes ever to make landfall in Louisiana. In comparison, Hurricane Katrina had maximum winds of 125 mph when it made landfall. Hurricane Laura moved more in an eastern direction than models predicted, which meant Texarkana and Longview, Texas were not in the main path as expected, and Louisiana bore the majority of the damage on SWEPCO's system.

1 Q. PLEASE DESCRIBE THE DAMAGE TO THE DISTRIBUTION SYSTEM CAUSED
2 BY HURRICANE LAURA.

3 A. For SWEPCO Louisiana's Shreveport and Valley districts combined, there were 1,550
4 broken poles, 102 distribution feeder breakers locked out, and 3,550 crew jobs necessary
5 for downed wires and other damage-related issues. The highest number of customers
6 without power simultaneously was 132,720 at 4:00 pm on August 27. More than 136,000
7 SWEPCO customers lost power overall. SWEPCO Louisiana saw 53% of its customers
8 lose power, with 95% of the Valley District and 43% of the Shreveport District
9 experiencing outages.

10 Q. WHAT WAS THE DURATION OF THE RESTORATION EFFORT?

11 A. In the more densely populated Shreveport area, almost all customers had their service
12 restored by September 1, 2020. In the more rural and heavily-wooded Valley District all
13 outages were restored by approximately September 8, 2020.

14 2. Hurricane Delta

15 Q. PLEASE DESCRIBE HURRICANE DELTA.

16 A. Hurricane Delta was a Category 2 hurricane when landfall occurred near Creole, Louisiana
17 on the evening of October 9, 2020. The storm had sustained winds of 100 mph as it moved
18 quickly to the east, with the Valley District experiencing approximately 95% of SWEPCO
19 Louisiana's outages from Delta.

20 Q. PLEASE DESCRIBE THE DAMAGE TO THE DISTRIBUTION SYSTEM CAUSED
21 BY HURRICANE DELTA.

22 A. Although a large storm, the damage caused by Hurricane Delta was not as extensive as that
23 caused by Hurricane Laura. There were 59 poles damaged and 37 feeder breakers locked

1 out and 325 crew jobs were needed for downed wires and other damage. The peak
2 customer outage count was approximately 23,000 on the morning of Saturday, October 10.
3 At the peak, the Valley District had 47% of its customers out, while the Shreveport District
4 had nearly 2,000 customers out. Damage from Hurricane Delta was limited to mostly wires
5 and trees, whereas SWEPCO experienced extensive structural damage from Hurricane
6 Laura. Importantly, many of the repairs completed during the restoration for Laura likely
7 mitigated the damage to the system caused during Delta.

8 Q. WHAT WAS THE DURATION OF THE HURRICANE DELTA RESTORATION
9 EFFORT?

10 A. All customer outages were restored by October 15, 2020.

11 3. 2021 Winter Storm

12 Q. PLEASE DESCRIBE THE FEBRUARY, 2021 WINTER STORM.

13 A. The Winter Storm was a major storm that affected much of the United States from February
14 10 to February 21, 2021. Snow and ice were part of the storm and hit the SWEPCO service
15 area beginning on Monday February 15, with the more damaging part of the storm moving
16 through Louisiana on Wednesday February 17. The damage from ice in the Shreveport
17 district was relatively low, while freezing rain in the Valley District caused significant
18 impact to the distribution system in that area.

19 Q. PLEASE DESCRIBE THE DAMAGE TO THE DISTRIBUTION SYSTEM CAUSED
20 BY THE WINTER STORM.

21 A. Caddo and Bossier parishes experienced the most significant damage from the Winter
22 Storm. However, the Valley District saw significant impacts due to ice from the storm.
23 There were 67 poles damaged and 40 feeder breakers locked out, 500 crew jobs were

1 needed for downed wires and other damage. By the early morning of Thursday, February
2 18 approximately 23,000 SWEPCO Louisiana customers were without power.

3 Q. WHAT WAS THE DURATION OF THE RESTORATION EFFORT?

4 A. All customer outages were restored by February 21, 2021.

5
6 V. SWEPCO LOUISIANA'S EMERGENCY RESPONSE PLAN (ERP)
7 AND IMPLEMENTATION

8 1. The Emergency Response Plan

9 Q. PLEASE DESCRIBE THE PLAN THAT SWEPCO LOUISIANA USES TO ADDRESS
10 STORMS SUCH AS THE HURRICANES AND THE FEBRUARY 2021 WINTER
11 STORM.

12 A. SWEPCO has a written ERP that establishes procedures to guide, during emergency
13 conditions, the restoration of electrical service to all of its Louisiana assets in a systematic
14 and efficient manner by utilizing all of the Company's available human and physical
15 resources, and, if necessary, by securing and utilizing outside resources. The ERP is
16 reviewed regularly to ensure its appropriateness in managing emergency service restoration
17 conditions.

18 In general under the ERP, the Company monitors weather services on an ongoing
19 basis and begins ramping up planning activities as a storm approaches. After the storm
20 passes, the Company then refines its restoration plans as new information becomes
21 available from damage assessments.

22 Q. PLEASE DESCRIBE THE OBJECTIVES OF THE ERP.

23 A. The primary objective of the ERP is to establish an emergency operation organization that
24 will efficiently utilize all available resources to resolve the emergency situation. The ERP

1 allows the Company to accomplish the rapid and orderly repair of electric facilities for the
2 protection of public health and safety and the restoration of services to all customers in the
3 minimum time possible.

4 The second objective of the ERP is to provide for the timely collection of accurate
5 damage assessment reports for management, employees, and the general public. The
6 reports include such information as the extent of any damage to the distribution and
7 transmission systems and the progress made in restoring service.

8 Q. PLEASE DESCRIBE THE KEY FUNCTIONS OF SWEPCO AND AEP PERSONNEL
9 UNDER THE ERP.

10 A. When a major emergency or disaster occurs, the first function of SWEPCO and AEP
11 personnel is to clear all known public hazards, such as downed power lines, that pose an
12 immediate danger to the public. The second function is to conduct a detailed assessment
13 of the damage to the affected systems so that the Company can procure the necessary
14 resources and management can position crews appropriately for the efficient restoration of
15 service. The third function is to restore service to the most consumers in the shortest time
16 while keeping in focus restoration of service to vital community services and installations
17 (critical loads). The fourth function is to restore service to all remaining users as quickly
18 as possible.

19 Q. DOES THE COMPANY UTILIZE OTHER RESOURCES ASIDE FROM SWEPCO
20 AND AEP PERSONNEL TO EXECUTE THE ERP?

21 A. Yes. The Company also engages help from Regional Mutual Assistance Groups
22 (RMAGs).

1 Q. PLEASE DESCRIBE MUTUAL ASSISTANCE RESOURCES.

2 A. AEP is a member of several RMAGs, including Southeastern Electric Exchange, Texas
3 Mutual Assistance Group, Midwest Mutual Assistance Group, and Great Lakes Mutual
4 Assistance Group (there are currently seven RMAGs, of which AEP is a member of four).
5 Membership in these groups provides for a potential source of additional assistance from
6 other utilities as needed. Mutual assistance among utilities to facilitate restoration of
7 service as rapidly as possible after a storm or other adverse situation is an important step
8 to reinforce the reliability of service by the individual utilities and the industry.

9 2. Preparations Made in Advance of Storms

10 Q. HOW DID THE COMPANY PREPARE FOR HURRICANE LAURA IN THE DAYS
11 BEFORE THE STORM MADE LANDFALL?

12 A. The following describes the Company's preparations in the days prior to landfall:
13 • On August 24, 2020, three days before landfall, SWEPCO made its initial request
14 for mutual assistance.
15 • SWEPCO activated the level two (indicating two districts are affected) Incident
16 Command System (ICS) organization beginning on August 26. This organization
17 aligns with the ICS used by the federal government during emergency situations.
18 • Also on August 26, the Company increased its mutual assistance request and began
19 to deploy base camps to deal with lodging constraints caused by demand from
20 evacuees and other response workers. Please see section 3 below for more detail
21 on base camps.

22 Q. HOW DID THE COMPANY MOBILIZE PERSONNEL TO PREPARE FOR THE
23 STORM?

24 A. SWEPCO was supported in the preparation and restoration effort by approximately 2,880
25 external personnel from RMAGs and from internal AEP entities AEP Texas, Public Service
26 Company of Oklahoma (PSO), Indiana and Michigan Power (I&M), and AEP Ohio.
27 SWEPCO established three base camps prior to the storm. These were set up in Leesville,

1 Longview, and Shreveport. After the storm moved through, the Longview base camp was
2 moved to Shreveport. After the Shreveport district was restored, one base camp located
3 there was moved to Natchitoches so resources would be closer to the work. The base camps
4 slept almost 1,900 personnel, and fed the entire contingent of support.

5 Q. HOW DID THE COMPANY PREPARE FOR HURRICANE DELTA IN THE DAYS
6 BEFORE THE STORM MADE LANDFALL?

7 A. The following describes the Company's preparations in the days prior to landfall:

- 8 • On October 6, 2020, three days before landfall, SWEPCO made its initial request
9 for mutual assistance.
- 10 • SWEPCO activated the level one (one district) ICS organization beginning on
11 October 8.
- 12 • The decision to set up base camps in the Valley district was made on October 9.

13 Q. HOW DID THE COMPANY MOBILIZE PERSONNEL TO PREPARE FOR DELTA?

14 A. SWEPCO utilized approximately 1,280 external personnel, mostly from AEP Texas, PSO,
15 I&M, Kentucky Power, and AEP Ohio. RMAGs provided limited resources initially as
16 well. Two 400-person base camps were set up, slept over 800 personnel, and fed
17 approximately 1,300.

18 Q. HOW DID THE COMPANY PREPARE FOR THE FEBRUARY, 2021 WINTER
19 STORM AS THE STORM APPROACHED ITS LOUISIANA SERVICE AREA?

20 A. The following describes the Company's preparations as the storm approached:

- 21 • Mutual assistance was first requested on February 12, 2021 to be ready to work on
22 February 14.
- 23 • A request for additional mutual assistance to be available on February 18 was made
24 on February 15.
- 25 • Plans were made on February 15 to set up base camps after the storm moved
26 through the SWEPCO Louisiana service area.

1 Q. HOW DID THE COMPANY MOBILIZE PERSONNEL TO PREPARE FOR THE
2 STORM?

3 A. Approximately 2,500 employees were deployed to perform restoration work beginning on
4 February 18, 2021. The Shreveport District was fully restored on February 20 and all
5 resources were then shifted to the Valley District on February 21, where distribution line
6 work and tree management crews were required at more than 500 locations each.

7 3. Base Camps, Staging Sites, and Materials

8 Q. WHAT ARE BASE CAMPS AND STAGING SITES UNDER THE ERP?

9 A. Base camps are locations where primary logistics functions for personnel for an incident
10 are coordinated. The base camps are equipped and staffed to provide sleeping quarters,
11 food, water, and sanitary services, as needed, to incident personnel. Staging sites are
12 locations set up for an incident where materials can be placed while awaiting tactical
13 assignment. Depending on the circumstances, locations may serve both as base camps for
14 personnel and staging sites for materials.

15 Q. HOW ARE THE BASE CAMPS AND STAGING SITES GENERALLY SELECTED
16 AND ORGANIZED?

17 A. The Company has relationships with most of the sites utilized as a part of the overall
18 planning process for a hurricane or similar event. The locations are chosen due to the
19 availability of space necessary to establish a base camp or staging area in support of a
20 restoration event as well as their proximity to the Company's assets and the area impacted
21 by the storm. For example, Northwestern State University allowed SWEPCO to utilize
22 its facilities for Laura as students were not in session at the time. Chesapeake, a SWEPCO
23 customer, also allowed use of one of its facilities for Delta.

1 Q. DID THE COVID PANDEMIC PRESENT ADDITIONAL CHALLENGES
2 REGARDING THE ESTABLISHMENT AND LAYOUT OF THE BASE CAMPS?

3 A. Yes. Due to the safety measures required as a result of COVID-19, social distancing
4 dictated that the base camps could only be filled to 33% of normal occupancy. This
5 compounded the fact that lodging availability was already constrained due to evacuees and
6 other restoration workers needing shelter. The AEP policy would have filled the camps to
7 50% capacity, but AEP was not able to use that policy at the sites. The Company would
8 have liked to utilize more resources, but the stated distancing policy, the footprint of the
9 camp, and the safe spacing of sleeping units prevented having more personnel based in the
10 camps. Therefore, more base camps were used due to these circumstances.

11 Q. DID THE COMPANY TAKE ACTION THAT LIKELY HELPED TO MITIGATE
12 SOME OF THE EFFECTS OF SMALLER CAMP OCCUPANCY?

13 A. Yes. SWEPCO took action very quickly to set up base camps, and that decision likely
14 saved up to a week of restoration time. Without this rapid effort, the smaller camp
15 occupancy would have resulted in much longer restoration times.

16 Q. WHAT DID THE COMPANY DO TO MAINTAIN ADEQUATE MATERIALS FOR
17 THE RESTORATION EFFORT?

18 A. The Company conducted daily reviews of storm material usage at each staging site and
19 submitted material requests as needed. The Company coordinated additional bulk orders
20 through other distribution centers within SWEPCO and AEP Procurement material
21 vendors.

1 Q. WHAT WAS THE PROCESS FOR HANDLING THE MATERIAL AT THE STAGING
2 SITES AND BASE CAMPS WHEN CLOSED AT THE CONCLUSION OF INITIAL
3 RESTORATION EFFORTS?

4 A. Inventory counts were taken on all material at the time of site closing and then remaining
5 materials were returned to inventory to be ready for distribution when needed in the future.

6 Q. WERE ANY UNUSED MATERIALS CHARGED AGAINST THE STORM WORK
7 ORDER?

8 A. No, only materials actually employed in restoration repairs were charged to the storm work
9 order.

10 4. Hazard Removal and Damage Assessments

11 Q. WHAT WAS THE FIRST FUNCTION OF SWEPCO LOUISIANA PERSONNEL
12 AFTER THE ARRIVAL OF THE STORMS?

13 A. The first function of Company personnel after landfall was to clear all known public
14 hazards that posed an immediate danger to the public.

15 Q. WHAT TYPES OF DISTRIBUTION HAZARDS EXIST AFTER SUCH STORMS?

16 A. Distribution lines and poles may be down across highways, roads, and streets. In some
17 instances, the downed facilities may block passage completely, while in other instances,
18 facilities may still be energized and thereby prevent safe passage across them.

19 Q. PLEASE DESCRIBE HOW HAZARDS WERE IDENTIFIED AND ADDRESSED
20 DURING AND AFTER THE STORMS.

21 A. Hazard assessment is an important component of the overall assessment process. Hazards
22 are identified through calls from customers or civil authorities during the damage
23 assessment process or by first responders and repair crews. Once a hazard location is

1 identified, it is cleared and repaired, and guarded by qualified individuals until it can be
2 mitigated, or, in cases where energized facilities are not involved, made safe by the
3 placement of cones, barricade tape, or other suitable barrier until the facilities can be
4 repaired.

5 Q. WHAT WAS THE SECOND FUNCTION OF SWEPCO LOUISIANA PERSONNEL
6 AFTER THE ARRIVAL OF THE STORMS?

7 A. The second function was to conduct a detailed assessment of the damage to the affected
8 systems so that the necessary resources could be procured and management could position
9 crews appropriately for the efficient restoration of service. In the event of a major
10 restoration effort, it is very important to make a high-level damage assessment or
11 reconnaissance early in the outage event. The earlier the need for additional resources is
12 identified, the sooner those resources can be mobilized for the restoration effort.

13 Q. HOW WAS THE DAMAGE ASSESSMENT CONDUCTED?

14 A. The reconnaissance assessment includes the following:

- 15 • Geographical description of the area involved
- 16 • Stations and/or circuits affected
- 17 • Equipment damaged and/or hazardous situations
- 18 • Estimated number of customers affected by district
- 19 • Restoration plans (manpower and material needs)
- 20 • Estimated restoration time

21 The reconnaissance assessment is followed as early as possible with assessment of
22 major interruptions and three phase outages and finally a complete circuit detailed
23 assessment.

1 5. Restoration Implementation

2 Q. PLEASE DESCRIBE THE COMPANY'S RESTORATION STRATEGY AS
3 REFLECTED IN THE ERP.

4 A. After hazard removal and damage assessment, the third function identified in the
5 Company's ERP is to restore service to the most consumers in the shortest time while
6 keeping in focus restoration of service to vital community services and installations
7 (critical loads). The fourth function is to restore service to all remaining users as quickly
8 as possible.

9 Q. PLEASE DESCRIBE THE COMPANY'S STRATEGY TO RESTORE SERVICE TO
10 ESSENTIAL SERVICES/CRITICAL LOADS.

11 A. The Company establishes guidelines to assist in setting the priority order in which assessed
12 outages are worked. Critical loads are essential services as collaboratively determined by
13 community leaders and SWEPCO. These include:

- 14 • Hospitals, institutions and health support facilities
- 15 • Fire, law enforcement and essential governmental agencies
- 16 • Water and sewage treatment facilities
- 17 • Perishable food processors
- 18 • Media communication centers
- 19 • FAA Navigational Facilities
- 20 • Other institutions whose operation are essential to the safety, health and welfare of
- 21 the community

22 Q. PLEASE DESCRIBE HOW THE COMPANY IMPLEMENTS ITS STRATEGY TO
23 RESTORE SERVICE TO THE MOST CUSTOMERS IN THE SHORTEST AMOUNT
24 OF TIME.

1 A. In order to restore service to the most customers in the shortest amount of time, the
2 Company generally works through restoration in the following overall order, prioritizing
3 the stability and integrity of the entire transmission and distribution grid:

- 4 • Transmission circuits that could result in cascading station outages (outages that
5 could lead to outages on subsequent circuits if overall demand remains the same
6 after the initial outage)
- 7 • Sub transmission circuits that could also result in cascading station outages
- 8 • Sub transmission circuits that result in station outages
- 9 • Stations
- 10 • Distribution feeder circuits
- 11 • Distribution three phase branch circuits
- 12 • Two phase and single phase laterals
- 13 • Secondary/ Services
- 14 • Street lighting

15 Accordingly, for distribution, the first emphasis is on the feeder circuits, followed by the
16 three-phase branch circuits, laterals, and secondary/services. Finally, street lighting is
17 addressed. Of course, although this is the general work plan, the Company's crews in
18 practice will work multiple facilities in parallel paths to the extent possible so that service
19 can be restored as quickly as possible. Additionally, even though the overall work plan
20 listed above indicates that restoration of transmission facilities comes prior to restoration
21 of distribution facilities, the transmission and distribution work teams also proceed in
22 parallel paths so that service can be restored as quickly as possible.

23 Q. WHAT IS THE BENEFIT OF INITIALLY FOCUSING ON THE FEEDER CIRCUITS
24 IN THE RESTORATION PROCESS?

25 A. Focusing on the feeder circuits supports the restoration of the largest number of customers
26 in the shortest time possible. A single feeder circuit may support service to as many as
27 1,000 customers whereas laterals, for example, may only support service to 10 customers.

1 Q. DID THE COMPANY KEEP ITS CUSTOMERS AND OTHER STAKEHOLDERS
2 INFORMED DURING THE RESTORATION EFFORTS?

3 A. Yes. The Company recognizes that timely communication is vital to the process of
4 managing storm-related outages, and made sure to keep its customers, all those
5 participating in the restoration effort, and the Commission apprised of all-important factors
6 of the outage and restoration status during the events.

7 6. Safety

8 Q. WHAT IS THE COMPANY'S PERSPECTIVE ON SAFETY DURING RESTORATION
9 ACTIVITIES?

10 A. SWEPCO and AEP are committed to the safety and health of its employees, external crews,
11 contractors, and the general public. Our goal in every storm recovery event is "Zero harm"
12 – no injuries or vehicle accidents.

13 Q. WHAT STEPS DID THE COMPANY TAKE TO ENSURE SAFETY AMONG THE
14 COMPANY'S EMPLOYEES AND THE THOUSANDS OF CONTRACTOR
15 PERSONNEL?

16 A. As noted above, the Company provided a safety orientation to mutual assistance and non-
17 local contractor workers. This ensured that crews received the same message. The training
18 included live and video presentations and literature, plus information on local hospitals and
19 regional cautions such as dangerous insects, snakes, reptiles, and plants. SWEPCO Safety
20 personnel communicated daily with safety representatives from each of the mutual
21 assistance and non-local companies. SWEPCO also stationed Company safety
22 representatives at each staging site who sat in on morning safety meetings with the
23 non-local crews.

1 VI. DISTRIBUTION-RELATED O&M SYSTEM RESTORATION COSTS

2 Q. PLEASE DESCRIBE THE MAJOR COST DRIVERS FOR THE DISTRIBUTION-
3 RELATED O&M SYSTEM RESTORATION COSTS INCURRED BY SWEPCO
4 LOUISIANA AS A RESULT OF THE THREE MAJOR STORMS.

5 A. The major cost drivers for the Company's recovery effort included the extent of damage to
6 the distribution system and the urgency of restoration.

7 The Company recognized the importance of restoring service quickly. In any
8 restoration effort of this magnitude, it is essential to first restore service to key functions,
9 such as water pumping stations, hospitals, and sewer lifts, as well as schools and
10 businesses. The health, safety, and well-being of all customers are paramount. In
11 anticipation of a large restoration effort, the Company ordered materials and engaged
12 personnel before the storms arrived, and in the course of the restoration effort, expedited
13 the delivery of additional materials from every source available.

14 Q. WHAT IS THE AMOUNT OF THE DISTRIBUTION-RELATED O&M SYSTEM
15 RESTORATION COSTS DUE TO THE STORMS?

16 A. The total O&M costs incurred for distribution-related restoration was approximately
17 \$151.9 million as of September 30, 2021. The costs per storm are detailed in the Figure 2
18 below.

19 Q. WHAT ARE THE COST CATEGORIES THAT MAKE UP THE TOTAL
20 DISTRIBUTION-RELATED O&M SYSTEM RESTORATION COSTS INCURRED AS
21 OF SEPTEMBER 30, 2021?

A. Figure 2 below shows the distribution cost categories and their associated costs. Figure 2 represents O&M costs for each category allocated through September 30, 2021 for SWEPCO Louisiana.

**Figure 2 - Louisiana Major Storm Restoration
Distribution Related O&M Costs
Through September 30, 2021**

	Hurricane Laura	Hurricane Delta	Winter Storm 2021	Grand Total
Cost Category	Distribution O&M	Distribution O&M	Distribution O&M	Distribution O&M
Fleet Services	\$ 1,403,127	\$ 647,928	\$ 324,035	\$ 2,375,090
Fringes	\$ 542,891	\$ 195,656	\$ 15,631	\$ 754,178
Incentives	\$ 1,102,980	\$ 252,136	\$ 122,639	\$ 1,477,755
Internal Labor	\$ 5,282,301	\$ 1,878,713	\$ 1,132,244	\$ 8,293,258
Material & Supplies	\$ 89,365	\$ 1,740	\$ 700,667	\$ 791,773
Other Clearings/Billings	\$ 207,004	\$ 25,814	\$ 54,139	\$ 286,957
Other Cost Category	\$ 23,586,105	\$ 3,135,759	\$ 80,247	\$ 26,802,110
Outside Services	\$ 56,028,490	\$ 11,250,616	\$ 42,970,231	\$ 110,249,337
Travel Expenses	\$ 670,423	\$ 257,378	\$ 36,789	\$ 964,590
TOTAL	\$ 88,912,685	\$ 17,645,741	\$ 45,436,623	\$ 151,995,049

Q. PLEASE PROVIDE AN OVERVIEW OF THE OUTSIDE SERVICES COSTS.

A. The distribution-related outside services charges make up the majority of distribution restoration costs and total approximately \$110.2 million. The outside services costs include the costs of non-AEP personnel to assist SWEPCO Louisiana in restoring service to customers after the major storms. The functions provided by non-AEP personnel include assessors, linemen, tree trimmers, and other miscellaneous functions as needed.

Q. PLEASE DESCRIBE THE PROCESS BY WHICH THE COMPANY OBTAINED CONTRACTUAL OUTSIDE SERVICES.

A. In the months and years prior to the major storms, the Company identified contractors used by other AEP operating companies and other utilities that would be available to help in the event of a major storm event. This enabled the Company to establish proactive emergency

1 operations contracts with approximately 100 contractors in advance of the storm. This
2 largely eliminated the process of qualifying contractors and negotiating contracts during
3 restoration.

4 In the course of the restoration effort, the Company identified the need for, and
5 established contracts with additional contractors. The additional contractors were
6 identified by communicating with other utilities and existing contractors. Most contractors
7 already have an agreement or contract with a home utility, so the Company had to
8 determine if the home utility was willing to release the contractor to perform work off of
9 its system.

10 Q. HOW WERE THE CONTRACTS WITH NON-LOCAL CONTRACTORS REVIEWED?

11 A. The AEP Emergency Restoration Planning Group reviews all contracts related to the
12 recovery efforts for events such as the major storms. This includes proactive contracts
13 established prior to the storm season as well as temporary 30-day contracts that are
14 executed as necessary during an event. If temporary 30-day contracts are utilized, they are
15 reviewed and executed by the AEP Emergency Restoration Planning Manager.

16 Q. WHAT PROCESSES AND PROCEDURES ARE EMPLOYED TO ENSURE THAT
17 THE CONTRACT SERVICES ARE PROVIDED AT REASONABLE RATES?

18 A. Representatives of the Company negotiate storm contracts as part of our storm
19 preparedness strategy throughout the year. Pricing from potential storm vendors is
20 negotiated and compared with other vendors already under contract. When additional
21 resources are needed outside of established contracts or mutual assistance relationships,
22 vendors are secured and a temporary 30-day contract is executed. As part of the contract

1 execution process, pricing is negotiated before crews can work on company property, and
2 the contract is only in effect for 30 days.

3 Q. PLEASE IDENTIFY THE TYPES OF OUTSIDE SERVICES COSTS IN GREATER
4 DETAIL.

5 A. The outside services costs include the costs of the following:

- 6 • Mutual assistance utilities
- 7 • Line contractors
- 8 • Distribution-related substation contractors
- 9 • Vegetation contractors
- 10 • Line recovery and disposal contractors
- 11 • Engineering contractors
- 12 • Environmental contractors
- 13 • Transportation contractors
- 14 • Telecommunications contractors
- 15 • Logistics contractors
- 16 • Other

17 Q. ARE THE DISTRIBUTION-RELATED O&M SYSTEM RESTORATION COSTS
18 RESULTING FROM THESE MAJOR STORMS REASONABLE AND NECESSARY?

19 A. Yes. It was necessary for the Company to incur the costs to restore service as safely and
20 quickly as reasonably possible after each of the storm events described in this testimony.
21 The contracting practices described earlier in my testimony ensured the reasonableness of
22 the system restoration costs.

23 VII. CONCLUSION

24 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

25 A. Yes, it does.