

1 provide a unique or timely service, but these charges were evaluated and deemed
2 to be reasonable under the circumstances.

3

4 Q122. HOW WERE THE EMPLOYEE EXPENSES COSTS CAPTURED AND
5 MONITORED?

6 A. The costs in this category were captured by both direct vendor invoices to ETI and
7 through the use of lines of credit arranged with Citibank Corporation. These
8 invoices were processed via our normal accounts-payable system applications,
9 PeopleSoft Financials.

10 Storm invoices directly charged to ETI were reviewed for the accuracy of
11 both quantity and rates, and their payment was approved by Entergy management.
12 Meals and lodging for smaller work groups, as well as supplies for the workers at
13 their job sites, were secured using storm credit cards. Entergy secured lines of
14 credit with Citibank Corporation for credit cards to be used in the event of storm
15 restoration activities. These credit cards were assigned to Entergy employees who
16 were trained in the appropriate management and accounting of storm credit cards
17 prior to the occurrence of Hurricanes Laura and Delta and Winter Storm Uri. These
18 employees procured meals, lodging, supplies, and miscellaneous items on an as-
19 needed basis. The individual transactions on the credit card statements were
20 reconciled with vendor receipts.

c. Labor

Q123. WHAT DISTRIBUTION DOLLARS ARE ASSOCIATED WITH THE RESTORATION COST CATEGORY “LABOR”?

A. As of February 28, 2021, ETI distribution labor costs incurred for the storm restorations were as follows in Table 17:

Table 17
Labor Costs

Hurricane Laura	\$3,908,306
Hurricane Delta	\$1,836,461
Winter Storm Uri	\$1,338,581
Total	\$7,083,348

Q124. DESCRIBE THE COSTS INCLUDED IN THIS COST CATEGORY.

A. This cost category includes the total labor cost for ETI employees performing storm restoration activities, including payroll taxes and benefits.

Q125. DESCRIBE THE ETI PERSONNEL INVOLVED IN ADDRESSING THE STORMS.

A. In a major storm event, all employees who can be released from their normal job functions are reassigned to assist with the restoration effort. ETI distribution employees supporting restoration following Hurricane Laura totaled 548. ETI distribution employees supporting restoration following Hurricane Delta totaled 312. And ETI distribution employees supporting restoration following Winter Storm Uri totaled 276.

1 Many of ETI's line supervisors, line crews, and service personnel
2 performed their normal storm restoration duties. However, some of these and other
3 employees worked outside of their normal job descriptions, taking on storm duties
4 to help manage the extensive damage and significant amount of resources used
5 during these restoration efforts. They worked as safety specialists, logistics
6 support, damage assessment scouts, staging area support, crew leads, guides,
7 trouble shooters, line crews, Supply Chain support, or in other roles such as
8 assisting our State Command Center and its supporting staff. However, once
9 restoration was completed, and these employees returned to their normal job
10 functions, they had a substantial amount of catching-up to do in that their normal
11 workload had continued to accrue while they were lending aid to the restoration
12 efforts.

13
14 Q126. WHAT WERE THE BENEFITS OF USING ETI EMPLOYEES FOR
15 HURRICANE RESTORATION ROLES?

16 A. These employees were very familiar with ETI's procedures, service area, facilities,
17 and safety requirements, thus improving the efficiency and safety of the
18 restorations. These ETI resources were therefore utilized to the maximum extent
19 possible.

20
21 Q127. WERE THE LABOR COSTS REASONABLE AND NECESSARY?

22 A. Yes. These employees have first-hand knowledge of ETI's electrical systems and
23 safety procedures. In addition, this labor was provided at cost. The use of ETI

employees in the storm restoration was absolutely necessary to restore service in the time frame in which it was accomplished, and these employees were utilized prior to engaging mutual-aid or third-party contractors whenever possible.

Q128. DOES THE COST CATEGORY “LABOR” INCLUDE OVERTIME?

A. Yes. ETI employee overtime is included in the cost category “labor.” Overtime was incurred due to both the need for ETI employees familiar with the system to work as much as possible in order to restore power quickly as well as the lack of other labor resources due to restoration efforts ongoing in other areas due to both Hurricanes Laura and Delta. As of February 28, 2021, the total approximate amounts of ETI employee overtime charged to the storm project codes were as follows in Table 18:

Table 18
Overtime Included in Labor Costs

Hurricane Laura	\$1,877,860
Hurricane Delta	\$991,699
Winter Storm Uri	\$636,022
Total	\$3,505,581

d. Materials

Q129. WHAT DISTRIBUTION CLASS DOLLARS ARE ASSOCIATED WITH THE RESTORATION COST CATEGORY “MATERIALS”?

A. As detailed in Table 19 below, the material costs incurred for each storm were as follows:

Table 19
Materials Costs

	Direct	Loaned Resources
Hurricane Laura	\$11,380,908	\$784,244
Hurricane Delta	\$3,379,143	\$0
Winter Storm Uri	\$1,698,725	\$5,833
Total	\$16,458,776	\$790,077

Materials received from the Central Distribution Warehouse in Hammond, Louisiana and from other Entergy companies are considered to be “loaned resources” since the warehouse is located outside of Texas. However, for future discussion, I have combined the amounts under the “Materials” cost category since there is no difference between the materials received from the out-of-state warehouses and the materials in the Texas warehouses.

Q130. DESCRIBE THE COSTS INCLUDED IN THIS COST CATEGORY.

A. This category includes the cost of materials used in the restoration work, including poles, wires, transformers and related materials obtained from our vendors and key suppliers, including the material loaders applied to all material issued. Material loaders are costs related to procurement, transportation, inventory management, and other Supply Chain costs that are customarily applied to the cost of each unit.

1 As I have previously testified, both hurricanes caused a significant amount of
2 damage to the distribution system from vegetation, wind, and debris. Many
3 material units required replacement because, in most cases, physical and
4 mechanical damage was incurred.

5 In addition, this category also contains the cost of fuel trucks used to supply
6 the line and service trucks, as well as other equipment during the restoration. This
7 fuel cost does not include the cost of fuel purchased through the Transportation
8 Department or other normal contracts to fuel the service centers.

9

10 Q131. WHAT PARTICULAR MATERIALS WERE UTILIZED IN THE
11 DISTRIBUTION RESTORATION EFFORTS?

12 A. The following Table 20 lists the major material items that represent approximately
13 94% of the materials costs for the Hurricane Laura restoration incurred by ETI
14 Distribution. The remaining balance of material consists of other miscellaneous
15 materials and items used in the distribution restoration effort such as work gloves,
16 insect repellent, electrical tape, batteries, lubricant, switching tags, and first-aid
17 supplies.

Table 20
Major Material Categories for Hurricane Laura

Stock Item Name	Quantity	Monetary Amount \$
Cable	478,227 ft./90.6 miles	\$681,174
Wire	158,892 ft./30.1 miles	\$219,122
Splices	63,566	\$272,702
Transformers	1,272	\$1,403,445
Poles	1,804	\$847,256
Cross-arms	5717	\$752,690
Reclosers	21	\$214,201
Capacitor	14	\$61,711
Insulators	30,391	\$286,743
Clamps	32,414	\$191,063
Brackets	9,236	\$186,785
Lighting (fixtures/lamps)	455	\$57,450
Bolt Assemblies	66,550	\$87,616
Connectors	27,574	\$102,938
Cutouts	3,407	\$186,355
Fuses	52,360	\$408,492
Stirrups	9,888	\$121,637
Major Material Categories		\$6,081,380
Catering Food		\$4,023,147
Fuel		\$614,053
Total Major Material		\$10,718,580

The following Table 21 lists the major material items that represent approximately 89% of the materials costs for the Hurricane Delta restoration incurred by ETI Distribution. The remaining balance of material consists of other miscellaneous materials and items used in the distribution restoration effort such as work gloves, insect repellent, electrical tape, batteries, lubricant, switching tags, and first-aid supplies.

Table 21
Major Material Categories for Hurricane Delta

Stock Item Name	Quantity	Monetary Amount \$
Cable	132,556 ft./ 25.1 miles	\$101,926
Wire	34,677 ft./ 6.5 miles	\$72,692
Splices	8,914	\$31,788
Transformers	320	\$440,990
Poles	601	\$296,415
Cross-arms	768	\$117,676
Reclosers	7	\$97,299
Capacitors	24	\$81,605
Insulators	5,606	\$59,001
Clamps	9,294	\$43,165
Brackets	2,372	\$52,561
Lighting (fixtures/lamps)	4,762	\$854,686
Bolt Assemblies	10,230	\$19,554
Connectors	7,557	\$22,059
Cutouts	552	\$30,387
Fuses	7,923	\$65,000
Stirrups	1,496	\$20,595
	Major Material Categories	\$2,280,900
	Catering Food	\$517,632
	Fuel	\$87,893
	Total Major Material	\$3,012,924

The following Table 22 lists the major material items that represent approximately 82% of the materials costs incurred by ETI Distribution for the Winter Storm Uri restoration. The remaining balance of material consists of other miscellaneous materials and items used in the distribution restoration effort such as work gloves, insect repellent, electrical tape, batteries, lubricant, switching tags, and first-aid supplies.

Table 22
Major Material Categories for Winter Storm Uri

Stock Item Name	Quantity	Monetary Amount \$
Transformers	432	\$1,094,632
Cable	50,167ft./ 9.5 Miles	\$128,590
Poles	246	\$62,540
Connectors	1,992	\$32,952
Reclosers	3	\$37,501
Fuses	3,421	\$30,083
Total Major Material		\$1,386,298

Prior to each storm's arrival, materials were procured, transported, and staged at strategic sites. The process of procuring materials continued throughout the restoration process to meet the needs that were identified through on-going assessments of damage to facilities.

Q132. PLEASE DESCRIBE THE KEY TYPES OF MATERIALS LISTED ABOVE.

A. The following is a brief description of the significant types of materials shown in the tables above:

- **Transformer** – A device that reduces voltage from distribution level to a customer utilization voltage. Transformers come in different capacity and voltage ratings.
- **Pole** – This is a structure, typically wooden but sometimes steel or concrete, that supports aerial wires and equipment. Poles come in various heights and strength ratings.

- 1 • **Cable/Wire** – This is the metallic medium through which electrical current
2 is transported from source to load. Wire comes in various types of metals
3 and alloys, capacity, strength, and basic insulation levels.
- 4 • **Splice** – This is a device used to join or rejoin cable and wires. Splices
5 come in different sizes to accommodate different wire sizes and types.
- 6 • **Cross-arm** – This is a horizontal support for cables and wires. This support
7 is attached toward the top of the pole and braced with diagonal mounted
8 cross-arm braces with galvanized bolts, nuts, and washers of various SAE
9 sizes and lengths. Cross-arms come in various sizes, strengths, BIL, and
10 material.
- 11 • **Braces** – Braces are used in conjunction to stabilize/level cross-arms on a
12 pole.
- 13 • **Compound** – This is a soil stabilizer used to support poles in poor soil
14 conditions. Compound is a catalytic chemical system that is combined and
15 applied at the worksite.
- 16 • **Recloser** – This is a protective device that automatically interrupts the flow
17 of current under fault conditions. Reclosers come in various sizes and
18 ratings.
- 19 • **Cut-Outs** – These are protective devices that operate much like the breaker
20 in a home. When there is a fault, the fuse will blow and open the line to
21 clear downstream faults and protect upstream devices.

- 1 • **Fuse** – This is the device that goes into the cut-out to blow when there is a
2 fault on the line to protect upstream devices.
- 3 • **Stirrup** – This is a mechanical device used to make connections from the
4 electrical conductor to a protective device or another conductor.
- 5 • **Insulator** – This is non-conductive hardware that supports cable and wires
6 and prevents current from flowing through undesired paths. Insulators are
7 typically constructed of porcelain or polymer compounds and come in
8 various BIL and strength ratings.
- 9 • **Clamp** – This is a mechanical device used to hold objects suspended. There
10 are numerous types, sizes, and applications for clamps.
- 11 • **Connectors** – Mechanical devices used to connect objects to each other.
12 There are numerous types, sizes, and applications for connectors
- 13 • **Bracket** – This is a mechanical device used as a support or securing point
14 for various types of equipment and hardware. There are numerous types,
15 sizes, and applications for brackets.
- 16 • **Fixture** – This is equipment used for private and street/roadway lighting.
17 There are numerous types, sizes, and applications for fixtures.
- 18 • **Bolt Assembly** – Any combination of bolts, washers, and nuts to attach
19 numerous pieces of equipment to each other or structures.

1 Q133. WERE THE COSTS TO OBTAIN THESE MATERIAL REASONABLE AND
2 NECESSARY?

3 A. Yes. The materials used in the Hurricane Laura and Delta restorations were
4 necessary to replace equipment that was damaged and/or destroyed and therefore
5 necessary to reliably restore service. The vast majority of materials used in the
6 restorations of service were obtained under pre-existing contracts between the
7 Company and major material vendors. As discussed previously in my testimony,
8 these contracts were executed during non-emergency situations, usually based on
9 prior dealings with the vendor, and consistent with industry standards. A minor
10 amount of material was obtained from vendors with which the Company did not
11 have pre-existing contracts. Costs for these materials were reviewed and
12 determined to be reasonable under the circumstances given that the availability of
13 supplies was constricted due to the impact of hurricanes on utilities throughout the
14 southeast region of the country.

15

16 Q134. HOW DID ETI OBTAIN ITS SUPPLY OF POLES?

17 A. ETI has contracts with major pole brokers who have access to several pole mills in
18 the U.S., and an inventory of poles is maintained for normal replacement work. For
19 Hurricanes Laura and Delta, Entergy maintained multiple central pole yards and,
20 based on the damage estimates, poles were brought into these yards for distribution
21 to the affected areas as needed. In some cases, the poles acquired from an alternate
22 supplier were more costly than the poles normally obtained (class of pole and wood
23 treatment, for example) due to supply limitations due to the pandemic. As a result,

1 material costs for poles did increase in some cases due to demand and availability.
2 However, any price increases were reviewed and found to be reasonable based on
3 demand and availability at the time.

4

5 Q135. IDENTIFY THE MAJOR MATERIALS VENDORS FOR THE HURRICANE
6 LAURA AND DELTA RESTORATIONS, INCLUDING KEY SUPPLIERS,
7 AND DESCRIBE THE MATERIALS SUPPLIED.

8 A. The major materials vendors for the combined hurricane restorations are included
9 in Table 23 below. Their prices were reasonable based on Entergy's prior
10 experience with the vendors and the circumstances at the time (*i.e.*, supply
11 shortages).

Table 23
Major Materials Vendors

Vendor Name	Cost	Materials Provided	Contract Type	Multi-Year Relationship
Wesco Distribution	\$5,113,568	distributor that supplies major overhead, underground, maintenance, repair and operating materials	Pre-Existing	Y
Howard Ind.	\$1,826,883	distribution transformers	Pre-Existing	Y
T&C Specialty	\$1,071,427	wood poles	Pre-Existing	Y
Stuart C. Irby Co.	\$243,286	distributor that supplies overhead and underground materials	Pre-Existing	Y
Aluma Form, Inc.	\$148,870	distribution pole hardware & racks	Pre-Existing	Y
Base Logistics ⁵	\$1,500,153	catering food	Pre-Existing	Y
Lodging Solutions, LLC	\$487,125	catering food	Pre-Existing	Y
Storm Services, LLC	\$684,513	catering food	Pre-Existing	Y
Swadley's Emergency Relief Team	\$1,210,541	catering food	Pre-Existing	Y
Total	\$12,286,366			

Q136. PLEASE SUMMARIZE THE LEVEL OF DISTRIBUTION-CLASS MATERIALS COSTS AND WHY THEY WERE REASONABLE AND NECESSARY.

⁵ Several logistics contractors provided logistics services that are included in the category Contract Work as well as catering services/food that are separately included in this Materials category.

1 A. The total amount of Materials costs incurred by ETI in the Distribution Class for
2 the Hurricane Laura, Hurricane Delta, and Winter Storm Uri restorations through
3 February 28, 2021 was \$16,458,776. Those costs were necessary to restore service
4 to ETI's customers and repair the extensive damage to the distribution system.
5 Given the massive damage to the system from the hurricanes and the urgent need
6 to restore service for the health, safety, and convenience of customers and the
7 regional and national economy, ETI had to acquire the large amount of materials
8 described above on an expedited basis. ETI first utilized its existing stores of
9 materials, a large percentage of which had been pre-staged throughout the service
10 area in anticipation of the storm's landing. ETI then made arrangements with its
11 vendors under existing supply contracts to provide additional needed materials at
12 pre-existing contract prices. ETI then called upon additional vendors who were in
13 a position to supply materials to acquire the remaining materials necessary to
14 complete the restoration and reconstruction.

15 ETI acquired and distributed these materials as expeditiously as we could
16 to commence restoration of the system as quickly as possible. We continuously
17 monitored the level of materials in inventory, initially to make sure we acquired
18 sufficient additional materials to address all parts of the system that were damaged,
19 and then to make sure that we ramped down the materials on order as our needs
20 diminished. This was an evaluative process that continued on a constant basis
21 throughout the restoration and reconstruction.

22 Furthermore, we implemented measures to ensure that the costs we were
23 paying for these materials were reasonable. As an initial matter, we made sure we

Table 24
Other Costs

Hurricane Laura	\$2,889,179
Hurricane Delta	\$511,416
Winter Event Uri	\$816,946
Total	\$4,217,541

Q138. DESCRIBE THE COSTS INCLUDED IN THIS CATEGORY.

A. The Other cost category includes additional costs not categorized in the four categories above. Examples include transportation costs (not included in other categories), equipment rentals, network truck and equipment time charged to the project codes, the Allowance for Funds Used During Construction (“AFUDC”), advertising and radio messaging, and capital suspense costs.

The costs of transportation and equipment rentals constitute 76% (or approximately \$3.2 million) of the total costs in the “Other” category. These costs consist primarily of the cost to rent buses to transport crews to and from the staging sites. This allowed the large equipment to be stored and fueled at the staging site, while the workers were lodged and fed elsewhere. The remainder of the equipment rental costs is the rental of specialized equipment. Specialized equipment includes cranes, bulldozers, marsh buggies, alley machines, and other equipment that was necessary for the restoration efforts.

Capital Suspense is 13% (or approximately \$539,000) of the cost category. Capital suspense is a pool of overhead construction costs, not directly associated with any specific capital job, that is allocated to capital jobs on the basis that the amounts of such overheads reasonably support the capital work.

1 Advertising is 5% (or approximately \$195,000) of the cost category.
2 Advertising costs include the purchase of radio and digital media to educate
3 customers before and during the storm restoration process. Advertising included
4 messaging around safety, as well as resources for customers to stay informed as
5 crews completed restoration efforts.

6 Capital labor overhead costs are 4% (or approximately \$166,000) of the
7 costs in this category. Capital labor overhead costs are the proportional allocation
8 of labor costs for support personnel who were not included in the labor costs
9 discussed above but were involved in the overall support of the storm restoration
10 effort. The rate for this allocation is proportional to the cost of the restoration effort
11 against the cost of routine capital work.

12 AFUDC is 2% (or approximately \$104,000) of the costs in this category.
13 AFUDC is the recognized electric utility industry mechanism for the recovery of
14 interest costs on funds used during the construction of facilities. It applies to the
15 capital portion of the costs of storm restoration at the same cost of money as is
16 applicable for routine construction.

17 The remaining costs in this category represent less than 1% of the category
18 and include items such as the acquisition of the necessary computer hardware and
19 software to replace equipment damaged by the storm; the operation of emergency
20 generators; office supplies required to monitor and document storm restoration; the
21 purchase of media air time to update the public on restoration progress; the purchase
22 of other restoration-related public service announcements; and the cost of
23 communications during and following the restoration periods.

1 Q139. PLEASE FURTHER DESCRIBE THE TRANSPORTATION COSTS
2 INCURRED IN THE RESTORATIONS.

3 A. The transportation costs included in this cost category are the proportional costs of
4 Entergy's fleet of vehicles as they were used in the Hurricane Laura and Hurricane
5 Delta restoration efforts, as well as any incremental costs that resulted specifically
6 from the extraordinary circumstances. The direct costs of Entergy's fleet include
7 the lease costs of the vehicles, fuel, and maintenance. The costs included in this
8 category are the result of these direct costs being allocated proportionally to the
9 storm restoration based on the hours each vehicle was used for restoration work. In
10 addition, the costs of providing fuel to remote work sites and any maintenance work
11 resulting from storm conditions are included in this cost category.

12 These transportation costs relate only to Entergy's fleet of vehicles and the
13 use of the vehicles in the actual restoration work. The vehicles are specifically
14 designed and equipped to perform distribution line work, such as setting poles,
15 handling wire, hanging transformers, and setting anchors. The use of contract
16 vendors to provide transportation for workers to and from their job sites is not
17 included in this category.

18

19 Q140. WERE THESE TRANSPORTATION COSTS REASONABLE AND
20 NECESSARY?

21 A. Yes. The transportation costs were necessary to enable ETI and contractor
22 personnel to travel to and from work sites for damaged facilities and, with respect
23 to vehicles utilized in the restoration work itself, to perform the repair and/or

1 replacement of damaged distribution facilities. The transportation costs assigned
2 to the storm effort were reasonable because they are based on the same costs and
3 prices incurred during non-storm operations. The lease costs of the vehicles are
4 managed through contracts with Altec, Inc., and they are regularly revised to ensure
5 the best possible fleet for the lowest cost. Fuel and maintenance costs were subject
6 to the current market rates, plus on-site delivery and fueling service.

7
8 Q141. WERE THE COSTS INCLUDED IN THE "OTHER" CATEGORY
9 REASONABLE AND NECESSARY?

10 A. Yes. The costs included in the Other category were necessary to enable ETI to
11 perform the work required to restore and reconstruct its distribution system. The
12 rates and prices for these cost items are reasonable and are generally consistent with
13 pre-established rates. As I already mentioned, AFUDC rates are based on the cost
14 of equity and debt for ETI and are no different for storm costs than for normal
15 capital work. Capital labor overhead rates for storm work are consistent with
16 normal overhead rates and are necessary to the storm restoration effort. The costs
17 for specialized equipment were reasonable because the equipment was obtained at
18 rates that were negotiated based on pre-storm operating conditions.

19
20 f. Affiliate Costs

21 Q142. WHAT DISTRIBUTION CLASS DOLLARS ARE ASSOCIATED WITH THE
22 RESTORATION AFFILIATE COST CATEGORY "ESL BILLINGS"?

23 A. ESL Billings through February 28, 2021 are as detailed in Table 25:

Table 25
ESI Billings

Hurricane Laura	\$2,506,185
Hurricane Delta	\$439,723
Winter Storm Uri	\$196,193
Total	\$3,142,101

Q143. DESCRIBE THE COSTS INCLUDED IN THIS COST CATEGORY.

A. This category includes costs related to services provided to ETI by ESL personnel in the distribution restoration efforts following Hurricanes Laura and Delta. ESL Billings also include employee payroll to provide management and corporate support services to ETI, such as the System Command Center, Accounts Payable, and Human Resources.

Q144. WHAT DISTRIBUTION DOLLARS ARE ASSOCIATED WITH THE RESTORATION AFFILIATE COST CATEGORY "LOANED RESOURCES"?

A. Loaned Resources costs incurred through February 28, 2021 are as detailed in Table 26 below:

Table 26
Loaned Resources

Hurricane Laura	\$1,474,179
Hurricane Delta	\$435,125
Winter Storm Uri	\$6,953
Total	\$1,916,257

Of this amount, Labor costs for the combined three restoration events were \$1,693,963. The Loaned Resources (Labor) category reflects the process by which payroll costs are charged from one department within Entergy to another when an

1 employee is loaned to another department for reasons such as storm restoration.
2 Charges for Labor from ETI's sister Operating Companies (EAL, EML, ELL, and
3 ENOL) are included in this category, which also includes \$947,055 in employee
4 overtime for the Hurricane Laura, Hurricane Delta, and Winter Storm Uri
5 restorations. Materials and Transportation costs related to Loaned Resources are
6 included in the respective "Direct" sections discussed above.

7
8 Q145. TO WHAT EXTENT DID THE COMPANY RELY ON THE RESOURCES OF
9 ESL AND OTHER ENTERGY OPERATING COMPANIES TO ADDRESS THE
10 HURRICANES' IMPACTS?

11 A. The support from many ESL employees was critical to our restoration efforts in
12 Texas. Our System Command Center in Jackson, Mississippi was primarily staffed
13 with ESL employees. The System Command Center provided support to the State
14 and other Departmental Command Centers, such as coordination among our sister
15 Operating Companies and among Transmission, Generation, and many other
16 departments engaged in our restoration efforts. More specifically, the System
17 Command Center:

- 18 • acquired and deployed off-system line crews, vegetation crews,
19 damage-assessment support, logistical support and communications
20 support;
- 21 • tracked the progress of restoration efforts;
- 22 • monitored and reported on weather conditions;
- 23 • coordinated mutual-assistance crews;

- coordinated with regulatory agencies; and
- performed other restoration-related functions.

In addition, we had many ESL employees supporting our restoration efforts in Texas by directly working in a support role that was not part of their regular work activities, such as assisting with logistics and staging sites. ESL employees, as part of their regular work activities, also supported the many corporate systems, such as the Storm Assignment Management System (“SAMS”), the information technology communication systems, contracts, and accounts payable. In addition, ETI’s affiliated Operating Companies supported our restoration efforts by supplying line crews, servicemen, management teams, logistics personnel, safety specialists, call center personnel, scouts, material Supply Chain personnel, and dispatching personnel. Our sister Operating Companies also supplied other resources such as material and equipment.

Q146. WHAT WERE THE BENEFITS OF USING AFFILIATE RESOURCES?

A. Like the use of ETI employees, the major benefit, from a cost perspective, was that these resources performed their storm restoration work at their normal pay level, thus ensuring that the costs of their labor were reasonable. Further, these resources were invaluable due to their knowledge of ETI’s system, standards, operating procedures, and safety rules. These resources were utilized to the maximum extent possible, though it must be noted that these types of resources were stretched thin due to the restoration work ongoing for other Entergy Operating Companies due to the impacts of Hurricanes Laura and Delta.

1 Q147. HOW WERE COSTS FOR ESL BILLINGS AND LOANED RESOURCES
2 BILLED TO THE DISTRIBUTION CLASS?

3 A. ESL Billings are billed using project codes that define how costs should be billed
4 to affiliates. Each project code has a single assigned billing method. The billing
5 method results in either a “direct” billing (billed 100% to one affiliate) or an
6 “allocation” to several affiliates. Loaned Resource category transactions are the
7 result of a process for direct billing labor costs among Entergy’s utility companies.
8 The Loaned Resources category of costs corresponds to the labor cost billed
9 directly to the storm job order. Company witness Barbara Heard further addresses
10 these billing mechanics in her testimony.

11

12 Q148. HOW WERE THE ESL AND LOANED LABOR AFFILIATE COSTS
13 TRACKED AND RECORDED?

14 A. In ETI’s time and labor system, the costs for the Hurricane Laura and Hurricane
15 Delta storm restorations have been tracked primarily by project code, meaning that
16 a specific project code was established to capture costs associated with a particular
17 task. For example, one project code was set up to capture costs attributable to
18 repairs of distribution lines. Additional accounting attributes describe the nature of
19 the cost to support compliance with the FERC Uniform System of Accounts.
20 Company witness Barbara Heard provides further detail regarding the tracking and
21 recording of affiliate costs.

1 Q149. WERE THE AFFILIATE COSTS INCURRED FOR THE DISTRIBUTION
2 CLASS REASONABLE AND NECESSARY?

3 A. Yes. These costs were both necessary and reasonable to the restorations following
4 Hurricane Laura and Hurricane Delta. These costs were predominantly associated
5 with employees from our regulated affiliate companies who provided direct
6 restoration support such as line construction, network management, operation and
7 staffing of staging sites, and support and staffing of logistics management.

8 These services were necessary for several reasons. With regard to
9 managing the restoration efforts following Hurricanes Laura and Delta, the
10 employees of our sister Operating Companies are familiar with our administrative
11 systems and company procedures, whereas outside contractors or utilities generally
12 are not. The construction resources were necessary to conduct a timely restoration
13 just like the non-affiliated construction resources provided by ETI, contractors,
14 other utilities, and other third parties.

15 These costs were reasonable because ETI paid the direct labor costs and
16 expenses of using these resources. The labor was provided at cost.

17

18 Q150. WERE THE PRICES FOR THE COSTS INCURRED IN THE DISTRIBUTION
19 CLASS NO HIGHER THAN THE PRICES CHARGED BY THE SUPPLYING
20 AFFILIATE FOR THE SAME ITEM OR CLASS OF ITEMS TO OTHER
21 AFFILIATES OF ETI?

22 A. Yes. Company witness Barbara Heard addresses this issue in her testimony.

1 Q151. DO THE AFFILIATE COSTS INCURRED IN THE DISTRIBUTION AND
2 CLASS REASONABLY APPROXIMATE THE ACTUAL COSTS OF THE
3 SERVICES AND MATERIALS PROVIDED?

4 A. Yes. Company witness Barbara Heard addresses this issue in her testimony.

5

6 g. Estimated Costs

7 Q152. IS ETI REQUESTING COST RECOVERY BASED ON THE ESTIMATES OF
8 FUTURE WORK ASSOCIATED WITH DAMAGES INCURRED FROM
9 HURRICANES LAURA AND DELTA?

10 A. Yes. ETI is requesting recovery of the estimated Distribution Class costs totaling
11 \$14,187,464 required to fully restore distribution facilities and capacity to pre-
12 Hurricane Laura conditions.

13

14 Q153. DESCRIBE THE NATURE OF THE ESTIMATED COSTS.

15 A. The costs included in this category are SRCs pertaining to work and activities
16 undertaken (or that are being undertaken) by and on behalf of ETI to repair damage
17 to the distribution system following the 2020 hurricanes that have not yet booked
18 by ETI. Pursuant to PURA § 36.402(a), SRCs “shall include reasonable estimates
19 of the costs of an activity or activities conducted or expected to be conducted by or
20 on behalf of the electric utility in connection with the restoration of service or
21 infrastructure associated with electric power outages.” As explained above in
22 section IV.C.3.a.i, the bulk of the estimated costs pertain to the costs of mutual-aid
23 crews for which the Company is still being invoiced.

4. Conclusion Regarding Distribution Class Costs

Q154. IN LIGHT OF THE FACTS KNOWN TO THE COMPANY AT THE TIME, WERE THE DISTRIBUTION CLASS STORM RESTORATION COSTS YOU SPONSOR REASONABLE AND NECESSARY FOR THE COMPANY TO ACQUIRE AND UTILIZE THE RESOURCES TO COMPLETE THE RESTORATION OF SERVICE AND RECONSTRUCTION OF FACILITIES FOLLOWING HURRICANES LAURA AND DELTA?

A. Yes.

Q155. IN LIGHT OF THE FACTS KNOWN TO THE COMPANY AT THE TIME, WAS IT PRUDENT FOR THE COMPANY TO ACQUIRE AND UTILIZE THE RESOURCES THAT IT DID TO COMPLETE RESTORATION OF SERVICE AND RECONSTRUCTION OF FACILITIES FOR BOTH HURRICANES?

A. Yes.

V. FEBRUARY 2021 WINTER STORM URI COSTS

Q156. IS ETI ALSO SEEKING TO INCLUDE IN THE CALCULATION OF STORM RESTORATION COSTS THE COSTS INCURRED TO RESTORE SERVICE AS A RESULT OF THE FEBRUARY 2021 WINTER STORM URI?

A. Yes. ETI also seeks to include the restoration costs resulting from Winter Storm Uri in the determination of system restoration costs eligible for recovery and securitization. ETI is requesting recovery of \$4,359,192 in Distribution Class costs

1 incurred as a result of Winter Storm Uri. I have identified those costs above in the
2 tables for each Distribution Class cost category.

3

4 Q157. PLEASE DESCRIBE THE 2021 WINTER STORM EVENT.

5 A. Texas experienced an extreme winter storm event that brought extremely cold
6 temperatures, freezing rain, snow, and sleet to the ETI service territory on the
7 evening of February 14, 2021 into the following morning. The winter storm
8 conditions persisted for six days, lasting through much of the week of February 14,
9 2021.

10 As of February 10, 2021, severe winter weather was forecasted for a
11 significant number of states, including most of the State of Texas and throughout
12 the Entergy service area. On February 12, 2021, Governor Abbott issued a
13 proclamation for all 254 counties of Texas, certifying that the forecasted severe
14 winter weather constituted an “imminent threat of widespread and severe property
15 damage, injury, and loss of life due to prolonged freezing temperatures, heavy
16 snow, and freezing rain statewide.” On February 18-19, 2021, President Biden
17 declared a state of emergency in Texas and Louisiana, respectively, due to the
18 severe winter storms.

19

20 Q158. HOW DID THE WINTER STORM AFFECT THE ETI SERVICE TERRITORY?

21 A. The effects of the winter storm on ETI’s service territory can be broken down into
22 two major categories (1) the freezing rain, snow, and sleet; and (2) the extreme cold
23 temperatures that persisted for six days.

- 1 • Freezing rain, sleet, and snow began Sunday evening on February 14, and
2 continued throughout the day on Monday, February 15, before exiting the
3 service territory later that afternoon. This left a blanket of ice up to 3/8 inches
4 thick in the most northern network areas: Navasota, Huntsville, Cleveland, and
5 Conroe. The ice caused numerous outages and many customers to lose power.
6 Then on Wednesday morning, a second round of freezing rain again began
7 affecting ETI's most northern network areas. The towns of Bremond, Calvert,
8 Hearne, Franklin, Normangee, Madisonville, Trinity, Groveton, and Woodville,
9 Texas all saw ice accumulation, with some up to almost one-inch thick. This
10 second round of weather caused substantial damage to ETI's distribution
11 infrastructure.
- 12 • The extremely cold temperatures also created issues for ETI's distribution
13 infrastructure. Several pieces of equipment, transformers, wire and
14 sectionalization devices became overloaded and failed or tripped out due to the
15 extreme cold air and heavier than normal peak loads. Also, MISO directed
16 several load sheds, which at one point was up to 800 MW in the Western load
17 pocket. Restoring that load during extremely low temperatures was extremely
18 challenging. Several factors made that task much more difficult than normal,
19 including loss of load diversity, cold load pick-up, and stepped restoration.
- 20 ○ **Loss of Load Diversity:** Electric distribution system design takes into
21 account the non-coincident nature of the interconnected loads on the power
22 system, often referred to as the principal of diversity. The Diversity Factor
23 is defined as:

1 *the ratio of the sum of the individual non-coincident maximum loads*
2 *of the system to the maximum demand of the complete system.*

3 In simpler terms, diversity is the ratio between the load currently on the
4 system versus the maximum possible load. Loss of diversity is when the
5 actual load on the circuit approaches the maximum demand of the circuit.
6 An example is an electrical distribution feeder serving a residential
7 subdivision. Each home has diversity between its various appliances that
8 can be lost as discussed below in the cold load pick-up section. The loss of
9 diversity at an individual house is compounded when there are multiple
10 houses on a circuit, possibly thousands. Under normal operating conditions,
11 a percentage of the homes are cycling their loads and the aggregate across
12 the circuit reduces the overall load on the system. During a loss of diversity,
13 the majority of the homes are using their full capacity, resulting in a system
14 overload.

- 15 ○ **Cold Load Pickup**: An aspect to cold weather restoration, as opposed to
16 normal temperature restoration, is what is referred to as “cold load pick-
17 up.” The Institute of Electrical and Electronics Engineers (“IEEE”) defines
18 cold load pick-up as:

19 *the phenomenon that takes place when a distribution circuit is*
20 *reenergized following an extended outage of that circuit. Cold load*
21 *pickup is a composite of two conditions: inrush and loss of load*
22 *diversity. The magnitude of cold load pickup current is a*
23 *combination of non-diverse cyclic load current, continuously*
24 *operating load current, transformer magnetizing current, capacitor*
25 *inrush current, etc. The combination can result in current levels that*
26 *are significantly higher than normal peak load levels. Cold load*
27 *pickup current can be high enough to cause instantaneous*
28 *overcurrent and/or time overcurrent relays to operate.*

1 In simpler terms, when power is restored after an extended duration outage,
2 all customer equipment comes on simultaneously. Examples in a typical
3 residence would be the HVAC system, water heater, refrigerators, lights,
4 etc. This inrush of current results in an abnormally high demand, which can
5 exceed the trip setting for a given protective device on the circuit. The result
6 is the device trips and the restoration process starts over again.

- 7 ○ **Stepped Restoration**: If the circuit protective device does trip due to cold
8 load pickup, operations personnel may have to use stepped restoration to
9 pick up smaller segments of the circuit in order to not overload the
10 protective device. Partial restoration for cold load pickup can take hours to
11 complete and is often a challenging exercise as described further by IEEE:

- 12 ■ If cold load pickup issues are thought to exist or to have caused a
13 protective device to have operated, the most common practice
14 applied is to sectionalize the circuit. In these cases, switches will be
15 opened in order to remove load downstream from the protective
16 device in order to reduce the cumulative cold load pickup effects.
17 The downstream circuit may be split into halves or some other
18 smaller segments depending on the number, type, and load of the
19 customers served. Pre-event loading can be reviewed, if data is
20 available, to aid in the sectionalizing procedure. The protective
21 device that operated on the cold load pickup can then be closed to
22 pick up the load immediately downstream. Additional circuit
23 segments are then restored once the cold load pickup current has
24 decayed for the segments energized earlier.
- 25 ■ In simpler terms, when stepped restoration is utilized, a group of
26 customers is disconnected from the circuit to allow the circuit to be
27 energized without overload. Over time, customers are slowly added
28 back to the circuit until all customers are restored.

1 Q159. HOW DID ETI PREPARE FOR THESE SUSTAINED EXTREME WINTER
2 CONDITIONS?

3 A. ETI monitored the regional and national weather forecasts with respect to the
4 developing arctic weather events and potential for severe winter weather and began
5 preparations on February 11, 2021. ETI acted quickly to engage in preparation
6 efforts for the winter storm. Similar to other significant weather events, ETI's
7 preparation begins days ahead of the forecasted occurrence in order to have all the
8 necessary workforce, materials, logistics, and equipment in place so that restoration
9 commences as soon as it is safe to begin such efforts. That preparation included
10 committing to off-system crews, material suppliers, and logistics suppliers early
11 enough so that they could be ready to start work when needed. These are the same
12 steps taken for other storms such as Hurricanes Laura and Delta, as described in
13 detail earlier in my testimony. Those plans included:

- 14 • stopped work on all planned projects that could be stopped;
- 15 • completed repair on projects as feasible;
- 16 • made repairs on any pending sectionalization devices;
- 17 • worked through storm-preparation checklists:
 - 18 ▪ checked distribution map supplies;
 - 19 ▪ checked service center generators;
 - 20 ▪ ensured vehicles were equipped with chains and were prepared for
 - 21 winter-driving conditions;
 - 22 ▪ prepared meal packages and logistical arrangements for crews and
 - 23 support personnel;

- 1 ▪ prepared staging sites; and
- 2 ▪ prepared employee rosters and assignments;
- 3 • patrolled critical feeders for vegetation issues or potential areas that could
- 4 be impacted with ice accumulation;
- 5 • on Saturday, February 13, six generators were arranged to be deployed to
- 6 support critical customers; and
- 7 • requested 25 additional line crews who arrived Sunday, February 14.

8

9 Q160. PLEASE DESCRIBE YOUR INVOLVEMENT LEADING UP TO THE WINTER
10 STORM EVENT.

11 A. Before the arrival of the extreme winter weather, ETI was in communications with
12 other mutual-assistance utilities to discuss the allocation of potential resources and
13 to arrange mutual aid to the affected utilities. We relied upon our weather vendor,
14 Impact Weather, along with local weather and news outlets to keep us advised of
15 developing weather situations. By February 11, we placed all of our employees
16 and base-load contractors on alert and cancelled vacations. We conducted frequent
17 conference calls with our State Command Center and key leadership in Texas, and
18 participated on Entergy System conference calls. We reviewed our winter weather
19 storm plans, while making preparation to support our mutual-assistance utilities if
20 needed. As our service area became increasingly threatened by the projected extent
21 of the winter storm, we secured staging areas, obtained fuel and supplies, ramped
22 up logistical support, and pre-staged crews.

1 During this time, the Entergy Operating Companies were fully engaged in
2 managing similar preparation and restoration efforts in Arkansas, Mississippi, and
3 Louisiana as the winter storm developed as a potential threat to all of Entergy's
4 footprint. All ETI crews were on notice and prepared to act. The System Command
5 Center worked diligently to allocate resources among Louisiana, Mississippi,
6 Arkansas, and Texas as the winter storm approached. In addition, the System
7 Command Center began to supplement resources through mutual-assistance and
8 off-system contractors. However, resource availability was affected by the
9 countrywide preparation for the cold weather and winter storm.

10
11 Q161. DID THE ETI SYSTEM INCUR OUTAGES AS RESULT OF WINTER STORM
12 URI?

13 A. Yes. Customer outages peaked at approximately 170,000 customers on
14 February 15.

15
16 Q162. DID ETI SUSTAIN DAMAGES AS A RESULT OF WINTER STORM URI?

17 A. Yes. Winter Storm Uri caused significant damage to distribution equipment and
18 facilities across ETI's service territory due to the accumulation of frozen rain, snow,
19 and sleet along with the extremely cold temperatures. Table 27 below details the
20 distribution facility damages and the areas of the ETI service territory in which they
21 occurred:

Table 27
Equipment Damages from Winter Storm Uri

	Poles	Spans	Xfmrs	X-Arms	Services	Veg	Autos	Reclosers
Beaumont	1	5	18	0	0	0		
Dayton	1	10	1	0	0	5		
Orange	0	12	14	0	0	0		1
Port Arthur	0	11	7	1	0	0		
Silsbee	0	69	10	0	0	0		
Winnie	1	8	5	1	0	0		
Cleveland	2	6	33	2	0	0	28	
Conroe	1	7	56	1	1	0	6	1
Huntsville	14	69	26	9	5	1	4	
Navasota	17	201	21	18	5	0	4	
New Caney	2	5	45	0	0	0	5	
Woodlands	0	2	28	0	0	0		
Total	39	405	264	32	11	6	47	2

Q163. PLEASE SUMMARIZE THE DISTRIBUTION CLASS COSTS THAT WERE INCURRED IN ETI'S PREPARATION AND SUBSEQUENT RESTORATION EFFORTS FOR WINTER STORM URI.

A. The Distribution Class costs incurred by ETI as a result of Winter Storm Uri fall into the same cost categories presented above for the restoration efforts following Hurricanes Laura and Delta. A summary of these cost categories is shown in Table 28 below:

Table 28
Cost Categories for Winter Storm Uri

Distribution Class Cost Category	Winter Storm Uri
Contract Work	\$296,410
Labor	\$1,338,581
Employee Expenses	\$5,384
Materials	\$1,698,725
Other	\$816,946
Total Direct Costs	\$4,156,046
ETI Affiliate Costs	
ESL Billings	\$196,193
Loaned Resources	\$6,953
Total Affiliate Costs	\$203,146
Total Booked Costs	\$4,359,192
ETI Estimated Costs	--
Total Distribution Class Costs	\$4,359,192

Q164. WERE THE DISTRIBUTION CLASS COSTS INCURRED BY ETI TO ADDRESS WINTER STORM URI THAT YOU SPONSOR REASONABLE AND NECESSARY?

A. Yes. The costs ETI incurred related to the 2021 winter storm were reasonable and necessary to quickly restore service to ETI's customers and repair the extensive damage to the distribution system under the extended extreme winter conditions. ETI acted in a prompt and orderly manner to repair damage to the system and with urgency to restore service for the health, safety, and convenience of customers and the regional and national economy.

ETI made necessary expenditures for essential materials, labor, and other identified costs to restore service to its service area. These costs were acquired in an appropriate manner to ensure the restoration of the distribution system to provide

1 power to essential facilities. Thus, the costs incurred were necessary to restore
2 power safely, timely, and efficiently.

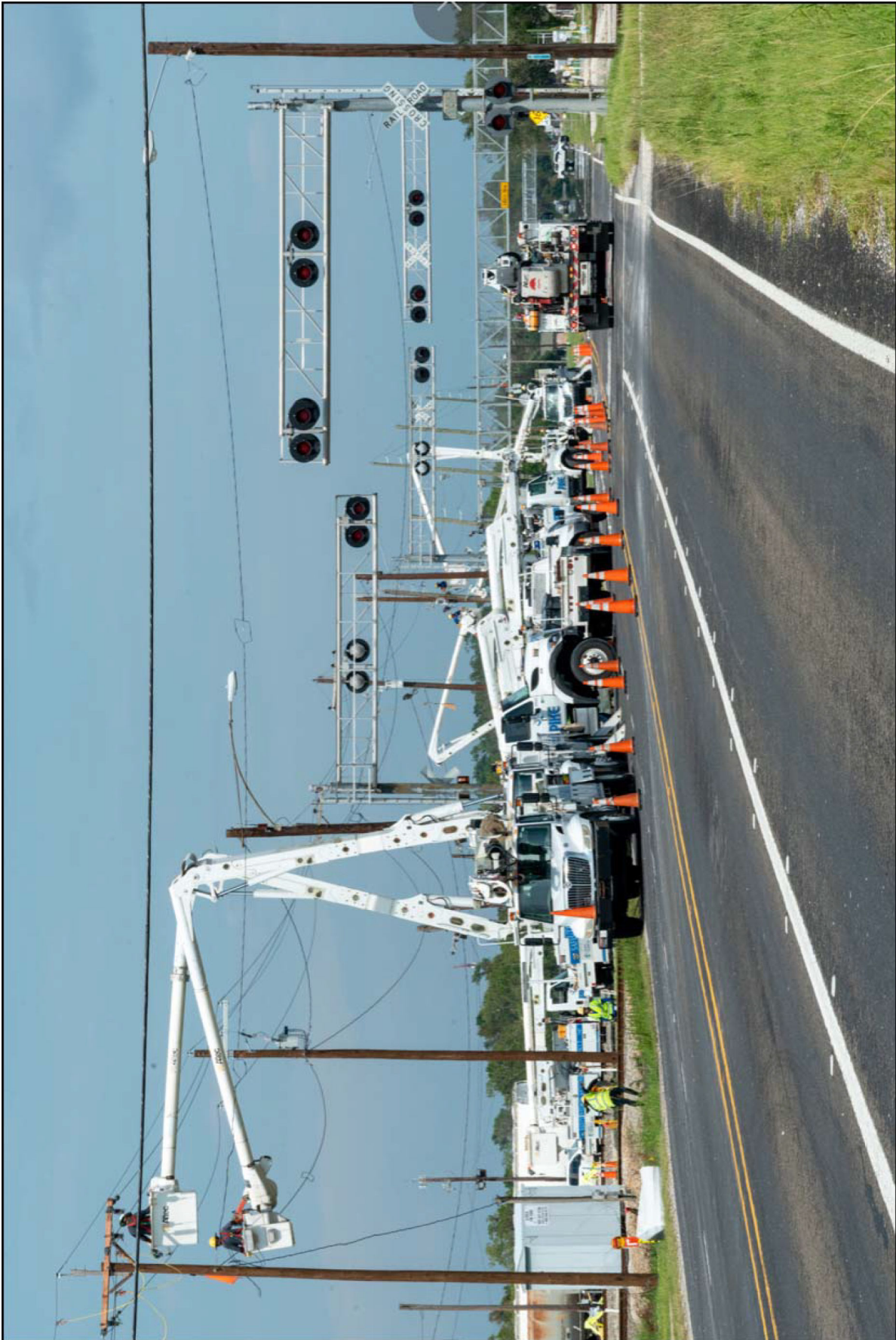
3 Moreover, these costs were reasonable as confirmed by the internal control
4 measures ETI relied on to procure and monitor the material and personnel resources
5 that it utilized for the restoration of its system. ETI properly prioritized the
6 restoration of service and protection of public health and welfare while obtaining
7 resources at a reasonable cost. As explained above, the Company is a highly skilled
8 purchaser of services and materials for its facilities and is intimately familiar with
9 the products and services of the vendors with which it was working. ETI was
10 therefore able to ensure that the prices and terms under which it purchased services
11 and materials were fair and reasonable under the circumstances.

12

13 VI. CONCLUSION

14 Q165. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

15 A. Yes, at this time.





















































Description of Restoration Tasks - Distribution Lines

Costs for the tasks outlined below include maintenance and operating costs as well as capital expenditures consisting primarily of Company labor, affiliate labor, mutual-aid labor, contract labor, materials, equipment, supplies, logistical support, and other support functions.

1. Managing, coordinating, assessing, prioritizing, planning, and overseeing all aspects of the restoration.
2. Safety management, including crew orientations, worksite observations/audits, personnel assessment, communication of safety alerts, safety equipment.
3. Overhead lines
 - Installing/removing clamps or insulators on guys.
 - Readjusting and changing position of guys or braces.
 - Installing, removing, replacing, reinforcing, realigning and straightening poles, cross arms, braces, pins, racks, brackets, and other pole fixtures.
 - Installing, removing, replacing, and realigning transformers.
 - Installing, removing, replacing, sagging, splicing, and re-sagging conductors (wire).
 - Installing, removing, replacing, splicing, sagging, and re-sagging services.
 - Installing, removing, replacing, repairing, resetting, refusing, and realigning protective devices (fuse switches, reclosers, circuit breakers, sectionalizers, switch cabinets).
 - Repairing pole support platform.
 - Supporting conductors, transformers, and other fixtures and transferring them to new poles during pole replacements.
 - Overhauling and repairing line cutouts, line switches, line breakers, and capacitor installations.
 - Cleaning damaged insulators and bushings.
 - Repair/replacement of line oil circuit breakers and associated relays and control wiring.
 - Repairing grounds.
 - Cutting, trimming, and removal of trees and brush.
 - Debris removal.
4. Underground lines
 - Repairing circuit breakers, switches, cutouts, network protectors, and associated relays and control wiring.
 - Repairing grounds.
 - Repairing conductors and splices.
 - Installing, removing, replacing, and repairing any underground plant.
5. Installing, removing, replacing, and repairing street lighting and private area lighting.
6. Installing, removing, and replacing meters and associated controls and metering equipment.
7. Logistics, including lodging, housing, feeding, fueling, laundering, parking, staging, sanitation services, environmental management, medical services, waste management, security, site materials management, and mass transportation.
8. Materials and supplies inventories that were damaged and rendered unusable as a result of the storm.
9. Communication with customers; regulatory bodies; federal, state, and local agencies/officials; news media; and the operation of call centers and customer information centers.

Major Distribution Restoration Activities With Work Descriptions

Figure 1 below depicts a damaged pole being changed. The scenario in the figure is of a pole that is broken in the middle. The cross-arm and conductors are still attached to the top of the pole. The adjacent pole is not damaged but must be straightened as well.



Figure 1 - Crew replacing a broken pole

Following are the steps required to repair this structure:

1. Damage Assessment teams scout the line and identify damage and materials required to repair the section.
2. Crew is sent to site where they set up their worksite, initiate traffic control, and secure the area for public and worker safety.
3. Crew holds a “tailboard” meeting where they assess job safety and hazards, plan the repairs, and give work assignments to each crewmember.
4. The crew obtains a clearance, performs the necessary switching, and grounding of the section of line. Crew also isolates secondary conductors by pulling meters and opening possible sources.
5. Crew secures the top of the broken pole with digger-derrick.
6. The crew clears the immediate area of debris that would prevent them from carrying out the repairs and detaches joint-use facilities of other companies from damaged Entergy equipment.
7. Using digger-derrick, the crew removes the butt of the broken pole.

**Major Distribution Restoration Activities
With Work Descriptions**

8. With that same truck, the crew reams out the pole hole with an auger.
9. They then set the new pole with its butt in the hole and its top through the conductors still attached to the old pole top held by digger-derrick.
10. They then backfill the hole, compacting the soil as they backfill,
11. Digger-Derrick and the bucket truck are moved into position to place the cross-arm and pole hardware (frame the pole) on the pole.
12. The Linemen in the bucket then untie the conductor from the broken pole top and transfer them to the newly set and framed pole.
13. The old pole top is removed and the conductors are secured to the new insulators and digger-derrick moves to straighten the adjacent pole.
14. All equipment and taps are reconnected.
15. Grounding equipment is removed, the clearance is released and the section is energized.
16. The crew closes the worksite, returns traffic to normal controls and moves to its next assignment.

Major Distribution Restoration Activities With Work Descriptions

Figure 2 below depicts a broken cross-arm being changed. The scenario represented by this figure is where a large limb has fallen on the conductors, breaking the cross-arm and cross-arm braces.



Figure 2 - Crew replacing a broken cross-arm and cross-arm braces

Following are the steps required to repair this structure:

1. Damage Assessment teams scout the line and identify damage and materials required to repair the section.
2. Crew is sent to site where they set up their worksite, initiate traffic control, and secure the area for public and worker safety.
3. Crew holds a “tailboard” meeting where they assess job safety and hazards, plan the repairs, and give work assignments to each crew member.
4. The crew obtains a clearance, performs the necessary switching, and grounding of the section of line. Crew also isolates secondary conductors by pulling meters and opening possible sources.

Major Distribution Restoration Activities With Work Descriptions

5. Crew removes old insulator, conductor tying materials, and other hardware and cleans up the site. Crew also works to move any equipment in a mechanical bind to ease repairs and prevent injury from stored mechanical energy.
6. Crew installs new cross-arm, cross-arm braces, insulators, insulator pins, and any other hardware needed.
7. Crew raises conductors into position on arm.
8. Crew places conductors on insulators and secure by tying them to the insulators.
9. Crew connects any equipment, ground wires, etc.
10. Grounding equipment is removed, the clearance is released and the section is energized.
11. The crew closes the worksite, returns traffic to normal controls and moves to its next assignment.

Figure 2 used above to describe changing a cross-arm can also be used to describe changing a transformer.

Following are the steps required to replace the transformer:

1. Damage Assessment teams scout the line and identify damage and materials required to repair the transformer.
2. Crew is sent to site where they set up their worksite, initiate traffic control, and secure the area for public and worker safety.
3. Crew holds a “tailboard” meeting where they assess job safety and hazards, plan the repairs, and give work assignments to each crew member.
4. The crew obtains a clearance and performs the necessary switching and grounding of the section of line as needed based on the circumstances. Crew also isolates secondary conductors by pulling meters and opening any possible sources.
5. Crew removes the primary riser, secondary connections, and the ground connection from the failed transformer.
6. Lineman positions the job above the transformer and places a sling on the transformer.
7. He then loosens the hanger bolts securing the transformer to the pole or bracket.
8. Using his winch, he lifts the transformer from the hanger bolts and lowers it to the ground where it is secured.
9. The ground man places a sling on a new transformer that he has prepared for installation, and the lineman in the bucket lifts it into place.
10. Once in place on the hanger bolts, the bolts are tightened.
11. The lineman installs the ground connection, the secondary connections, and the primary riser.
12. The protecting device is re-fused.
13. Removal of grounds, releasing of clearances, and switching are performed if necessary.
14. All persons are verified to be in the clear.
15. The transformer is energized.
16. The voltage is checked.
17. The meters are reinstalled and sealed.

Major Distribution Restoration Activities With Work Descriptions

Figure 3 below depicts a section of line approximately one-half mile in length in which multiple distribution poles were broken.



Figure 3 - Crew repairing multiple spans of damaged line and poles

Following are the steps required to repair this structure:

1. Damage Assessment teams scout the line and identify damage and materials required to repair the section.
2. Crew is sent to site where they set up their worksite, initiate traffic control, and secure the area for public and worker safety.
3. Crew holds a “tailboard” meeting where they assess job safety and hazards, plan the repairs, and give work assignments to each crewmember.
4. The crew obtains a clearance, performs the necessary switching, and grounding of the section of line. Crew also isolates secondary conductors by pulling meters and opening possible sources.
5. The crews clear debris as needed to perform the restoration activities and detach and secure joint use attachments from any broken poles.
6. Failed poles and cross-arms are replaced as discussed in earlier scenarios.
7. The crews lay out the downed wire beside the pole routes and assess the condition of the wires. If there is damage to the wire, repairs are made while still on the ground.
8. When the structure repairs are complete and the wire has been assessed and repaired, the crews raise the wires near position and place at rest on the cross-arms.
9. Near the middle of the line section, hoists are used to pull the wires from both directions until the proper sag and tension is achieved.

**Major Distribution Restoration Activities
With Work Descriptions**

10. The clearances are checked along the line section, and the wire is then spliced at the pulling location.
11. Linemen working at each structure place the wires on the insulators and tie the conductors to the insulators.
12. The crews then make up all ground connections, taps, transformer primary connections, and other equipment connections.
13. Grounding equipment is removed, the clearance is released and the section is energized.
14. The crew closes the worksite, returns traffic to normal controls and moves to its next assignment.

**Entergy Texas, Inc.
Hurricane Laura Storm Restoration Costs
Distribution Contractor List**

Contractor Name	Cost
STORM SERVICES LLC	18,041,526
SWADLEYS EMERGENCY RELIEF TEAM	22,634,742
VOLT POWER LLC	5,394,988
JW DIDADO ELECTRIC LLC	5,174,974
PIKE ELECTRIC LLC	5,169,948
ABC PROFESSIONAL TREE SERVICES INC	4,990,870
ONESOURCE RESTORATION LLC	3,852,274
ASPLUNDH TREE EXPERT CO	3,658,300
UTILITY LINES CONSTRUCTION SERVICE INC	3,606,665
MJ ELECTRIC LLC A QUANTA SERVICES CO	3,515,134
MACRO COMPANIES INC	3,082,314
LEE ELECTRICAL CONSTRUCTION	2,822,644
FRONT LINE POWER CONSTRUCTION LLC	2,734,643
TOWNSEND TREE SERVICE CO LLC	2,708,163
BASE LOGISTICS LLC	2,499,659
INTREN LLC	2,392,703
JORDAN HIGH VOLTAGE INC	2,378,085
HENKELS & MCCOY INC	2,377,888
QUALITY LINES INC	2,301,825
HAUGLAND ENERGY GROUP LLC	2,186,703
NORTH HOUSTON POLE LINE LP	2,004,140
IRBY CONSTRUCTION CO	1,745,574
HEART UTILITIES OF JACKSONVILLE INC	1,735,939
ARC AMERICAN INC	1,674,001
INTERCON CONSTRUCTION INC	1,579,725
WILCO ELECTRICAL LLC	1,299,716
GREAT SOUTHWESTERN CONSTRUCTION INC	1,253,500
MICHELS POWER	1,250,878
CAJUN FLAVOR INC	1,217,373
VRP GROUP INC DBA REGIUS DBA VERTUS	1,135,561
CAPITAL ELECTRIC LINE BUILDERS INC	1,097,878
BRIGHT STAR SOLUTIONS INC	1,073,845
SERVICE ELECTRIC COMPANY	987,627
HYDAKER WHEATLAKE COMPANY	963,850
BIRD ELECTRIC ENTERPRISES LLC	942,508
WAMPOLE MILLER INC DBA MILLER BROS	937,588
PRIMORIS T&D SERVICES LLC	865,234
LECOM INC	819,387
AINSWORTH ELECTRIC INC	681,818
MDR CONSTRUCTION INC	657,940
PROFORCE LLC	630,209
POWER LINE SERVICES INC	629,094

PAR ELECTRICAL CONTRACTORS INC	623,190
PLUS FINANCE INC DBA BOWLIN ENERGY LLC	620,822
BOBCAT ELETRICAL & INSTRUMENTATION LLC	616,486
CVTECH HOLDING INC DBA RIGGS DISTLER AND	613,031
SOUTHERN LINE CONTRACTORS INC	580,923
MIRARCHI BROTHERS INC	576,750
CHAIN ELECTRIC COMPANY	566,767
PLASKA TRANSMISSION LINE CONSTRUCTION	534,930
SOUTHERN ELECTRIC CORP	516,681
THE ROBERT HENRY CORPORATION	507,508
DAVIS H ELLIOT CONSTRUCTION CO INC	476,047
BHI ENERGY POWER SERVICES LLC	448,810
THE FISHEL COMPANY DBA TEAM POWER	421,187
OSMOSE UTILITIES SERVICES INC	393,329
SET ENVIRONMENTAL INC	356,206
MASTEC NORTH AMERICA INC	343,353
TECHSERV CONSULTING & TRAINING LTD	339,044
PMI ENERGY SOLUTIONS LLC	337,457
HOTARD COACHES INC	309,223
MUSGROVE CONSTRUCTION INC	272,695
M&S ENGINEERING LLC	269,979
IRBY CONSTRUCTION COMPANY	269,955
BURFORDS TREE LLC	254,469
XTREME POWERLINE CONSTRUCTION INC	242,370
LAMAR TECHNICAL SERVICE INC	240,981
DC INDUSTRIAL MAT LLC	211,405
SPARKS ENERGY INC	204,924
B&B ELECTRICAL & UTILITY CONTRACTORS	198,968
RENEW INTERNATIONAL LLC	176,153
MESSAGE BROADCAST COM	145,286
POWERGRID SERVICES LLC	144,335
HOWARD DEDICATED OPERATIONS INC	125,884
LODGING SOLUTIONS LLC	120,000
HEART OF TEXAS UTILITY DESIGN LLC	98,490
MEDCOR INC	97,011
JAKE EDWARD LEMOINE DBA BOARDWALK GRILL	90,304
DISASTER RESOURCE GROUP LLC	84,838
ENHANCED ENVIRONMENTAL AND EMERGENCY	82,456
GUIDANT GROUP INC	79,042
EDG INC	70,763
TOTAL SAFETY US INC	65,943
KNOWLEDGE VINE LLC	58,696
ELLIS CREATIVE GROUP INC	58,070
ALORICA INC	54,428
Small / Individual contracts or vendors (<1%)	689,377
TOTAL	140,295,996

**Entergy Texas, Inc.
Hurricane Delta Storm Restoration Costs
Distribution Contractor List**

Contractor Name	Cost
TEMPEST ENERGY LLC	3,024,873
VOLT POWER LLC	2,908,292
BRIGHT STAR SOLUTIONS INC	2,092,448
LECOM INC	1,871,390
PRIMORIS T&D SERVICES LLC	1,558,523
ABC PROFESSIONAL TREE SERVICES INC	1,401,439
ONESOURCE RESTORATION LLC	1,358,265
XTREME POWERLINE CONSTRUCTION INC	1,262,282
PIKE ELECTRIC LLC	1,250,997
LINETEC SERVICES LLC	909,520
MP TECHNOLOGIES LLC	781,491
HYDAKER WHEATLAKE COMPANY	767,879
FRONT LINE POWER CONSTRUCTION LLC	686,246
CAJUN FLAVOR INC	656,868
MJ ELECTRIC LLC A QUANTA SERVICES CO	613,211
GREAT SOUTHWESTERN CONSTRUCTION INC	579,250
LODGING SOLUTIONS LLC	569,712
NORTH HOUSTON POLE LINE LP	523,163
FRANKART POWER LINE SERVICES LLC	452,020
BHI ENERGY POWER SERVICES LLC	440,098
MACRO COMPANIES INC	381,944
SOUTHERN ELECTRIC CORP	339,285
DAVIS H ELLIOT CONSTRUCTION CO INC	282,509
SCROTEC INC	225,121
TRAVIS BROTHERS ENTERPRISES & SERVICES	204,589
REPUBLIC SERVICES INC DBA BFI WASTE	194,046
WILLIAM E GROVES CONSTRUCTION	190,762
CIVAECO	178,130
M&S ENGINEERING LLC	150,153
MASTEC NORTH AMERICA INC	128,993
DC INDUSTRIAL MAT LLC	116,057
HEART OF TEXAS UTILITY DESIGN LLC	113,517
BUS SUPPLY CHARTERS INC	110,000
HOTARD COACHES INC	101,712
MICHAEL JOSEPH HAMILTON DBA HAMILTON'S	56,810
Small / Individual contracts or vendors (2%)	645,673
TOTAL	27,127,266

**Entergy Texas, Inc.
Winter Storm Uri Restoration Costs
Distribution Contractor List**

Contractor Name	Cost
HOWARD DEDICATED OPERATIONS INC	93,384
VENTURESUM CORP	54,803
CAJUN FLAVOR INC	48,118
COTTON COMMERCIAL USA INC	33,334
KELLY ARNOLD DRAMBERGER DBA SWEET TEA	23,367
SUNSET G VENTURES INC DBA TOP HAT	20,600
GUIDANT GROUP INC	12,940
Small / Individual contracts or vendors (3%)	9,864
TOTAL	296,410



Southeastern Electric Exchange

2020 Mutual Assistance Procedures and Guidelines

Last Updated May 26, 2020

As directed by the Board of Directors of Southeastern Electric Exchange (S.E.E.), the Mutual Assistance Committee has developed and accepted the following procedures to provide and request assistance to aid in restoring electric service when it has been disrupted and cannot be restored in a safe and timely manner by the affected company or companies alone. In approaching this task, committee members recognized the significant differences between work performed under normal circumstances and emergency restoration, as well as the fact that each member will at some time both require and supply emergency assistance. Therefore, members have reached understanding and agreement to adhere to the procedures and guidelines that follow without the necessity of formal contractual arrangements.

This procedures and guidelines document contains confidential and proprietary information of the S.E.E. The reproduction or distribution of this material, in whole or in part, by any person is prohibited without the express prior written permission of S.E.E. To request permission to reproduce or distribute such material, please contact Scott H. Smith, Executive Director at shsmith@theexchange.org or 404-233-1188.

The Mutual Assistance Procedures and Guidelines Subcommittee shall have responsibility for maintenance, annual review and revision of the *Southeastern Electric Exchange Mutual Assistance Procedures and Guidelines*. Final acceptance of this document, as well as any future modifications, must be approved by $\frac{3}{4}$ of the appointed and serving members of the S.E.E. Mutual Assistance Committee, each operating member company having one (1) vote.

Section I

Understanding Among Members Regarding Mutual Assistance

1. Members of S.E.E. understand and agree:

1.1 That members will work together to minimize risk to all parties. Responding Companies will provide assistance (personnel and equipment) on a not-for-profit basis, and Requesting Companies will reimburse Responding Companies for all expenses incurred in providing the assistance.¹

1.2 To adhere to and operate in accordance with the procedures contained in this document (the *Southeastern Electric Exchange Mutual Assistance Procedures and Guidelines*).

1.3 That should there be any conflict in procedures and guidelines contained in the *S.E.E. Mutual Assistance Procedures and Guidelines* and other regional or national mutual assistance agreements, guidelines, principles, or procedures, S.E.E. members will adhere to the procedures approved by the S.E.E. Mutual Assistance Committee when assisting or requesting assistance from fellow members through the Joint Mobilization Conference Call Procedure outlined in this document.

1. In this document the terms Responding Company and Requesting Company refers to both the company and its employees.

Section II

General Guidelines / Responsibilities

2. Personnel Safety

- 2.1 Whether providing or receiving assistance, personnel safety will be the preeminent objective and responsibility of all participants.
- 2.2 The Requesting Company agrees to make every effort to avoid moving Responding Company personnel into harm's way.
- 2.3 Responding Company will follow its own safety rules, except as noted in paragraphs 2.6 and 2.7 below.
- 2.4 Responding Company is responsible for following its own personal protective grounding practices.
- 2.5 Responding Company will immediately report any and all accidents to Requesting Company (both incidence and injury).
- 2.6 Switching procedures will be handled as the Requesting Company designates, provided that the procedures do not violate the safety rules of the Responding Company.
- 2.7 Requesting Company will provide information on their switching and tagging rules. Requesting Company switching and blocking tags will be used.
- 2.8 Security personnel requirements shall be discussed and mutually agreed upon by the Requesting and Responding Companies prior to deployment of armed security personnel.
- 2.9 Any deployment of security personnel, armed or otherwise, must comply with Federal, State, and Local regulations.

3. Maintenance of Contact Roster

- 3.1 In order to facilitate efficient communication and response, S.E.E. member utilities will share the following information:
 - 3.1.1 The names, contact numbers (work phone, home phone, and cellular phone), and e-mail addresses for three (3) individuals authorized to participate in Joint Mobilization Conference Calls.
 - 3.1.2 If available, the telephone number for the 24-hour operations / dispatch center for the member company.
 - 3.1.3 If available, a satellite telephone number for the 24-hour storm or operations / dispatch center.
 - 3.1.4 If available, a corporate storm / emergency center 24-hour telephone number, if different from the 24-hour operations / dispatch telephone number.
- 3.2 The S.E.E. office will be responsible for maintaining and updating the Member Company Contact Roster at least semi-annually or earlier as needed.

4. Code of Conduct

- 4.1 Whether providing or receiving assistance, all personnel will be expected to conduct themselves in a professional and responsible manner.

5. Communication With Contractors

5.1 Members understand the need for clear communication with contractors working on their systems and are encouraged to explain the joint mobilization process discussed in this document, including, but not limited to information contained in 11.1 and 18.7.

6. Definition of Emergency Assistance Period

6.1 Members agree that the emergency assistance period shall commence when personnel and/or equipment expenses are initially incurred by the Responding Company in response to the Requesting Company's needs. This includes any request for the Responding Company to prepare its employees and/or equipment for travel to the Requesting Company's location but to await further instructions before departing. This preparation time should begin when normal work activities for Responding Company stop and preparations dedicated to supporting the off system effort begin. Except as noted in paragraph 6.3, the emergency assistance period shall terminate when such employees and/or equipment have returned to their point of origin and after a reasonable time as required to prepare the equipment for return to normal activities (e.g. cleaning trucks, restocking minor materials, etc.).

6.2 The length of stay by Responding Company personnel will be mutually agreed to by both companies. Generally, this period should not exceed 14 consecutive days, including travel time to the work area and return to the point of origin. When mutual assistance assignments go beyond this time frame, S.E.E. members agree that Responding Company personnel will usually be changed out (rotated) rather than take extended reset periods (days off). Responding and Requesting companies may agree upon exceptions to this procedure.

6.3 It is understood and agreed that if Responding Company's or its Holding Company's system is threatened during any time after it has mobilized to provide mutual assistance, any part or all of the Responding Company's native and contract workforce may be recalled. In these instances:

6.3.1 It is understood and agreed that the decision to terminate assistance and recall employees lies solely with the Responding Company.

6.3.2 If recall of Responding Company's workforce becomes necessary, the Requesting Company will be responsible for all expenses incurred by Responding Company until the Responding Company returns home and vehicles are cleaned and stocked for normal work activities.

6.3.3 If Responding Company's workforce is recalled to another of the Responding Company's locations other than their original point of origin, the Requesting Company will be responsible for travel costs to the alternate location not to exceed that which would have been incurred had the workforce returned to their original point of origin.

Section III

The Joint Mobilization Conference Call (JMCC) Procedure

7. Purpose and Rationale for JMCC Procedures

7.1 The following procedures are intended to enhance and in no way hamper the mobilization goals of member companies during emergencies.

7.2 Because response time is critical in emergency situations, the JMCC provides a mechanism that allows members to quickly request assistance and identify the number and status of all available regional resources.

7.3 The conference call format should:

7.3.1 Provide members with the opportunity to understand the entire scope of the emergency situation, including the number of companies expecting to be impacted and the potential damage to each.

7.3.2 Allow members to discuss and evaluate weather forecasts from different sources.

7.3.3 Result in the most efficient, effective and equitable allocation of available resources while mitigating the financial risk associated with the early mobilization of resources.

8. Agreement and Understanding – JMCC Procedures

8.1 Members agree to adhere to the procedures contained in this section to request, identify and mobilize emergency mutual assistance resources. The understood exception being when an event impacts a single member utility and the predicted impact is not expected to impact other member utilities or other member utilities are not requesting assistance. In this instance, the impacted member may contact other member utilities directly to arrange assistance after contacting S.E.E., and after determining that other member utilities are not impacted or requesting. However, because emergency events tend to expand and impact more than one utility over time, members will use the JMCC procedures described below when additional member utilities are also requesting assistance.

8.2 Members understand and agree that participation on JMCC is restricted to employees of member companies of S.E.E., unless otherwise agreed by members of the Mutual Assistance Committee.

8.3 Members understand that conversations between member utilities during the JMCC shall be confidential and proprietary. Therefore, with the exception of general deployment data and information, members agree not to share or release any information shared between member utilities during JMCC, unless mutually agreed.

8.4 The Resource Allocation Management Program for Utility Personnel (RAMP-UP) tool will be used for the allocation and matching of resources, unless otherwise agreed.

9. Initiation of the JMCC

9.1 Typically, the member that expects to be impacted first by an event will request a JMCC.

9.2 A JMCC will be initiated at the request of a member or when multiple utilities are requesting external resources. In addition, requesting utilities shall be ready to commit to mobilize and begin to incur expenses for the resources acquired on the JMCC.

9.3 Procedure for initiating the JMCC:

9.3.1 During normal business hours, the initiating member will notify any S.E.E. staff member (phone number 404-233-1188) that they wish to request a JMCC for storm response. S.E.E. will contact all members via e-mail, providing conference call information, RAMP-UP event name and confirm all members' participation. After every call, S.E.E. will send out an e-mail providing a summary of the conference call discussion.

9.3.2 After normal working hours and on weekends, members initiate the call by contacting the Executive Director of S.E.E. or S.E.E. Coordinator on his/her cell phone. The Executive Director will contact members as described above. If the S.E.E. Executive Director cannot be reached, the initiating member will use the S.E.E. Mutual Assistance Contact Roster to contact members directly.

10. Responsibilities of Company Requesting a JMCC

10.1 In most cases, the company(s) initiating the JMCC will request the Executive Director of S.E.E. to serve as moderator.

10.1.1 Prior to the JMCC, Requesting Company(s) shall enter resource requests in RAMP-UP, designate a latest arrival date and time and non-native resources already acquired. In addition, if already in restoration mode, outages and cases of trouble information is also required to be entered into RAMP-UP.

10.1.2 Impacted Company(s) should be prepared to present the weather forecast for their service territory. An impacted company may opt to have a weather consultant present the current forecast.

10.1.3 Impacted Company(s) should be prepared to present an estimate of current or predicted impact and damages and when these are expected to occur.

10.1.4 Impacted Company(s) should be prepared to answer questions regarding their resource requests, provide general information regarding mobilization, safety concerns, etc.

11. Responsibilities of Non-Initiating, Non-Impacted Members Participating In JMCC,

11.1 Members agree not to release or dispatch any resources (contract or native) unless committed to and confirmed by a Requesting Company. It is understood that Responding Companies' territories must be free from significant threat before resources can be committed and dispatched.

11.2 Prior to the JMCC, non-threatened, non-impacted members will enter their company and contractor distribution line, transmission line, vegetation management and damage assessment personnel or other full-time equivalents available to assist impacted companies, including an estimate of when these resources can be dispatched in RAMP-UP.

11.2.1 When resources are on Hold and may become available within the next Allocation and Matching cycle, usually next day or two, the estimated Expected Release Date/Time and Resource Responses by Resource Type should be entered to assist impacted companies with planning.

11.2.2 When a member does not have resources available or is unable to provide assistance, members will indicate they are represented and participating in the JMCC process by entering a Response in RAMP-UP. In such cases, the Company Name, response of Hold and Hold Reason will be entered, however, the Expected Release Date/Time and Resource Responses by Resource Type can be left blank.

11.3 To enhance safety and flexibility, and upon request, non-threatened, non-impacted members will be prepared to identify staging areas available in their territories.

11.4 Upon request non-threatened, non-impacted members will assist with DOT exemptions for crews traveling through their service territories.

11.5 Prior to deployment, the Responding Company shall inform the Requesting Company when line-worker or vegetation contractors will be embedded in their responding workforce.

12. Resource Allocation and Mobilization

12.1 When more than one company has requested emergency assistance, all members understand and agree that it is the responsibility of the Requesting Companies to agree upon the allocation of available first wave and subsequent member company resources.

12.2 Members agree that, in general, resources will be allocated using the RAMP-UP allocation process. Adjustments may be made based on the following:

12.2.1 Predicted impact – percentage and degree of system loss and estimated time customers will have been without power.

12.2.2 Storm timing – which company will be first impacted.

12.2.3 Travel time.

12.2.4 The intent will be to allocate available resources to meet all member company needs in the most efficient and equitable manner possible.

12.3 Members agree that final dispatch of committed resources is to be coordinated directly between the Requesting Company and the Responding Company (or its contractor(s), where applicable).

13. Responsibilities of S.E.E. Coordinator

13.1 The S.E.E. Coordinator (usually the Executive Director), will be responsible for notifying members of JMCC in accordance with paragraph 9.3, and for creating an event in RAMP-UP as needed.

13.2 The Executive Director of S.E.E. will serve as the call moderator. In the event that the S.E.E. Executive Director or S.E.E. Coordinator is not available, a representative from the Requesting Company or designated S.E.E. National Mutual Assistance Response Team (NMART) representative will serve as the moderator on the call.

13.3 The S.E.E. Coordinator will be responsible for producing and distributing conference call summary notes and the RAMP-UP Match Log after each JMCC. Members agree that this information is to be treated as confidential and proprietary information of the S.E.E. and is not to be reproduced or distributed in whole or in part outside of S.E.E. membership, without the

express prior written permission of S.E.E. Members also agree that all information contained in RAMP-UP is also confidential and proprietary and is not to be shared as described above.

13.4 When more than one company has requested emergency assistance, the S.E.E. Coordinator will serve as moderator of conference calls between impacted companies on which Requesting Companies will agree upon the allocation of available first wave S.E.E. resources.

13.5 As agreed by EEI's EP/MA Executive Committee, the S.E.E. Coordinator will be responsible for sending the RMAG communications document to the other RMAGS and EEI per the approved RMAG Communication Process as appropriate, and informing them that a joint mobilization call was conducted by S.E.E.

Section IV

Requesting Company Responsibilities

14. Requesting Company – Responsibilities Prior to Mobilization

14.1 To the extent possible, the Requesting Company is expected to clearly communicate the degree of devastation and working conditions Responding Company personnel should expect to encounter upon arrival at the emergency restoration work area.

14.2 The Requesting Company is expected to inform the Responding Company if their requirements for the maintenance of receipts differ from the procedures stated in paragraph 19.5.

14.3 To facilitate communications, the Requesting Company may opt to provide a single point of contact (Coordinator) to interact with the Responding Company.

14.4 The Requesting Company will provide the Responding Company with the name and contact information for their "company contact" as required on the RESPONDING COMPANY INITIAL INFORMATION SHEET before Responding Company personnel leave their point of origin.

14.5 Requesting Company will coordinate with their state DOT officials concerning emergency exemptions and any other transportation issues that will facilitate the Responding Company's trip to and from the Requesting Company.

14.6 The Requesting Company provides other general information to Responding Companies. Items covered may include labor contractual issues, safety issues, contact personnel, vehicle fueling arrangements, typical standard construction, meal and lodging arrangements, and other items that will be of benefit to the responding personnel and their supervision.

15. Requesting Company – Responsibilities During Emergency Assistance Period

15.1 The Requesting Company will establish expectations for work, including start time and duration.

15.2 The Requesting Company will provide materials unless specifically noted otherwise.

15.3 When necessary, the Requesting Company will provide a guide with communications capability, portable radios or cellular telephones to assist responding team leaders.

15.4 The Requesting Company will authorize Responding Company to use cellular phones as a method of communication. Where cellular service is unavailable, it is understood that satellite phones may be used until such time that cellular service is restored in the Requesting Company's area.

15.5 The Requesting Company will provide vehicle security for parking areas unless specifically agreed otherwise.

15.6 With the exception of fuel, food and lodging during travel to and from the final work site, the Requesting Company will handle all fuel, food, lodging and incidental support needed by Responding Company unless both companies agree for Responding Company to handle these logistics.

15.7 Requesting and Responding companies should agree on the provision of laundry services.

15.8 Requesting Company understands that the Responding Company will not incur hotel-related expenses other than lodging, unless agreed to by the Requesting Company prior to their occurrence. For example, phone calls made from rooms, room service, in-room movies, mini bar usage, etc. should not be incurred.

16. Requesting Company - Procedures for Releasing Responding Companies

16.1 During emergencies impacting more than one member company simultaneously, each Requesting Company will develop and send the S.E.E. Coordinator a proposed "Release Schedule" 48-hours before releasing any contract or utility (members & non-member) crews. This release schedule will include: Names of utilities and contractors to be released, the numbers and specialty (distribution line, transmission line, vegetation, etc.) of workers from each utility and/or contractor being released, the on-site contact or the coordinator of the crews being released, and the date and approximate time the crews expect to be released.

16.2 During emergencies when Responding Company contract and/or utility resources are already deployed and working to provide restoration help to one member company and another member company (or companies) is impacted by another emergency, or in the case of hurricanes, a second landfall of the storm, the company that obtained help first agrees to:

16.2.1 Not retain personnel solely to perform maintenance, street lighting work, or clean up type work and will aggressively work to release personnel.

16.2.2 Immediately prepare a release schedule which includes details listed in paragraph 16.1 above, including projected release dates.

16.2.3 Provide realistic estimated restoration times and release dates to the S.E.E. coordinator for dissemination to the second Requesting Company (or companies). Since this could mean the difference in going days away or waiting on resources closer that may become available, it is essential that release dates be as accurate as possible. Note: Should the emergency situation described above develop before a Responding Company personnel arrive at the initial restoration area, these resources will be reallocated to Requesting Companies in accordance with the provisions of Section 12 and paragraph 17.3 of these procedures and guidelines.

16.3 In the emergency situation described in paragraph 16.2 above, the initial and secondarily impacted companies agree to:

16.3.1 Immediately hold an "impacted companies" conference call to negotiate reallocation of the resources on the release schedule developed by the first impacted company as well as any other resources not already committed.

16.3.2 Regarding personnel released by the first impacted company, secondary Requesting Companies will contact the resources (companies) allocated to them to determine if those persons will agree to re-deploy or be changed out (rotated) in accordance with paragraph 6.2.

16.4 In all emergency situations, the Requesting Company will make every effort to notify each Responding Company's mutual assistance contact 24-hours in advance of the anticipated final release of their utility personnel.

17. Requesting Company – Responsibility for Reimbursement of Expenses and Indemnification of Responding Company

17.1 Members understand and agree that the provision of emergency mutual assistance is a not-for-profit endeavor for Responding Companies. Therefore, the Requesting Company will reimburse all costs and expenses incurred by the Responding Company in the provision of the emergency assistance for the entire emergency assistance period as defined in paragraph 6 above.

17.2 If Responding Company resources are released after mobilization but before being utilized, the Requesting Company will reimburse Responding Company for all incurred preparation and travel expenses including reasonable time required to prepare the equipment for return to normal activities after returning to their point of origin.

17.3 During emergencies impacting more than one member, Responding Company resources may be re-assigned either: en route to the Requesting Company; at an initial staging area before reaching the Requesting Company; or at the Responding Company's final staging area. Additionally, resources may be assigned to assist a second Requesting Company after completing work for the initial Requesting Company. *Note: In any of these instances, unless otherwise mutually agreed, the utility that receives the re-assigned Responding Company resources will be responsible for all Responding Company costs from the time of re-assignment.*

17.4 Requesting Company will reimburse members for expenses incurred in the provision and management of interim staging areas (i.e. labor and miscellaneous expenses provided by the host utility to operate the staging area, but not including any Responding Company crew costs). In emergencies involving more than one Requesting Company, staging costs will be shared by Requesting Companies on a prorated basis based on the resources committed to each entering (logged into) the staging site.

17.5 Provided proper supporting documentation is included, the Requesting Company will pay all (preliminary and final) invoice(s) from Responding Company within 60 calendar days after receipt of invoice(s).

17.6 Once final invoices are paid in full to the Responding Company by the Requesting Company, final payments shall be considered final, closed and shall not be subject to adjustment.

17.7 Requesting Company shall indemnify and hold Responding Company harmless from and against any and all liability for loss, damage, cost or expense which Responding Company may incur by reason of bodily injury, including death, to any person or persons or by reason of damage to or destruction of any property, including the loss of use thereof, which result from furnishing emergency assistance and whether or not due in whole or in part to any act, omission, or negligence of Responding Company except to the extent that such death or injury to person, or damage to property, is caused by the willful or wanton misconduct and/or gross negligence of the Responding Company. Where payments are made by Responding Company under a worker's compensation or disability benefits law or any similar law for bodily injury or death resulting from furnishing emergency assistance, Requesting Company shall reimburse the Responding Company for such payments, except to the extent that such bodily injury or death is caused by the willful or wanton misconduct and/or gross negligence of the Responding Company.

17.8 In the event any claim or demand is made or suit or action is filed against Responding Company alleging liability for which Requesting Company shall indemnify and hold harmless Responding Company under paragraph (17.7) above, Responding Company shall promptly notify Requesting Company thereof, and Requesting Company, at its sole cost and expense, shall settle, compromise or defend the same in such manner as it in its sole discretion deems necessary or prudent.

Section V

Responding Company – Procedures / Responsibilities

18. Responding Company – Responsibilities Prior to Mobilization

18.1 To the extent possible, the Responding Company is expected to clearly communicate the degree of devastation and working conditions that their responding employees should expect to encounter upon arrival at the emergency restoration work area.

18.2 To facilitate communications, the Responding Company may opt to provide a single point of contact (Coordinator) to interact with the Requesting Company.

18.3 Responding Company will complete and forward the *RESPONDING COMPANY INITIAL INFORMATION SHEET* before departing their home location.

18.4 If requested, Responding Company will provide a copy of completed *PERSONNEL LISTING FORM* as soon as the information becomes available.

18.5 Responding Company's telecommunications personnel shall contact Requesting Company's telecommunications personnel and local FCC authorities to make any temporary telecommunications arrangements.

18.6 Responding Company agrees not to load extra emergency stock on trucks unless specifically requested by the Requesting Company.

18.7 When Responding Company's available contractor resources have been allocated to a Requesting Company through the JMCC procedures, the Responding Company will:

18.7.1 Provide Requesting Company with contact information for their on-site contractors.

18.7.2 Alert their contractors that their assistance has been requested and that they will be contacted by the Requesting Company.

18.7.3 Give their contractors the Requesting Company contact information.

18.7.4 Encourage their contractors to respond to the S.E.E. member's request for help with all contract crews being released from the Responding Company's work site.

19. Responding Company – Responsibilities During Emergency Assistance Period

19.1 Responding Company will handle all communication needs within their teams. This could include acquiring additional communications equipment, such as portable repeaters, to ensure continuous communication capabilities.

19.2 The Responding Company will be responsible for performing normal maintenance on their vehicles and equipment during the emergency assistance period and this work will be covered in their standard hourly/daily rates.

19.3 Responding Company will maintain daily records of time and expenses for personnel and equipment. This documentation will be provided with their preliminary invoice.

19.4 When the Requesting Company has provided specific guidance in advance that differs from that in paragraph 19.5, the Responding Company will maintain and furnish the requested documentation of expenses with their preliminary invoice.

19.5 Unless otherwise agreed prior to mobilization, members agree that Responding companies will maintain and furnish upon request receipts for all individual expenses / purchases made during the emergency assistance period in accordance with the IRS requirements in effect at the time assistance is requested.

20. Responding Company – Responsibilities at the End of Emergency Assistance Period

20.1 Responding Company should submit their "preliminary invoice" to Requesting Company within 60 calendar days from date released by the Requesting Company. Responding Company will provide supporting documentation at the time the preliminary invoice is mailed. Requesting Utility should receive final invoice within 90 calendar days from invoice date of preliminary invoice. An *S.E.E. INVOICE COVER SHEET* shall be included with the Responding Company's billing package.

20.2 Responding Companies agree to maintain auditable records of billed expenses for emergency mutual assistance sufficient to satisfy the legal / statutory requirements and obligations incumbent upon the Requesting Company.

Section VI

National Response Event (NRE) – Procedures and Responsibilities

21. NRE and RAMP-UP

21.1 Members understand and have voluntarily agreed that at the time a NRE has been activated, that S.E.E.'s available resources will become included in a national pool of resources available, as outlined in the EEI NRE Playbook.

21.2. Members understand that resources may be assigned to a regional group other than S.E.E., even if S.E.E. is engaged in the restoration of an event.

21.3 During a NRE, it is expected that S.E.E. will utilize the RAMP-UP tool.

21.4 Responsibilities of Members:

21.4.1 Members will be responsible for establishing and maintaining their own list of company representatives assigned to access RAMP-UP (up to 10 concurrent users per company).

21.4.2 This responsibility includes designating the level of access required, as designed and defined within RAMP-UP.

21.4.3 Notify S.E.E.'s NMART Representatives whenever a change is made to their designated RAMP-UP users.

21.4.4 As outlined in the RAMP-UP User Guide, members will be responsible for entering their company's resource requests and resources available whenever the use of RAMP-UP is activated in response to a joint mobilization request.

21.5 Responsibilities of Designated NMART Representatives

21.5.1 Designated NMART Representatives includes: S.E.E.'s Executive Director, and two-member company representatives.

21.5.2 Designated NMART Representatives are responsible for maintaining designated S.E.E. member RAMP-UP users in RAMP-UP.

21.5.3 Designated NMART Representatives are responsible for administering the functional use of RAMP-UP during a joint mobilization event.

Attachments:

Attachment I – Joint Mobilization Conference Call Outline

Attachment II – Responding Company Initial Information Sheet

Attachment III – Emergency Assistance Personnel Listing Form

Attachment IV – S.E.E. Invoice Cover Sheet

Appendix 1: S.E.E. JMCC Agenda

1. Roll Call:

- 1.1. Requesting Company(s)
- 1.2. NMART Representatives
- 1.3. S.E.E. Staff

2. Confidentiality Reminder

3. Phone Etiquette Reminder

4. Confirm RAMP-UP Entry is Complete

5. Requesting Company(s) Provide Weather Brief, System Impacts & Cover Safety

6. Review Entered RAMP-UP Requests

- 6.1. Including Latest Target Arrival Date & Time
- 6.2. Non-native Resources Acquired
- 6.3. Customer Outages & Cases of Trouble (if in restoration)

7. Review Entered RAMP-UP Responses

- 7.1. If on Hold, verify release date & time

8. Discuss Need for Next Call & Schedule If Needed

9. Perform RAMP-UP Functions

- 9.1. Encourage Running Export of Responses
- 9.2. Run Allocation
- 9.3. Begin Matching
- 9.4. Verify Match Log is Correct
- 9.5. Complete Matching
- 9.6. Perform Fleet Working Group Communication

10. Determine Need to Invite Other RMAGs

11. Request Emergency Declarations

12. Present Safety Reminders

13. Adjourn the Call

Appendix 2: S.E.E. Mutual Assistance Procedures and Guidelines – Revision History

Date	Description	Author
05/26/2020	<p>Numerous modifications were made to the document including the following.</p> <p>Page 1: Added new second paragraph which addresses the confidentiality and treatment of the document.</p> <p>Updated formatting and replaced document bullets with document numbering throughout.</p> <p>Updated document to reflect current process, clarified roles and responsibilities.</p> <p>Page 3: Modified 5.1 to foot to 11.1 and 18.7.</p> <p>Page 4: Replaced use of Joint Mobilization Conference Call with “JMCC” throughout.</p> <p>Page 5: Modified 9.2 with replacing “are ready to commit to mobilize and incur expenses for the resources acquired on the call” with “<u>shall</u> be ready to commit to mobilize and begin to incur expenses for the resources acquired on the JMCC.”</p> <p>Page 6: Added 11.5 requiring Responding Company to reveal intent to embed contractors.</p> <p>Page 9: Added 17.6 addressing once final payments are made, they are considered final and are not subject to adjustment.</p> <p>Page 13: New Appendix 1, S.E.E. JMCC Call Agenda.</p>	Guidelines Subcommittee per Committee Vote
05/31/2016	<p>Page 5: Modified 9.3 to include the addition of “or S.E.E. Coordinator as described in Section 13,” at home or on his”/her.” In addition, added “Executive” to Director in the final two sentences of 9.3. <u>Previous language:</u> After normal working hours and on weekends, members initiate the call by contacting the Executive Director of S.E.E., at home or on his cell phone. The Director will contact members as described above. If the S.E.E. Director cannot be reached, the initiating member will use the S.E.E. Mutual Assistance Contact Roster to contact members directly.</p>	Kevin Hall per Committee Vote
05/31/2016	<p>Page 5: Modified 10.1 to include the addition of “In most cases, the Executive Director of S.E.E. will serve as moderator.” <u>Previous language:</u> The company initiating the conference call will designate an individual to serve as moderator for the conference call. The moderator will:</p>	Kevin Hall per Committee Vote
05/31/2016	<p>Page 5: Modified 10.1(9) with the placement of new language “member companies as appropriate.” <u>Previous language:</u> If requested, notify non-S.E.E. members via the EEI Restore Power list serve.</p>	Guidelines Subcommittee per Committee Vote

Appendix 1: S.E.E. Mutual Assistance Procedures and Guidelines – Revision History cont’d

05/31/2016	Page 7: Added new language: “13.4 As agreed by EEL’s EP/MA Executive Committee, Southeastern Electric Exchange Coordinator will be responsible for developing and sending a high-level communication to regional mutual assistance groups informing them that a joint mobilization call was conducted by S.E.E.” <u>Previous language:</u> None	Guidelines Subcommittee per Committee Vote
05/31/2016	Page 8: Modified 15.6 to include “fuel” with food, and lodging. <u>Previous language:</u> With the exception of food and lodging during travel to and from the final work site, the Requesting Company will handle all food, lodging and incidental support needed by Responding Company unless both companies agree for Responding Company to handle these logistics.	David Bynum per Committee Vote
05/31/2016	Page 10: Renumbered a duplicated 17.6 to “17.7.” <u>Previous language:</u> 17.6	Scott Smith per Committee Vote
05/31/2016	New Page 11: Added new Section VI, 21.1 to 21.4 as recognition of NRE and RAMP-UP. Covered responsibilities of members and NMART. <u>Previous language:</u> None	Scott Smith per Committee Vote
05/29/2015	Page 2: Modified 2.2 to exclude “the initial, first-wave.” <u>Previous language:</u> The Requesting Company agrees to make every effort to avoid moving Responding Company personnel into harm’s way during the initial, first-wave mobilization.	Dave Callahan per Committee Vote
05/29/2015	Page 4: Modified 8.1 to include “In this instance, the impacted member may contact neighboring utilities directly to arrange assistance after contacting S.E.E., and after determining that other member utilities are not impacted or requesting.” <u>Previous language:</u> In this instance, the impacted member may contact neighboring utilities directly to arrange assistance.	Dave Callahan per Committee Vote
05/29/2015	Page 5: Modified 9.2 to include “joint mobilization” and “and are ready to commit to mobilize and incur expenses for the resources acquired on the call.” <u>Previous language:</u> Members agree to initiate a conference call anytime they experience or are threatened by an event so significant that they anticipate needing resources beyond the capabilities of their neighboring (adjacent) utilities to restore their system	Dave Callahan per Committee Vote
11/12/2014	Page 1: Preface, 2 nd paragraph, added recognition of Guidelines Subcommittee and function.	Scott Smith per Committee Vote

Appendix 1: S.E.E. Mutual Assistance Procedures and Guidelines – Revision History cont’d

11/12/2014	Page 8: Section IV, deleted former paragraph 15.8 which required Requesting Company to make provisions for personal long-distance telephone calls and provide pre-paid long-distance calling cards.	Scott Smith per Committee Vote
11/12/2014	Page 10: Section V, deleted former paragraph 18.6 which required Requesting Company to make provisions for personal long-distance telephone calls and provide pre-paid long-distance calling cards (15.8).	Scott Smith per Committee Vote
11/12/2014	Appendix 1 - Page 12: Added Revision History table to S.E.E. Mutual Assistance Procedures and Guidelines.	Scott Smith per Committee
11/12/2014	Added reviewed date to page 1 and revised date to footer, all pages.	Scott Smith per Committee



SUGGESTED GOVERNING PRINCIPLES COVERING EMERGENCY ASSISTANCE ARRANGEMENTS BETWEEN EDISON ELECTRIC INSTITUTE MEMBER COMPANIES

Electric companies have occasion to call upon other companies for emergency assistance in the form of personnel or equipment to aid in maintaining or restoring electric utility service when such service has been disrupted by acts of the elements, equipment malfunctions, accidents, sabotage or any other occurrences where the parties deem emergency assistance to be necessary or advisable. While it is acknowledged that a company is not under any obligation to furnish such emergency assistance, experience indicates that companies are willing to furnish such assistance when personnel or equipment are available.

In the absence of a continuing formal contract between a company requesting emergency assistance ("Requesting Company") and a company willing to furnish such assistance ("Responding Company"), the following principles are suggested as the basis for a contract governing emergency assistance to be established at the time such assistance is requested:

1. The emergency assistance period shall commence when personnel and/or equipment expenses are initially incurred by the Responding Company in response to the Requesting Company's needs. (This would include any request for the Responding Company to prepare its employees and/or equipment for transport to the Requesting Company's location but to await further instructions before departing). The emergency assistance period shall terminate when such employees and/or equipment have returned to the Responding Company, and shall include any mandated DOT rest time resulting from the assistance provided and reasonable time required to prepare the equipment for return to normal activities (e.g. cleaning off trucks, restocking minor materials, etc.).
2. To the extent possible, the companies should reach a mutual understanding and agreement in advance on the anticipated length – in general – of the emergency assistance period. For extended assistance periods, the companies should agree on the process for replacing or providing extra rest for the Responding Company's employees. It is understood and agreed that if, in the Responding Company's judgment such action becomes necessary the decision to terminate the assistance and recall employees, contractors, and equipment lies solely with the Responding Company. The Requesting Company will take the necessary action to return such employees, contractors, and equipment promptly.
3. Employees of Responding Company shall at all times during the emergency assistance period continue to be employees of Responding Company and shall not be deemed employees of Requesting Company for any purpose. Responding Company shall be an independent Contractor of Requesting Company and wages, hours and other terms and conditions of employment of Responding Company shall remain applicable to its employees during the emergency assistance period.
4. Responding Company shall make available upon request supervision in addition to crew leads. All instructions for work to be done by Responding Company's crews shall be given by

Requesting Company to Responding Company's supervision; or, when Responding Company's crews are to work in widely separate areas, to such of Responding Company's crew lead as may be designated for the purpose by Responding Company's supervision.

5. Unless otherwise agreed by the companies, Requesting Company shall be responsible for supplying and/or coordinating support functions such as lodging, meals, materials, etc. As an exception to this, the Responding Company shall normally be responsible for arranging lodging and meals en route to the Requesting Company and for the return trip home. The cost for these in transit expenses will be covered by the Requesting Company.
6. Responding Company's safety rules shall apply to all work done by their employees. Unless mutually agreed otherwise, the Requesting Company's switching and tagging rules should be followed to ensure consistent and safe operation. Any questions or concerns arising about any safety rules and/or procedures should be brought to the proper level of management for prompt resolution between management of the Requesting and Responding Companies.
7. All time sheets and work records pertaining to Responding Company's employees furnishing emergency assistance shall be kept by Responding Company.
8. Requesting Company shall indicate to Responding Company the type and size of trucks and other equipment desired as well as the number of job function of employees requested but the extent to which Responding Company makes available such equipment and employees shall be at Responding Company's sole discretion.
9. Requesting Company shall reimburse Responding Company for all costs and expenses incurred by Responding Company as a result of furnishing emergency assistance. Responding Company shall furnish documentation of expenses to Requesting Company. Such costs and expenses shall include, but not be limited to, the following:
 - a. Employees' wages and salaries for paid time spent in Requesting Company's service area and paid time during travel to and from such service area, plus Responding Company's standard payable additives to cover all employee benefits and allowances for vacation, sick leave and holiday pay and social and retirement benefits, all payroll taxes, workmen's compensation, employer's liability insurance and other contingencies and benefits imposed by applicable law or regulation.
 - b. Employee travel and living expenses (meals, lodging and reasonable incidentals).
 - c. Replacement cost of materials and supplies expended or furnished.
 - d. Repair or replacement cost of equipment damaged or lost.
 - e. Charges, at rates internally used by Responding Company, for the use of transportation equipment and other equipment requested.
 - f. Administrative and general costs, which are properly allocable to the emergency assistance to the extent such costs, are not chargeable pursuant to the foregoing subsections.
10. Requesting Company shall pay all costs and expenses of Responding Company within sixty days after receiving a final invoice therefor.

11. Requesting Company shall indemnify, hold harmless and defend the Responding Company from and against any and all liability for loss, damage, cost or expense which Responding Company may incur by reason of bodily injury, including death, to any person or persons or by reason of damage to or destruction of any property, including the loss of use thereof, which result from furnishing emergency assistance and whether or not due in whole or in part to any act, omission, or negligence of Responding Company except to the extent that such death or injury to person, or damage to property, is caused by the willful or wanton misconduct and / or gross negligence of the Responding Company. Where payments are made by the Responding Company under a workmen's compensation or disability benefits law or any similar law for bodily injury or death resulting from furnishing emergency assistance, Requesting Company shall reimburse the Responding Company for such payments, except to the extent that such bodily injury or death is caused by the willful or wanton misconduct and / or gross negligence of the Responding Company.
12. In the event any claim or demand is made or suit or action is filed against Responding Company alleging liability for which Requesting Company shall indemnify and hold harmless Responding Company under paragraph (11) above, Responding Company shall promptly notify Requesting Company thereof, and Requesting Company, at its sole cost and expense, shall settle, compromise or defend the same in such manner as it in its sole discretion deems necessary or prudent. Responding Company shall cooperate with Requesting Company's reasonable efforts to investigate, defend and settle the claim or lawsuit.
13. Non-affected companies should consider the release of contractors during restoration activities. The non-affected company shall supply the requesting companies with contact information of the contactors (this may be simply supplying the contractors name). The contractors will negotiate directly with requesting companies.

Date	Description
October 2014	Sections 4, 5, and 10
September 2005	Sections 11 and 12

DOCKET NO. 51997

APPLICATION OF ENTERGY	§	BEFORE THE
TEXAS, INC. FOR DETERMINATION	§	PUBLIC UTILITY COMMISSION
OF SYSTEM RESTORATION COSTS	§	OF TEXAS

DIRECT TESTIMONY

OF

CHARLES W. LONG

ON BEHALF OF

ENTERGY TEXAS, INC.

APRIL 2021

DOCKET NO. 51997

APPLICATION OF ENTERGY TEXAS, INC. FOR
DETERMINATION OF SYSTEM RESTORATION COSTS

DIRECT TESTIMONY OF CHARLES W. LONG

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EXHIBITS

Exhibit CWL-1	List of Prior Testimonies
Exhibit CWL-2	Transmission Line and Substation Outage Report
Exhibit CWL-3	Damage Photos
Exhibit CWL-4	Transmission Storm Preparation and Restoration Checklists
Exhibit CWL-5	Contractors List
Exhibit CWL-6	Major Vendor Services

I. INTRODUCTION AND QUALIFICATIONS

Q1. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

A. My name is Charles W. Long. I am employed by Entergy Services, LLC (“ESL”)¹ as Vice President, Transmission Planning and Strategy within Entergy’s Transmission Organization. My business address is 6540 Watkins Drive, Jackson, MS 39213.

Q2. ON BEHALF OF WHOM ARE YOU TESTIFYING?

A. I am testifying on behalf of ETI.

Q3. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I received my Bachelor of Science degree in Electrical Engineering in 1991 from the University of Alabama in Tuscaloosa and my Master of Business Administration from Millsaps College in 2017. I began my professional career in 1992 with Louisiana Power & Light Company (now ELL) as a system protection engineer, remaining in that capacity until 1996. In 1996, I moved into transmission operations planning within Entergy Services, Inc. (now ESL), where I worked until 2000. In 2000, I became the substation supervisor in Baton Rouge, Louisiana, for Entergy Gulf States, Inc. (now ELL and ETI). In 2006, I assumed the role of

¹ ESL is a service company to the five Entergy Operating Companies (“EOCs”), which are Entergy Arkansas, LLC (“EAL”), Entergy Louisiana, LLC (“ELL”), Entergy Mississippi, LLC (“EML”), Entergy Texas, Inc. (“ETI” or “the Company”) and Entergy New Orleans, LLC (“ENO”).

1 Manager, Transmission Planning with planning responsibility for transmission
2 facilities for EAL and EML.

3 I was promoted to Director of Transmission Planning in April 2012. In that
4 position, I was responsible for overseeing the development of proposals for the
5 expansion of, and improvements to, the transmission systems of the EOCs,
6 including those of the Company. Specifically, my responsibilities included
7 providing leadership and guidance to a staff of managers and engineers engaged in
8 all aspects of long-term transmission planning, including the development of
9 projects and plans designed to ensure that the transmission systems of the EOCs
10 remain in compliance with the North American Electric Reliability Corporation
11 ("NERC") Reliability Standards governing transmission planning, as well as
12 Entergy's local planning criteria.

13 In July 2019, I was promoted to my current position. As VP of
14 Transmission Planning and Strategy, my responsibilities include overseeing the
15 long-term planning of the Transmission projects necessary for the EOCs to provide
16 reliable service, the plans to renew and maintain the existing and future
17 transmission assets of the EOCs, and supporting policy and regulatory activities. I
18 have over 25 years of experience in transmission system planning, operations, and
19 maintenance, and I am a registered professional engineer in the State of Louisiana.

1 Q4. WHAT ARE YOUR JOB RESPONSIBILITIES RELATING TO STORM
2 RESTORATION?

3 A. I have served as Deputy Section Chief of the Planning Section within Entergy's
4 incident response function for approximately 12 years. I served in incident
5 command during numerous hurricanes dating back to 2008, including Hurricanes
6 Gustav, Ike, Harvey, and most recently during the multiple hurricanes that impacted
7 the Gulf Coast in 2020 and the 2021 winter storm event ("Winter Storm Uri"). In
8 my incident command role, I am responsible for planning the restoration of the
9 transmission system. This generally includes activities related to situational
10 awareness, restoration prioritization, reporting, and a special projects team tasked
11 with developing novel solutions for areas where transmission restoration may be
12 severely delayed due to access or damage. I report to the system incident
13 commander and provide updates on transmission system status and capabilities,
14 technical guidance, and recommendations to facilitate the restoration. I also
15 coordinate with other branches within incident command and within the State
16 incident command, primarily to State incident commanders and planning section
17 leaders within the EOCs, including ETI.

18

19 Q5. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION OR
20 OTHER REGULATORY AGENCIES?

21 A. Yes. Exhibit CWL-1 contains a list of proceedings in which I have filed testimony.