2. Implementation of the Incident Response Plan

Q44. HOW DOES THE COMPANY DETERMINE ITS PERSONNEL AND RESOURCE NEEDS AFTER A MAJOR STORM?

A. The Company employs damage prediction models as a first step in determining the personnel and resources that will be necessary following a storm. The primary tool used to evaluate initial resource requirements is a modeling program utilized by the System Outage Response ("SOR") group. The model estimates resources based on potential damages as related to the category of a hurricane, its known characteristics, and its projected path. From this model, ELL estimates the potential damage, and based upon that estimate, the numbers of transmission, distribution, and vegetation workers required for the restoration are determined. Those model outputs are compared against past operational experience, which includes comparisons to previous storms with similar characteristics, and the estimated number and type of line and vegetation crews are determined and presented at a System Resource conference call prior to the storm's impact. I discuss this process in greater detail below. After a storm has made landfall, and as soon as the weather safely permits, actual damage assessment begins. The damage assessments provide a basis with which to adjust resource allocations among regions or networks or to request additional resources.

Q45. CAN YOU DESCRIBE THE DAMAGE ASSESSMENT PROCESS IN MORE DETAIL?

A. Yes. During a storm, limited utility crews that stayed on location begin patrolling and visually inspecting feeder trunks from their vehicles as long as it is safe to do so. Although it has been widely publicized that aerial bucket restoration activities cannot commence

until winds subside below 30 mph (*i.e.*, the manufacturer's limitation on handling material with aerial lift equipment), we do engage our line crews and scout teams to perform initial damage assessment activities at times when the wind speeds may exceed this threshold. Scouts, who can operate in small trucks, cars, and on foot, are able to initiate assessments as the weather allows. Nevertheless, safety is a priority for all restoration workers, and scouting/assessment activities commence or continue during a major storm event provided it is safe to do so. Any number of variables, including flooding, falling or flying debris, wind speed/gusts, visibility, rainfall, driving conditions, navigability of city streets, and fatigue of the work force, could stop scouting operations if conditions are no longer safe to continue.

Once the hurricane passes through the Company's service areas and additional scouts begin arriving, a full-scale damage assessment to the affected infrastructure can commence. At that point, helicopters are mobilized to expedite the damage assessment process. In addition, the use of advanced technology, such as drones, significantly improves our ability to perform damage assessments in areas where teams cannot safely scout. On the distribution system, scouts first patrol backbone feeders serving critical customers, followed by the rest of the feeder backbones. Major branches of each circuit (laterals) are inspected next, with individual customer service lines being assessed last. Assessment data is used to create a high-level summary of damage for poles, cross-arms, transformers, spans of wire, and vegetation needs. These summaries are used to plan material and equipment acquisition along with resource allocations. Circuit mapping captures detailed repair needs by location and is an essential planning tool used by the field management team on a daily basis.

In addition to ELL scouting personnel, the Company brought in 707 damage assessors to support local assessment after Hurricane Ida. Once they finished their damage assessment role, personnel utilized as scouts, depending on their qualifications, were added into the restoration effort and used by local teams according to their skill sets or discharged. Some of these workers also were utilized to help capture an early estimate of customers who were not able to safely accept service (*i.e.*, customers that sustained damage to the electrical equipment attached to their home or business that needed to be repaired).

While the post-storm damage assessment facilitates the creation of an efficient restoration plan, it also enables reconciliation between the predictive damage models and the actual damage early enough in the process for resource requests to be adjusted up or down as needed without either delaying arrival of restoration workers or committing resources to areas where they are under-utilized.

Q46. HOW DOES THE COMPANY ACQUIRE RESOURCES TO RESTORE SERVICE TO ITS CUSTOMERS?

A. The Company recognizes the importance of restoring service as safely and quickly as possible for the health, safety, and needs of its customers and also for the sake of the regional and national economies. Thus, the Company pre-arranges for a variety of logistical and specialized equipment resources that are staged throughout the potentially-affected service areas so that restoration can begin safely as soon as a storm passes. I discuss below the types of resources that the Company utilizes to restore service to its customers.

Q47. HOW DOES THE COMPANY MANAGE AND ALLOCATE INCOMING OFF-SYSTEM RESOURCES?

A. Standardized check-in procedures help the Region and Network Commands ensure that incoming crews understand safe work practices and the Company's distribution system, and that the condition of the crews' equipment will not endanger the public, themselves, or other restoration workers. After checking in, off-system crews are given a safety orientation and provided with important area-specific information. The Company also initiates electronic tracking of detailed off-system crew information, including inventorying the equipment that these crews have brought with them and the identity of each crew member present.

In addition to the initial safety orientation, a more specific safety meeting is conducted once a storm crew arrives at the local network office. Particulars about the local area, system, hospitals, contact points, and safe work practices are provided and reviewed by storm crew members. In the light of the ongoing pandemic, special instructions about safety and health protocols related to COVID-19 were also provided to storm crews. During this time, the local network also disseminates local emergency response information and acquires information regarding the storm crew's skill set and equipment in stock in order to make an in-network restoration assignment to the crew. A storm crew not requiring rest time due to traveling to the service area will begin restoration activities immediately. Crews needing rest are directed to lodging facilities to begin an 8-hour rest period and preparation for the next work day. As a guideline, Entergy's workers (employees and contractors) follow a work schedule of 16 hours followed by 8 hours of rest during emergency restoration operations after hurricanes, ice storms, and other types

of emergency conditions. This schedule is designed to deliver maximum restoration productivity while also providing a safe work environment for individuals engaged in restoration efforts. Other factors, such as heat, humidity, mental fatigue, and restoration-effort duration may necessitate additional rest periods.

An Entergy Crew Leader is assigned to each storm crew to direct storm restoration efforts and maintain continuous interface with the storm crew until it is reassigned or released. This ensures that restoration personnel understand safe work practices, working hours, work assignments and location, records management requirements, construction standards, system configurations and voltages, switching procedures, communication protocols, and the logistics surrounding food, lodging, fuel, and material. Crew Leaders address the storm crew's questions/concerns should they have any or forward them along to the appropriate person to address them accordingly.

At the distribution level, work is generally dispatched to storm crews to repair damage to equipment affecting the greatest amount of customers, starting with substations, feeder trunk circuits, lateral and sub-lateral circuits, transformers, and service drops. ELL also considers critical customers and facility characteristics, and the general public welfare was of highest priority as resources were directed to restore critical governmental, military, police, fire, medical, flood control, water/sewer, food, and communications systems and services, as well as commercial and industrial customers impacting storm restoration and basic services.

When no longer needed for restoration activities in the area assigned, the off-system storm crew is reassigned to a different crew leader, network, or region, or it is released to return home or to support another utility in need of resources.

Q48. ARE THERE CIRCUMSTANCES UNDER WHICH THE COMPANY'S DISTRIBUTION PERSONNEL FIND IT NECESSARY TO DEVIATE FROM THE GENERAL PLANS AND PROCEDURES THAT YOU JUST DESCRIBED?

A. Yes. As always, our objective is to conduct restoration following a major storm as safely and quickly as possible. While the Company's IRP and Storm IRP, together with the procedures that I describe above, provide a general framework to accomplish that purpose, it should be noted that every storm is different and creates a totally unique restoration environment. Flexibility must therefore be given to distribution management to dedicate resources in an efficient and orderly manner to restore customers as safely and quickly as possible. The creation of a step-by-step rigid procedure that dictates distribution restoration activities down to every detail would not be flexible enough to adapt to thousands of different damage scenarios following each major storm and could hinder the restoration process. Put different, on a distribution level, the restoration process is a series of judgment calls in a very dynamic and changing environment rather than adherence to a rigid policy, and discretion is given to the Company's seasoned distribution personnel to exercise the necessary decision-making.

IV. HURRICANE IDA IMPACT

A. Description of Hurricane Ida

Q49. PLEASE DESCRIBE HURRICANE IDA AND ITS MAGNITUDE.

A. On August 29, 2021, at 11:55 a.m. CDT, Hurricane Ida made landfall near Port Fourchon, Louisiana, as a strong Category 4 hurricane with sustained winds of 150 miles per hour. An instantaneous peak wind gust of 172 miles per hour was clocked by instruments on a

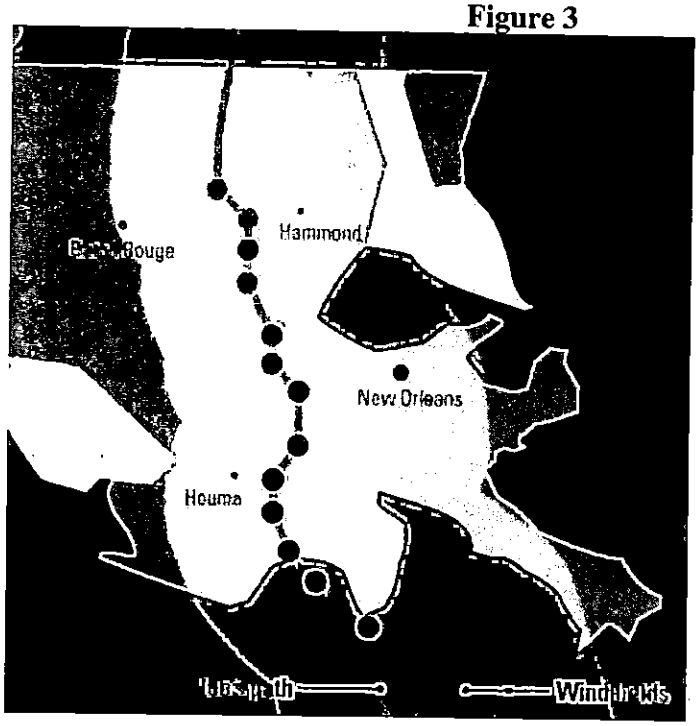
ship in Port Fourchon as the eyewall of the storm pummeled the Louisiana coast. The eye wall, which brings the most damaging winds and intense rainfall, passed over Lockport, Louisiana, and near Taft and Laplace, Louisiana, causing widespread damage.

The nature and magnitude of the damage inflicted in southeast Louisiana were very different from the experiences with most past hurricanes that impacted ELL's service area. Most hurricanes rapidly weaken following landfall, limiting the most extensive damages to at or near the coastline. Hurricane Ida did not follow this pattern, due in large part to the unique geography of the Louisiana coastline.

As Company witness Dr. Barry D. Keim explains, tropical storms form over warm ocean waters, strengthening and growing from the heat energy that fuels such storms. Typically, when a storm makes landfall, it loses that fuel source and weakening occurs. When Hurricane Ida came ashore in south Louisiana, however, it moved over swamps and marshland saturated with warm water that fueled the storm as though it were still churning over the warm waters of the Gulf of Mexico. It is my understanding that this weather phenomenon, referred to by researchers as the "brown ocean effect," likely contributed to Hurricane Ida's maintaining its catastrophic Category 4 strength for six hours after landfall, inflicting extensive damage not only along the coast, but also well inland.

As depicted in Figure 3, Hurricane Ida retained hurricane strength to the northern edge of ELL's service territory, knocking out power and crippling mobile and 911 communications in its wake. The storm then exited the state and continued its 1,500-mile journey, impacting 22 different states and Washington, D.C., along the way.

Figure 3



HURRICANE IDA

Affected Areas & Entergy Service Map

- **CAT 1** - Sustained winds of 60 mph Near Baton Rouge/Hammond
- **CAT 2** - Sustained winds of 110 mph Near Lake Maurepas/Ascension
- **CAT 3** - Sustained winds of 130 mph Near Houma
- **CAT 4** - 150 mph sustained winds Near Port Fourchon

Entergy.

Q50. DID THE EXTENSIVE DAMAGE FROM HURRICANE IDA STEM ONLY FROM THE STORM'S POWERFUL WINDS?

A. No. As Dr. Keim describes, Hurricane Ida produced a devastating storm surge that impacted communities well inland of the Louisiana gulf coastline, including on both the east and west banks of the Mississippi River and bordering portions of Lake Pontchartrain. Storm surge levels were recorded at 6 to 12 feet above ground along the west bank of Jefferson and Lafourche Parishes, and 6 to 9 feet at barrier islands on the west bank of Plaquemines, Tangipahoa, and western St. Tammany Parishes. On the east bank of the Mississippi River in Plaquemines Parish, storm surge levels were recorded at 9 to 14 feet, and 6 to 11 feet in St. Bernard, St. John the Baptist, and the east bank of St. Charles Parishes.

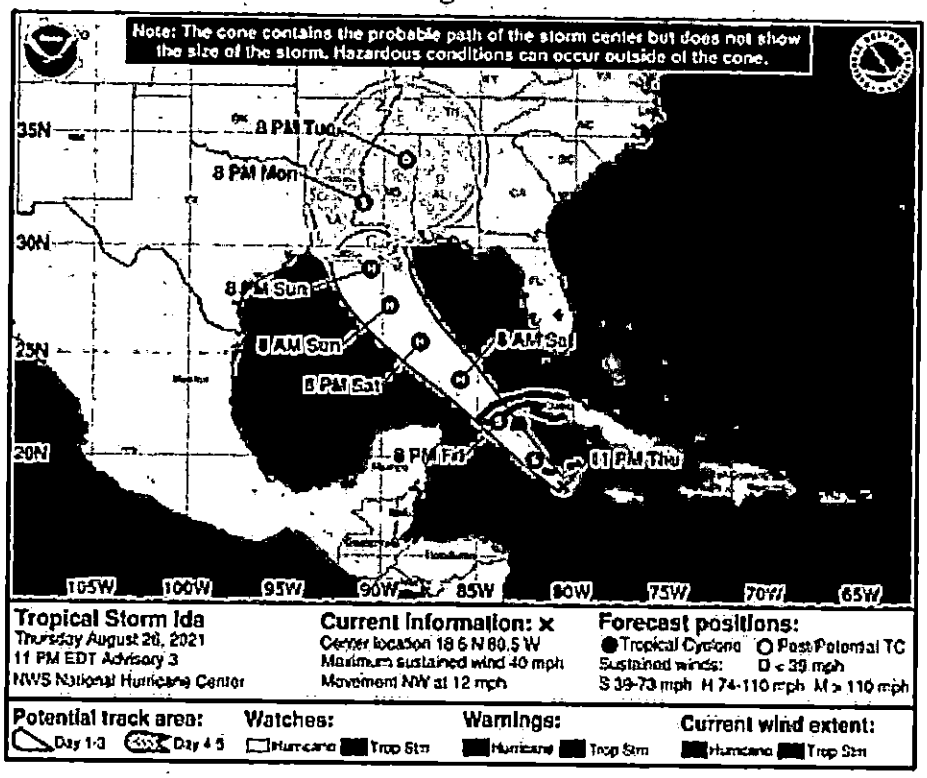
Storm surge levels were high enough in some locations to overtop local levee systems. Serious storm surge flooding from Hurricane Ida inundated towns like Galliano, Lafitte, and Barataria. And several feet of storm surge from Lake Pontchartrain, together with torrential rain, also prompted rare flash flood emergencies for St. John the Baptist and St. Charles Parishes, with significant flooding occurring on the west side of Lake Pontchartrain. In addition to storm surge, Hurricane Ida produced widespread rainfall along and near its track. Rainfall totals of more than 10 inches were recorded over portions of southeast Louisiana. Ponchatoula, Louisiana, in Tangipahoa Parish, recorded 15.04 inches of rain in addition to extensive wind damage that toppled trees, fences, and utility lines, leaving roads dangerously impassable.

Q51. HOW DID THE COMPANY MONITOR THE EXPECTED TRACK OF HURRICANE IDA?

A. As I noted above, because even small changes in the forecasted track of a major storm has the potential to cause significant hazards well beyond the projected track, ELL paid careful attention to the forecasts provided by the National Hurricane Center ("NHC"), and we also utilized weather consultant StormGeo to keep the Company apprised of developments with the storm and related weather conditions. Although Hurricane Ida's projected track did not change much in the days leading up to landfall, its intensity was significantly underestimated. In fact, Hurricane Ida set a record for its rapid intensification in the hours before landfall, surprising planners and forecasters.

Ida began as Tropical Depression 9 on August 26. Just over 6 hours later, its winds had strengthened to tropical storm force. At that time, the NHC predicted that Ida would come ashore along the Louisiana border as shown in Figure 4.

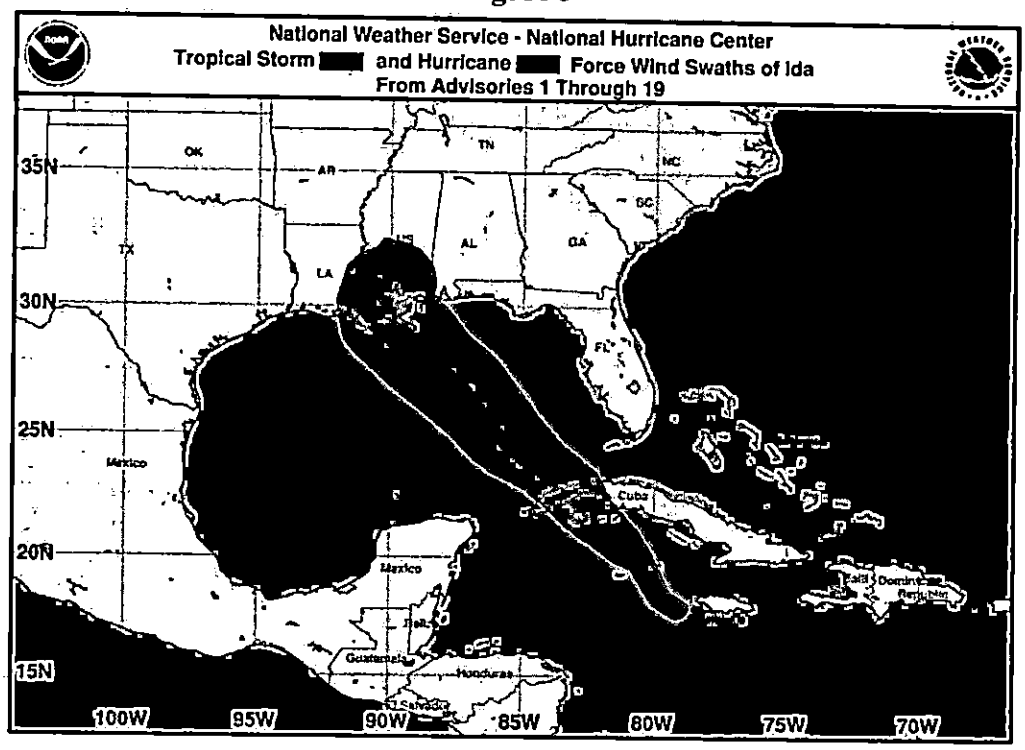
Figure 4



National Hurricane Center Forecast Image (August 26, 2021)

On August 27, the NHC classified then-Tropical Storm Ida as a hurricane. Taking advantage of very warm water in the Gulf of Mexico, Ida rapidly intensified from Category 1 to Category 4 status in the 24-hour period from August 28 to the morning of August 29, tying the record set in 2007 by Hurricane Humberto for most rapid intensification in the day before landfall. Shortly thereafter, Hurricane Ida made landfall as a strong Category 4 hurricane – a direct hit on southeast Louisiana – as depicted in Figure 5.

Figure 5



Areas subject to tropical storm and hurricane force winds based on NHC's Advisories 1 – 19 for Hurricane Ida

Q52. HOW DID THE COMPANY PREPARE FOR HURRICANE IDA AS IT DEVELOPED IN THE GULF OF MEXICO?

A. Before the storm system entered the Gulf, the Company began its preparations, which continued until landfall. The decision was made to fully activate the Entergy System Command Center and the Louisiana State Command Center on August 26, 2021. Our efforts included reviewing storm plans, reviewing and implementing checklist action items, stockpiling materials, pre-staging contractors, placing employees on alert, and moving equipment from possible flood areas. The Company also was engaged in reevaluating predictive damages and resource requirements and as discussed below, acquiring additional resources as the forecast worsened for Louisiana.

Beginning on August 26, 2021, the Company began running damage prediction models based on historic data to proactively ensure that ELL had the necessary personnel and equipment on standby and available for restoration activities that could result from combined impact of the storms. As of Saturday, August 28, and based on the forecast track and projected intensity of the storms, the Company anticipated mobilizing a storm team of approximately 16,000 employees, contractors, and support personnel to assist with restoration efforts in Louisiana, a number that could fluctuate based on the storm's path and intensity. (At that time, nearly 8,400 distribution, transmission, and support personnel had been secured, and efforts were underway to confirm additional resources.) As I mentioned above, because of Ida's rapid intensification, we had to broaden our request for resources in order to secure the workforce that we needed to response to the storm.

In addition, high-water vehicles, rear-alley machines, marsh buggies, drones, and helicopters were secured to assist in restoration efforts. And the Company was staging restoration crews in strategic locations in order to be ready to respond to customer outages as quickly as possible. We also took necessary steps to communicate with the public, government officials, parish and State emergency operations centers, and others to help them understand our plans for safely and quickly returning our communities and customers to normal operation, what would be involved in emergency-power restoration, public safety messages, and how to contact us after the storm.

Given the size and intensity of Hurricane Ida, the Company communicated across various channels that widespread outages would occur across the state. The Company advised that, based on historical restoration times, customers in the direct path of a storm as intense as Hurricane Ida could experience outages for more than 3 weeks. While the

majority of customers were expected to be restored sooner, the Company cautioned that customers in the hardest-hit areas should plan for the possibility of experiencing extended power outages.

Q53. PLEASE EXPLAIN THE COMPANY'S ACTIVITIES ONCE HURRICANE IDA MADE LANDFALL.

A. By the time the storm made landfall, we had completed the items mentioned above, and our first priority was to establish communication links with the Louisiana Regional Command Centers to ensure all Core Teams were safe. As of Monday, August 30, the day after the storm made landfall, the Company's workforce totaled 11,450 personnel, and the Company was continuing to secure a storm team of at least 20,000 to support restoration work, approximately half of which were already on site in Louisiana. The remainder of the crews arrived in waves, which allowed the Company to productively manage the large influx of resources and to conduct safety orientations and COVID-19 screenings.

The allocation of scouting and repair crews was made based on pre-landfall damage estimates, with adjustments made as early damage assessments became available. As I discussed above, scouting the Company's facilities after a hurricane, and before directing repair crews to neighborhoods, is essential to planning and executing an effective restoration. An additional benefit of scouting is that it allows for unsafe situations and obstacles to be identified in advance of crews arriving on the scene, which is especially important considering the amount of out of state workers that were involved in the restoration process following Hurricane Ida and that were not familiar with their surroundings. Even though aerial bucket truck restoration could not commence until winds

fell below 30 mph, early damage assessments were made by circuit bosses doing ground patrols even while winds were well above 30 mph. The preliminary assessments required us to make some adjustments to the allocation of scouts and repair crews to various regions.

And as I noted above, the Company also made use of advanced technology, including drones and aerial surveys, which allowed for damage assessments to be completed more efficiently, quickly, and safely than using ground patrols alone, and with less cost and impact to customers as well. By September 4, just 6 days after the storm made landfall, the Company had completed 100% of its damage assessments, in some instances using drones, airboats, and ground assessments, assessing over 870 circuits covering over 15,000 miles across four regions, including inaccessible areas in St. James, St. John, and Plaquemines Parishes that were devastated by Hurricane Ida.

As assessments came in, I reviewed preliminary damage reports to understand the condition of our transmission and distribution grids. I monitored the daily damage assessments and restoration progress along with the deployment of resources to ensure all areas had adequate material and restoration workers. I also made field visits to personally observe the level of damage from the storm and assess the field restoration progress, as well as the effectiveness of my management team's plan and its execution. I also kept senior management informed throughout the restoration process.

Q54. HOW MANY ELL CUSTOMER OUTAGES RESULTED FROM HURRICANE IDA?

A. Ida's high winds and heavy rains caused significant destruction to the electric grid, resulting in a total of 696,776 outages for ELL customers at its peak. I discuss the pace of restoration following Hurricane Ida later in my testimony.

B. Damages Caused by Hurricane Ida

Q55. PLEASE SUMMARIZE THE DAMAGE TO THE COMPANY'S DISTRIBUTION SYSTEM AS A RESULT OF HURRICANE IDA.

A. Hurricane Ida was the most devastating weather event to ever strike ELL's utility system, causing unprecedented damage across the Company's service area that vastly surpassed the damage caused by Hurricane Laura in 2020. The ELL electric grid sustained the greatest damage in Lafourche, Jefferson, Plaquemine, St. Charles, and Terrebonne Parishes.

As a result of Ida's extensive damage, large portions of the underlying distribution system in the storm's path required nearly a complete rebuild. This was the case in the Southeast region, namely, in Lafourche and Terrebonne Parishes and in Grand Isle in lower Jefferson Parish.

By the time the storm subsided, ELL's distribution system was impacted as follows:

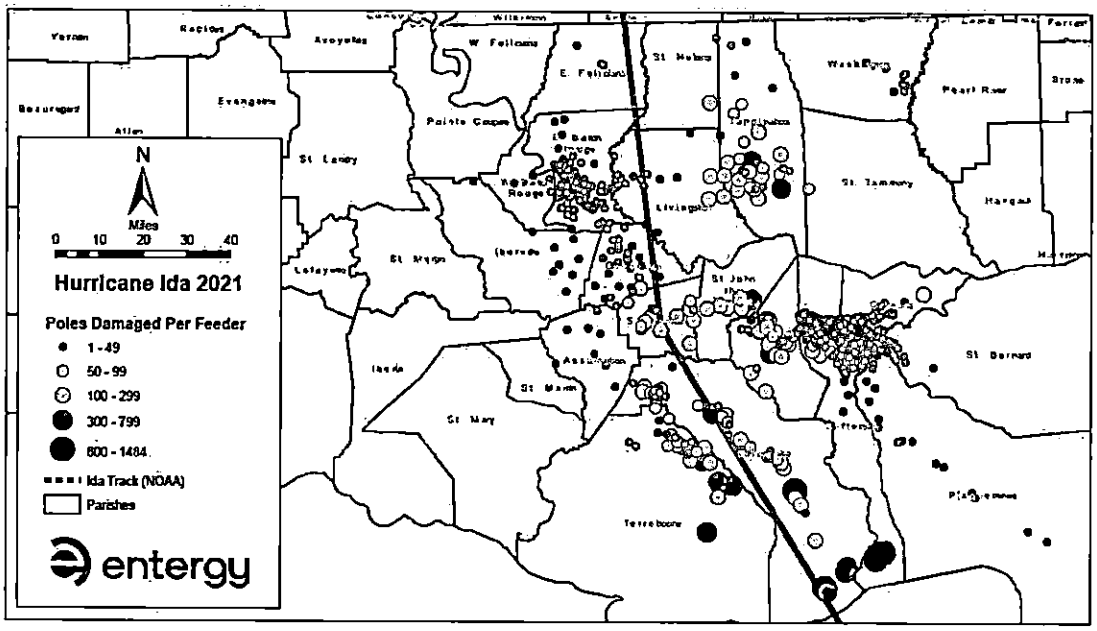
- 29,595 distribution poles were damaged and/or destroyed;
- 5,617 transformers were damaged and/or destroyed;
- 34,932 spans of distribution wire damaged and/or destroyed, roughly equivalent to 1,300 miles; and
- 21,270 cross-arms were damaged or destroyed.

Q56. COULD YOU ELABORATE ON HURRICANE IDA'S IMPACT ON THE COMPANY'S SERVICE AREA?

A. Yes. Hurricane Ida wreaked havoc on the Company's distribution system located within the communities in Ida's path on a much larger scale than with any prior storm to make landfall in Louisiana. The number of distribution poles that were damaged or destroyed by Ida was double that of Hurricane Laura, and more than Hurricanes Katrina (2005), Ike (2008), Delta (2020), and Zeta (2020) combined. Hurricane Ida had a devastating impact not only in a specific region (like Hurricane Laura), but also in three neighboring regions, including the two largest population centers of the state (the New Orleans and Baton Rouge metropolitan areas). In other words, the breadth of the Company's service area that was impacted was much greater (and more populated) than was the case with Hurricane Laura, meaning that the infrastructure damage totals stemming from Hurricane Ida likewise are much larger. Also compounding the impact of the storm is that Hurricane Ida's forward movement slowed after landfall, exposing communities (and ELL's infrastructure) in its path to rainfall and damaging winds for a longer duration.

As shown in Figure 6, there is a direct correlation between the location of the vast majority of the Company's broken or damaged poles and the areas of the state that were most heavily impacted by Hurricane Ida; nearly 80% of broken or damaged poles were from the most heavily impacted areas of the Bayou Region (including Lafourche and Terrebonne Parishes), the River Parishes (including St. Charles Parish), and the I-55 corridor, where many of the Company's customers sustained devastating damage where homes or businesses were destroyed.

Figure 6: Pole Damage in Hurricane Ida's Path



The scope of the devastation in the area in and around south Lafourche Parish, in particular, was staggering. Again, Hurricane Ida made landfall near the mouth of Bayou Lafourche and ran up much of its length, destroying thousands of homes and businesses, flooding roads, and damaging utility infrastructure. The Company's local Lockport network alone sustained a total of 9,229 damaged and/or destroyed poles (by far the most poles impacted on the Company's distribution system than in any other local network). As I noted above, in order to increase the resiliency of the distribution system in the Lockport area, the Company recently removed two overhead primary feeders across Bayou Lafourche and converted them to underground bores. In addition, the Company is also in the process of constructing a new substation and four distribution circuits in Lafourche Parish (in and around the Chackbay area) that will not only improve service reliability, but also will support economic growth in the area. The Company's planning for that project

predated Hurricane Ida, and it will have the added benefit of aiding in the area's recovery following the storm.

Q57. DO YOU OFFER WITH YOUR TESTIMONY ANY IMAGES OF THE STORM DAMAGE TO ELL'S DISTRIBUTION SYSTEM?

A. Yes, I do. Exhibit JWH-3 is a collection of photographs of damaged distribution and other facilities that are representative of the destruction caused by Hurricane Ida. Exhibit JWH-3 also demonstrates various components of ELL's successful restoration of the distribution system.

V. INTERACTION WITH STAKEHOLDERS

Q58. PLEASE DESCRIBE THE COMPANY'S EFFORTS TO COMMUNICATE WITH THE LOUISIANA PUBLIC SERVICE COMMISSION, STATE GOVERNMENTAL OFFICIALS, AND THE STATE EMERGENCY OPERATIONS CENTER IN BATON ROUGE IN ADVANCE OF, DURING, AND AFTER THE STORMS.

A. The Company's Regulatory Affairs and Public Affairs organizations are primarily responsible for communication with the LPSC, its Staff, and other State Governmental Officials. Prior to Hurricane Ida, Regulatory Affairs personnel were in direct communication with LPSC Commissioners, the Executive Secretary, and their Staffs, and plans were made for alternative means of communication in case of inaccessibility. During and after the storms, the Company's Regulatory Affairs staff provided customer outage reports to the LPSC via e-mail typically two times a day (morning and evening) in addition to periodic verbal updates. Those reports were also provided to governmental officials.

Customer Service and Public Affairs staff also hosted calls with those stakeholders to keep them informed.

ELL officials also met with and provided information regularly to the Governor and the Governor's Office following each storm, in addition to news releases and alert messages posted on Entergy's storm webpage. Additionally, the Company maintained communication with the Louisiana State Police and the Louisiana National Guard and coordinated resources and assistance from the National Guard during the restoration efforts.

Q59. PLEASE DESCRIBE THE COMPANY'S EFFORTS TO COMMUNICATE WITH LOCAL GOVERNMENTAL OFFICIALS AND "FIRST RESPONDERS" IN ADVANCE OF, DURING, AND AFTER THE STORMS.

A. In advance of the landfall of Hurricane Ida, ELL tracked the storms as they made their approach. During these periods, ELL officials communicated multiple times a day with city, parish, and emergency management personnel. After the storm's landfall, ELL officials hosted a daily conference call with city, parish, and emergency management personnel in the impacted locations of ELL's service area to share planning and restoration strategies. Local Customer Service Managers met with city and parish officials daily to provide updates on local restoration efforts. Phillip May, President and CEO of ELL, also gave restoration updates through WebEx meetings. And as I mentioned above, a daily press conference with ELL and ENO leadership, public officials, and the media was initiated for Hurricane Ida, which practice we plan to utilize for future storms as well.

Q60. PLEASE DESCRIBE THE COMPANY'S EFFORTS TO COMMUNICATE WITH FEDERAL GOVERNMENTAL OFFICIALS IN ADVANCE OF, DURING, AND AFTER THE STORMS.

A. The System Command Center was in regular contact with Federal Government agencies and departments during the storm restoration efforts. After landfall, System Command Center and Regulatory Affairs and Governmental Affairs personnel maintained regular communication with representatives of various federal agencies that were assembled at a joint operations facility in Baton Rouge, including the Department of Homeland Security, Federal Emergency Management Agency ("FEMA"), the Department of Energy, the Department of Defense, and the Army Corps of Engineers. Also, Regulatory Affairs and Governmental Affairs personnel participated on daily conference calls with representatives of various federal agencies, including FEMA and the Department of Energy. System and State Command Center personnel also participated in and provided restoration information during FEMA conference calls that included members of Louisiana's Congressional delegation. Furthermore, personnel at the System Command Center provided information and updates to SERC Reliability Corporation ("SERC") staff, who then participated on North American Electric Reliability Corporation ("NERC") conference calls, which included the Federal Energy Regulatory Commission ("FERC"), the Department of Energy, the Department of Defense, the Southwest Power Pool ("SPP"), the Midcontinent Independent System Operator ("MISO"), the PJM Interconnection ("PJM"), the Nuclear Regulatory Commission ("NRC"), the Department of Homeland Security, and the National Gas Association. Company representatives also had ongoing communications with the staffs of the FERC and NRC to apprise them of restoration developments.

Q61. PLEASE DESCRIBE THE COMPANY'S EFFORTS TO COORDINATE WITH MUTUAL-ASSISTANCE UTILITIES IN ADVANCE OF, DURING, AND AFTER THE STORM.

A. Once forecasts for the path of Hurricane Ida indicated that the ELL service area was at risk, Entergy initiated mutual-assistance conference calls with the regional mutual-assistance group of utilities to request and plan assistance. These calls were conducted from August 28 to September 2, 2021 to coordinate the acquisition of resources. Due to the amount of resources requested, not only by the EOCs but also by neighboring utilities, it was evident that the regional group could not meet the requests, and additional regional groups were invited to join in the response efforts. In total, 60 utilities from across the nation (with the exception of the western regional group on the West Coast) participated in providing assistance.

Q62. DESCRIBE THE COMPANY'S EFFORTS TO COMMUNICATE WITH ITS KEY SUPPLIERS IN ADVANCE OF, DURING, AND AFTER THE STORM.

A. Under the Incident Response Plan, key material and equipment suppliers ("Key Suppliers") were put on alert by ELL Supply Chain prior to the storm. Critical material was then ordered into the affected Entergy Distribution Center ("EDC") in advance of the storm. Supply Chain stayed in close contact with Key Suppliers throughout the storm and restoration via telephone and e-mail to keep the flow of material coming in response to field demands. Supply Chain personnel were redirected to the affected EDC to be on site to help with material requests. In addition, Supply Chain brought in a necessary and safe amount of resources from contractors and other utilities to support the materials process.

Each Supply Chain employee was assigned specific commodities, and they worked with the Key Suppliers of that commodity. Daily updates were sent to the Key Suppliers aiding them in forecasting our needs. In addition, the Company deployed onsite expediting resources to our wood pole mill source to assist with coordination of supplier priorities and reporting needs. As the storm restoration effort ramped down, efforts were undertaken to stop material in production that was no longer needed to minimize inventory impacts following the storm.

VI. RESTORATION OF THE DISTRIBUTION SYSTEM FOLLOWING HURRICANE IDA

A. Description of Restoration Efforts

Q63. HOW QUICKLY WAS SERVICE RESTORED TO CUSTOMERS AFTER HURRICANE IDA?

A. Less than 48 hours after Hurricane Ida left devastating destruction in its path, Entergy restored first lights into the Greater New Orleans area, the first step in bringing power back to the Metro region – including Orleans, Jefferson, St. Bernard, and Plaquemines Parishes, as well as parts of St. Charles and Terrebonne Parishes. Mr. May and Ms. Bourg provide details about how first lights were restored to New Orleans in such a short period of time after a very intense Category 4 storm left the state.

Power to nearly all ELL customers who were able to safely accept service (*i.e.*, customers who did not require reconstruction of their personal property) was restored by September 27, 2021 (29 days after Hurricane Ida made landfall). Table 4 below summarizes the restoration progress. Again, the Company's peak customer outage number

after Hurricane Ida was 696,776, and that occurred at 8:45 am on August 30, 2021. Although ELL began restoring service as soon as it was safe to do so on the evening/night of August 29, August 30, 2021 was the first full day of the restoration.

Table 4

August 29	Hurricane Ida makes landfall
September 1	First lights into New Orleans less than 48 hours after landfall
September 6	Baton Rouge area restored on Day 8 of restoration
September 8	Greater New Orleans area, including Jefferson Parish, restored and first lights into Thibodaux on Day 10
September 10	80% of all customers restored – over 11,000 poles replaced
September 14	90% of all customers restored – over 15,000 poles replaced
September 16	95% of all customers restored – over 17,000 poles replaced
September 20	97% of customer restored
September 27	All customers restored who could safely receive power on Day 29 of restoration

As of September 27, 2021 the customers that remained out of service were located in the hardest hit areas in the lower portions of Jefferson, Lafourche, and Terrebonne Parishes, including Port Fourchon and Grand Isle, along with some over-water routes. Although those customers were unable to take power at the time, our crews continued to rebuild our facilities so that power would be available when our customers were ready.

Q64. CAN YOU PROVIDE MORE DETAILS ABOUT THE NEARLY COMPLETE DISTRIBUTION REBUILD THAT WAS REQUIRED IN THE MOST HEAVILY-IMPACTED REGIONS OF THE COMPANY'S SERVICE AREA?

A. Yes. As I mentioned above, large portions of the underlying distribution system in the storm's path required nearly a complete rebuild, including in hard-hit coastal communities like Port Fourchon and Grand Isle that saw catastrophic damage from Hurricane Ida. As part of those efforts, crews installed distribution equipment meeting the most up-to-date design standards.

For example, crews installed Class 1 utility poles with extra hardened footings for critical power lines in Port Fourchon that are designed to withstand 150-mph winds. Service was restored to customers in Port Fourchon who could safely receive it on September 29, 2021.

The Company was able to restore first lights to Grand Isle on September 15, 2021, by providing temporary generators capable of powering critical facilities like grocery stores, lodging, and emergency and government operations. Like in Port Fourchon, work was done to increase the resiliency of the electric grid serving Grand Isle, resulting in the power supply system serving that area being rated to withstand winds of up to 150 mph. These efforts included:

- Setting Class 1 poles inside steel sleeves 15 feet into the ground along main thoroughfares to offset the island's sandy foundation.
- Installing steel caisson foundations to provide additional support.
- Adding stronger fill to areas where the soil conditions were poor.

- Replacing traditional "T" shaped poles with cross-arms by poles in which the lines are attached to the pole itself, which creates less resistance in high winds.
- Placing one of the two main distribution feeders serving Grand Isle underground to help the system withstand future storms.[23]

On Friday, January 14, 2022, 138 days after Hurricane Ida flattened more than 700 structures in the Town of Grand Isle and cut basic utilities to its homes and businesses, utility crews restored permanent power to the small barrier island community.

Q65. PLEASE DESCRIBE SOME OF THE EFFORTS THAT WERE REQUIRED FOR THE COMPANY TO RESTORE SERVICE TO CUSTOMERS AS QUICKLY AS POSSIBLE FOLLOWING HURRICANE IDA.

A. To successfully rebuild the distribution system in southeast Louisiana and restore power to nearly all affected customers in 29 days, took creative thinking, flexibility, and a level of deep-rooted dedication and passion. A cross-functional team focused on:

- Pulling resources and material from across the country, combining work and focus into one single effort.
- Supply chain and logistics quickly worked to request materials and set-up staging sites.
- Distribution quickly deployed emergency generators to temporarily feed loads.

[23] The work to complete this project began in January 2022 and remains ongoing.

- Power generation worked to reliably run New Orleans Power Station and Ninemile Six, which were critical to system stability, while repairing J. Wayne Leonard Power Station for service.

In addition, distribution poles that needed to be replaced were located in and around marshes, swamps, rivers, heavily-wooded areas, and a variety of other hard-to-reach locations. The Company also obtained and used specialized equipment to address these restoration challenges. For example, the Company deployed K-MAX helicopters to quickly move mangled structures out of the way and new ones into place. The Company also utilized tracked marsh buggies, barge-mounted cranes, and air boats, as well as advanced technology such as infrared cameras, drones, and satellite imagery, to access some of the hard-to-reach areas. Rear-alley machines were also utilized to maneuver tight spaces in residential areas.

Q66. PLEASE DESCRIBE FURTHER SOME OF THE SPECIFIC TASKS THAT WERE UNDERTAKEN BY THE COMPANY TO RESTORE ELL'S DISTRIBUTION SYSTEM.

A. In Exhibit JWH-4 to my testimony (Description of Restoration Tasks — Distribution), I provide a non-exclusive listing of numerous specific distribution restoration tasks that ELL performed to restore service after Hurricane Ida.

Q67. FOR PURPOSES OF ILLUSTRATION, PLEASE DESCRIBE FURTHER THE ACTIVITIES INVOLVED WITH REPAIRING DAMAGED DISTRIBUTION FACILITIES.

A. The activities required to repair the distribution system following Hurricane Ida were numerous. Some of the activities performed by distribution line crews included: repairing and/or replacing poles, repairing and/or replacing broken conductors, repairing and/or replacing damaged transformers, and repairing and/or replacing broken cross-arms. In my Exhibit JWH-5, I provide illustrative photographs of some of these activities, and I describe step-by-step the tasks required to complete the activities.

Q68. WHAT SIGNIFICANT OBSTACLES DID THE COMPANY ENCOUNTER IN REPAIRING DAMAGE FROM HURRICANE IDA?

A. The significant obstacles that the Company encountered included hurricane-caused obstacles, as well as inaccessibility of our electrical infrastructure because of location, construction, or design.

First, hurricane-caused obstacles included those hindrances directly caused by the hurricane and associated weather activity, which included the delay in deploying resources while the storm maintained hurricane strength throughout our service territory; obstacles to mobility such as trees and debris across roadways as well as flooded roadways;[24] trees and debris across or blocking access to ROWs; saturated ground from rains preventing truck access; trees and debris cluttering work sites; flooding along the coastal areas;

[24] Interstate 10 between New Orleans and Baton Rouge was temporarily closed because of flooding, with water reported to be 4 feet deep in one location.

domestic livestock and wildlife (alive and dead) displaced by hurricane or storm surge impeding access to roads, ROWs, and work sites; and storm surge damage to infrastructure such as roads and bridges.

The second group of obstacles was primarily related to the accessibility of our infrastructure. These obstacles would exist even without the devastation of a hurricane, though they were exacerbated by the debris left by Hurricane Ida. An example of this was the difficulty in making repairs to facilities located in rear lots, alleys, or off-road. In these cases, truck access was often not available or was blocked by customer buildings and debris. This type of construction required that most work be done by carrying specialized equipment and materials to the rights-of-way and manually reconstructing the facilities without the assistance of trucks for digging holes, erecting poles, and lifting workers and equipment into position on the poles. Even under normal operating conditions, these types of facilities are more difficult and time-consuming to restore.

Q69. WERE THERE ANY OTHER CHALLENGES FACED BY THE COMPANY DURING THE HURRICANE IDA RESTORATION?

A. Yes. Another significant challenge was supporting the workforce necessary to restore power to ELL's service area while in the middle of a pandemic and during the extreme heat and humidity experienced in southeast Louisiana during the months of August and September. The main example was the significant operational challenge involved in managing and maintaining logistical support for thousands of workers from outside the local area. The provision of lodging, meals, ice, laundry, parking, fuel, and other resources required to support this effort presented unique challenges which were complicated by the

COVID-19 pandemic and the need to operate under proper protocols for the health and safety of the workers, as I discuss in greater detail below. In addition, following Hurricane Ida, the region experienced stubbornly persistent severe weather (including Hurricane Nicholas, a Category 1 hurricane that made landfall in Texas and drifted slowly over Louisiana, drenching the Gulf Coast in mid-September 2021) requiring our workforce to take shelter at times.

B. Logistical Support

Q70. PLEASE DESCRIBE THE LOGISTICAL SUPPORT THAT WAS REQUIRED TO SUPPORT THE RESTORATION EFFORTS FOLLOWING HURRICANE IDA.

A. As I noted above, the logistical support efforts for ELL for the Hurricane Ida restoration were significant undertakings necessary to support the large number of personnel who were required to restore service to customers. Logistical support refers to resources to support restoration personnel that were necessary to reconstruct the system. Logistical support includes lodging, food, beverages, laundry, portable toilets, showers, dumpsters, transportation, staging area lighting, fuel, materials, vehicles, parking, security, and other related functions.

Lodging restoration workers proved to be the most significant logistical challenge during Hurricane Ida. Commercial lodging was utilized to the fullest extent available, and the Company maintained an average of 10,581 hotels rooms/day from 262 different hotels for Hurricane Ida. But creative solutions were also needed to house and feed the approximately 27,000 workers. ELL established alternative housing, including turn-key sites set up to provide lodging, catering, fuel, showers, laundry, etc. This expedited

restoration efforts by lodging workers closer to their worksites and reducing travel time from hotels. But turn-key sites cannot not be set up in advance of a storm; rather, they must be staged once it is safe to do so following landfall. Moreover, those sites were not able to be operated at full capacity due to the safety protocols required by COVID-19.

Q71. PLEASE DESCRIBE THE "TURN-KEY" SITES THAT THE COMPANY ESTABLISHED TO PROVIDE LOGISTICAL SUPPORT FOR RESTORATION PERSONNEL.

A. Based on the number of resources being secured to work on the restoration effort (summarized in Table 2 above), there was a shortfall of commercial beds available in the areas most impacted by the storm. Alternate lodging was needed to house and support the incoming restoration personnel. Therefore, the Company decided to engage certain full-service turn-key vendors to provide additional lodging space located in the areas of the most significant storm-related damage.[25] The Company determined that this was the best option to achieve the goal of supporting a timely restoration of electric service to our customers given the lack of viable options. The Company also incorporated COVID-19 testing at the turn-key sites. Exhibit JWH-6 provides a listing of the logistics sites utilized by ELL during the restoration efforts following Hurricane Ida, including turn-key,

[25] These vendors provided support and assets such as mass housing (tents or bunk trailers), catering, sanitation, and other logistics coordination and procurement.

laydown,[26] parking, catering, and other types of logistics sites. Exhibit JWH-6 also provides information on where each site was located.

Q72. PLEASE PROVIDE A SUMMARY OF THE VOLUME OF LOGISTICAL RESOURCES UTILIZED BY ELL IN THE DISTRIBUTION RESTORATION FOR HURRICANE IDA.

A. The logistical effort was massive. Table 5 provides a summary of the logistical resources utilized for the restoration efforts following Hurricane Ida.

Table 5

Work Sites Supported[27]	67
Meals Served	1,064,616
Room-Nights	370,231
Gallons of Fuel	3,071,338

Q73. DID THE COVID-19 PANDEMIC FURTHER COMPLICATE THE COMPANY'S EFFORTS TO PROVIDE LOGISTICAL SUPPORT TO ITS WORKERS DURING THE RESTORATION EFFORTS?

A. Yes. As discussed previously, the COVID-19 pandemic required that additional steps be taken to ensure the safety of the restoration workforce on top of the already significant undertakings. Although the Company gained significant valuable experience conducting restoration efforts in the midst of a global pandemic following Hurricanes Laura, Delta, and Zeta in 2020, the necessary precautions still presented a significant complication to the

[26] A laydown yard or site is an area where materials (poles, etc.) and equipment are stored until they need to be used. The Company utilizes multiple locations for laydown yards so that materials are located in close proximity to where restoration work is being performed.

[27] Work Sites in this context refers to 21 local networks and 46 staging sites supported by ELL.

restoration efforts following Hurricane Ida in August and September 2021 when Louisiana was battling its fourth COVID-19 surge. The Company utilized a dual-threat process to prepare for storm restoration. Specific measures adopted included:

- Crews came with their own pandemic personal protective equipment ("PPE") and maintained their own supplies of PPE to offset potential scarcity.
- Planners managed work to keep crews together in pods to minimize potential exposure and allow for contact tracing.
- All restoration partners implemented personnel screening to track and monitor cases and to mitigate spread.
- Large-scale workspace gatherings related to safety onboarding, equipment staging, and dining were replaced with smaller and safer alternatives.
- Staging centers were cut to half capacity.
- ELL engaged third-party health and safety groups to assist with COVID-19 coaching at the staging, lodging, and work sites.

In addition, housing and feeding the crews were special challenges. With beds in short supply due to the lack of available hotel rooms sufficient to house the restoration workforce as I discussed above, restoration workers slept in bunk trailers, tents, a cruise ship, and even 6 floating hotels. Five of the floating hotels were used to lodge restoration workers in the hard-hit areas of Port Fourchon and Grand Isle. Hurricane Ida also required the mobilization of major catering vendors from across the region to serve to-go meals each day for several weeks since we could not depend on local caterers and restaurants to feed workers in group settings.

Q74. PLEASE DESCRIBE THE COMPANY'S OTHER EFFORTS TO ADDRESS THE COVID-19 PANDEMIC DURING THE HURRICANE RESTORATIONS.

A. ELL's pandemic response has been driven by robust business continuity planning, incorporating the latest federal and state health official guidance. Entergy's pandemic response plan has been in place since 2007 and is evaluated each year by Entergy's incident response team. Specific risk-based measures taken in response to COVID-19 include adoption of health and safety protocols concerning face-to-face interactions; transitioning personnel to remote work to optimize social distancing; implementing trainings to address travel restrictions, use of PPE, industrial hygiene, self-screening and temperature checks for on-site and field workers; establishing a 24-7 contact tracing program; and continual monitoring to identify and mitigate potential business continuity risks.

Similarly, ELL adjusted its incident response planning process prior to the 2020 hurricane season to address the unique risks associated with responding to major weather events in the midst of a pandemic. Many of our normal storm response protocols have been modified with the aim of preventing COVID-19 infections among our restoration workforce. These measures include proactive changes to training and communication of COVID-19 protocols to all storm personnel, utilization of digital orientation processes during to limit exposure risks, and conducting safety orientations with appropriate social distancing. Social distancing measures were adopted with respect to lodging for restoration workers and meal service at staging sites. Vehicles used to transport restoration workers operated with capacity limits to enable social distancing. Interactions between crews was minimized and modifications to how restoration work was performed was undertaken to reduce exposure risk and enable social distancing. Increased cleaning supplies and

additional hand-wash stations were made available to enable workers to practice good hygiene. Additionally, increased cleaning was performed at staging sites and in vehicles. COVID-specific signage was displayed at all staging sites. Finally, ELL utilized personnel tasked solely with COVID-19 protocol compliance. ELL has at all times been committed to ensuring the guidelines of both the Louisiana Department of Health and the federal Centers for Disease Control ("CDC") are followed.

Q75. WERE THE PROTOCOLS UTILIZED BY THE COMPANY SUCCESSFUL IN ADDRESSING THE POTENTIAL IMPACT OF COVID-19 ON THE RESTORATION WORKFORCE?

A. Yes. While there were some COVID-19 cases reported during the ELL restorations following Hurricane Ida, the protocols discussed above successfully minimized the impact that COVID-19 otherwise could have had on the health and safety of the restoration workforce.

C. Restoration Resources

Q76. PLEASE DESCRIBE THE RESOURCES EMPLOYED BY THE COMPANY TO ADDRESS HURRICANE IDA AT THE DISTRIBUTION LEVEL.

A. At the Distribution-level, over 24,000 workers responded to Hurricane Ida in Louisiana. The specific breakdown of resources is provided in Table 2, above.

Restoration workers came from 41 states to assist in the restoration efforts following Hurricane Ida. This includes mutual-assistance and off-system resources that were acquired through our memberships and contracts with the Southeast Electric

Exchange ("SEE"), EEI, the Midwest Regional Mutual Assistance Group, and the Texas Regional Mutual Assistance Group.

1. ELL Employees

Q77. DESCRIBE THE ELL PERSONNEL INVOLVED IN ADDRESSING THE STORM.

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

Q78. WHAT WERE THE BENEFITS OF USING ELL EMPLOYEES FOR HURRICANE RESTORATION ROLES?

A. ELL employees were compensated for their storm restoration work at their normal pay level. In addition, these employees were very familiar with ELL's procedures, the area,

and safety requirements, thus improving efficiency and safety. These resources were utilized to the maximum extent possible.

2. Entergy Affiliate Resources

Q79. TO WHAT EXTENT DID THE COMPANY RELY ON THE RESOURCES OF ESL AND OTHER EOCS TO ADDRESS HURRICANE IDA'S IMPACTS?

A. The support from many ESL employees was critical to our restoration efforts in Louisiana. Our System Command Center in Jackson, Mississippi, was primarily staffed with ESL employees. The System Command Center provided support to the State and other Departmental Command Centers, such as coordination among the EOCs and among Transmission, Generation, and many other departments engaged in restoration efforts. More specifically, the System Command Center:

- Acquired and deployed off-system line crews, vegetation crews, damage assessment support, logistical support and communications support;
- Tracked the progress of restoration efforts;
- Monitored and reported on weather;
- 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 Louisiana by directly working in a support role that was not part of their regular work activities, such as assisting with logistics, staging sites, and customer service/social media. ESL

employees, as part of their regular work activities, also supported the many corporate systems, such as Storm Assignment Management System ("SAMS"), the information technology communication systems, contracts, and accounts payable. In addition, ELL's affiliated EOCs 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, as well as other resources such as material and equipment.

Q80. WHAT WERE THE BENEFITS OF USING AFFILIATED RESOURCES?

A. Like the use of ELL 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 ELL's system, standards, operating procedures, and safety rules, as well as a customer-centric mindset. 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 in other portions of the Entergy System due to the impacts of Hurricane Ida.

3. Mutual-Aid Resources

Q81. TO WHAT EXTENT DID THE COMPANY RELY ON OTHER UTILITIES TO PROVIDE ASSISTANCE IN RESTORING THE COMPANY'S DISTRIBUTION FACILITIES FOLLOWING HURRICANE IDA?

A. As I explained above, ELL was able to utilize the resources of other utilities through mutual-assistance agreements to which Entergy is a party. For safe, timely, and efficient restoration from major storms such as Hurricane Ida, our industry depends on off-system resources to support restoration efforts. Over the years, Entergy has assisted many other electric utilities by sending support to aid in their restoration efforts. Mutual-aid utilities were essential for the restoration following Hurricane Ida due to the massive infrastructure damage, including damage to ELL's distribution system.

The mutual-aid support consisted primarily of line crews supplied from other utilities. These companies also supported ELL by releasing many of their contract distribution line and vegetation crews to the Company. These resources were extremely valuable to the restoration effort because of their quick response and their knowledge of utility operations, construction, and safety procedures. In addition to their construction abilities, mutual-aid electric utilities provided other necessary support such as engineering, scouting, management, safety, and logistics.

The mutual-aid utilities were typically assigned the task of repairing the main trunk feeder circuits and lateral lines within an assigned geographic area. This work included replacing broken poles, damaged transformers, cross-arms and braces; repairing downed and damaged conductors; replacing or repairing downed services; and energizing lines.

Q82. WHAT ARE THE BENEFITS OF UTILIZING MUTUAL-AID UTILITIES IN HURRICANE RESTORATION?

A. The various mutual-assistance arrangements generally provide that the assisting utility will furnish labor and materials at the cost incurred by the loaning entity, without mark-up. Therefore, when the Company requires assistance, it pays the actual charges for the assisting utility's crews, at the same rates the assisting utility pays its crews. Labor rates, transportation charges, labor overhead, and corporate overhead are reimbursed at the same rates that the assisting utility accounts for these charges in its normal course of business. The Company reimburses actual expenses for lodging, meals, fuel, and consumable materials. The assisting utility makes no profit and suffers no loss. This arrangement is reciprocal, as the same rules apply when the Company is assisting other utilities outside of the Entergy footprint.

ELL has provided mutual aid for other utilities on numerous occasions. The "at-cost" pricing of the mutual-aid services is standard industry practice and is designed to enable storm-afflicted utilities to expeditiously secure assistance in an efficient and cost-effective manner while ensuring that the providing utility does not have to provide assistance at a loss.

Q83. PLEASE IDENTIFY THE MUTUAL-AID UTILITIES THAT ASSISTED ELL IN THE RESTORATION OF ITS DISTRIBUTION SYSTEM FOR HURRICANE IDA.

A. Exhibit JWH-7 lists the mutual-aid utilities that assisted ELL in the restoration of its distribution system following Hurricane Ida, as well as the costs charged by, and the Company's mutual assistance relationship with, each utility.

4. Off-System Contractors

Q84. TO WHAT EXTENT DID THE COMPANY RELY ON OFF-SYSTEM CONTRACTORS TO ADDRESS DAMAGE FROM THE HURRICANE?

A. Off-system contractors were critical to our restoration effort for Hurricane Ida. The companies supporting the restoration effort provided line workers, damage-assessment scouts, vegetation workers, and contractors providing assistance in other restoration support roles.

Q85. PLEASE DESCRIBE THE PROCESS BY WHICH ELL ENGAGED CONTRACTORS TO ASSIST WITH THE RESTORATION EFFORT.

A. Securing and engaging contractors was managed by the Entergy System Command Center in response to our State Command Center's requests for line, vegetation, scouting, and other support resources. This process allowed the State Command Center to focus entirely on the restoration while others worked out the details of securing and engaging contractors according to our standard contractual agreements.

Many of our contractors had pre-existing contracts with Entergy that were negotiated prior to the emergency conditions. These pre-existing contracts contain terms

that are based on established history with the contractors, are consistent with ELL's prior course of dealings in these areas and conform to industry standards. Processes were in place to ensure that the rates charged by contractors during the restoration matched the pre-existing contracts' terms, thus ensuring that the costs were reasonable.

ELL also used contractors with which it did not have pre-existing contracts and/or prior history at the time of the request. These contractors were used in cases where additional resources were needed and ELL employees, affiliate resources, mutual-aid utility resources, and contractors with whom pre-existing contracts were in place, were not available.

Q86. PLEASE DESCRIBE THE PROCESS BY WHICH ENTERGY AND ELL RECEIVED, REVIEWED, AND APPROVED THE INVOICES SUBMITTED BY THIRD-PARTY CONTRACTORS ASSISTING IN THE DISTRIBUTION-RELATED RESTORATION PROCESS.

A. Entergy has a structured process in place to review the work performed by third-party contractors and ensure the legitimacy and accuracy of submitted invoices. Ms. Harcus addresses contractor invoice processing in more detail in her testimony. As Ms. Harcus explains, because of the emergency nature and magnitude of the system restoration efforts and the number of employees and outside parties involved, additional review processes were implemented to supplement existing procedures to ensure the proper accounting of the hurricane storm costs.

a. Line Contractors

Q87. PLEASE DESCRIBE THE LINE CONTRACTORS AND HOW THEY WERE SELECTED.

A. Augmenting Company resources and mutual-aid utilities with line contractors was necessary to acquire a sufficient number of resources to restore service in an expedited manner. At the beginning of the 2021 hurricane season, Entergy had several distribution line contractors under contract. These contracts were negotiated at competitive rates and at terms typical of those negotiated during similar circumstances.

Entergy also had certain additional distribution line contractors with which it had past working experience and with whom we had communicated in anticipation of the 2021 hurricane season. No contracts were written with them, but our prior experience with them led us to believe that their rates would be acceptable during a storm event. We had operational knowledge of their skills, capabilities, work product, and safety practices. Some of the items discussed or negotiated were travel expenses, work and rest hours, equipment, tools, voltage capabilities, crew compliment, and other personnel expenses.

Q88. WHAT SERVICES WERE PERFORMED BY THE MAJOR LINE CONTRACTORS?

A. The major line contractors performed all aspects of restoration including repairing main trunk feeder circuits and lateral lines, replacing and repairing poles and braces, cross-arms, conductors (wire), transformers, services, streetlight repairs, and re-energizing lines.

Q89. WHO WERE THE MAJOR DISTRIBUTION LINE CONTRACTORS UTILIZED BY THE COMPANY FOR THE HURRICANE IDA RESTORATION?

A. The major distribution line contractors (those contractors from whom we received invoices in excess of $100,000) and the costs charged by each are listed in Exhibit JWH-8. These contractors provided the additional line workers, support personnel, and equipment needed to rebuild the ELL distribution system. Exhibit JWH-8 also provides the type of contract that the Company had with each distribution line contractor that was utilized during the restoration efforts following Hurricane Ida.

b. Vegetation Contractors

Q90. DESCRIBE THE NEED FOR VEGETATION WORKERS IN THE RESTORATION EFFORT.

A. The vegetation contractors engaged by ELL were necessary to address the damage caused by Hurricane Ida due to the typically dense tree growth and vegetation in and around ELL's rights-of-way in its service area.

Q91. PLEASE DESCRIBE THE SERVICES THAT WERE PERFORMED BY VEGETATION CONTRACTORS.

A. The ELL service territory includes dense vegetation that contributes significantly to infrastructure damage and outages following catastrophic storms with wind-related damage, such as Hurricane Ida. The vegetation contractors engaged by ELL performed four critical tasks, including: (1) clearing the way to access damaged equipment, (2) removing trees and tree limbs that had fallen on lines and poles, (3) patrolling lines in

the impacted areas to address damaged limbs/trees that posed a potential reliability threat, and (4) clearing roadways to enter damaged areas.

Q92. PLEASE IDENTIFY THE MAJOR VEGETATION CONTRACTORS AND THE COSTS CHARGED BY EACH.

A. The major vegetation contractors (those contractors from whom we received invoices in excess of $100,000) utilized by ELL in connection with the restoration of its distribution system and the costs charged by each are listed on Exhibit JWH-9. Exhibit JWH-9 also provides the type of contract that the Company had with each vegetation contractor that was utilized during the restoration efforts following Hurricane Ida.

c. Logistics Contractors

Q93. PLEASE DESCRIBE THE ROLE OF LOGISTICS CONTRACTORS DURING THE HURRICANE IDA RESTORATION EFFORT.

A. Logistics contractors provided services to our restoration workforce by providing basic human necessities. Many of these contractors were engaged to provide support to staging areas such as mass housing, catering, and other logistics coordination and procurement. In addition, some logistics contractors supported the staging areas in various functions such as directing traffic, fueling vehicles, delivering meals, moving supplies, and clean up.

Q94. PLEASE IDENTIFY THE MAJOR LOGISTICS CONTRACTORS UTILIZED BY ELL DURING THE RESTORATION EFFORT FOLLOWING HURRICANE IDA AT THE DISTRIBUTION LEVEL AND THE COSTS CHARGED BY EACH.

A. Exhibit JWH-10 lists the major logistics contractors (those contractors from whom we received invoices in excess of $100,000) used in the Hurricane Ida restoration, as well as the costs charged by, and the services provided by, each contractor.[28]

d. Other Contractors

Q95. WHAT SERVICES WERE PERFORMED BY THE "OTHER" CONTRACTORS IN CONNECTION WITH THE HURRICANE IDA RESTORATION?

A. "Other" contractors included, but were not limited to:

- **Investment Recovery Contractors** – These contractors were utilized in the recovery and disposal of damaged distribution line equipment and debris. In order to expedite restoration and maximize the use of skilled restoration labor, line crews were instructed to leave salvage material that required extensive effort to remove at the work site so that a labor force could recover the material at a less critical time and at a lower labor rate. This allowed restoration crews to focus on restoring service to our customers more quickly. As I discuss below, some cleanup work by our investment recovery contractors is included as estimated costs because such work was not yet completed as of March 31, 2022.

[28] Exhibit JWH-10 contains costs charged by Asplundh Tree Expert Co. ("Asplundh"), a vegetation contractor. Asplundh set up its own logistics site (with the Company's approval) for its workers. Asplundh paid the logistics vendor with which it contracted directly, and the Company then paid Asplundh for those costs.

- **Fuel Suppliers** – These contractors provided emergency-fuel-supply, logistics, and management services after Hurricane Ida.
- **Environmental Contractors** – These contractors provided spill response, containment, and leak management services. The Company placed a priority on addressing the potential impact of oil-filled equipment that faced mechanical failure and might pose an environmental threat. Again, to expedite restoration and effectively utilize skilled restoration labor, line crews were instructed and trained to contain spill locations so that a specialized environmental labor force could respond and mitigate the potential damage.
- **Damage Assessment Contractors** – These contractors provided assistance with damage assessment and scouting personnel to support local assessment after Hurricane Ida.
- **Trucking and Equipment Contractors** – These contractors moved equipment, material, and supplies as needed. They also provided generators for command centers, as well as temporary power at motels for crew lodging, heavy equipment with operators for clearing rights-of-way, and specialized equipment rentals.
- **Security Services** – Due to the large numbers of resources, equipment, and materials, as well as the unique circumstances where local law enforcement support was limited, it was necessary to procure contract security to ensure that order was maintained at staging and key operating sites. These services were necessary for the restoration effort to protect personnel, restrict areas to essential personnel only, and secure materials and supplies.

- **Transportation Contractors** – Transportation contractors repaired/replaced damaged tires, dead batteries, and performed other minor vehicle repairs. These contractors also may provide fuel trucks for the fleet at staging locations.

Q96. PLEASE IDENTIFY THE MAJOR "OTHER" CONTRACTORS AND THE COSTS CHARGED BY EACH.

A. Exhibit JWH-11 lists the major "Other" contractors (those contractors from whom we received invoices in excess of $100,000) used by the Company in its distribution-level restoration efforts following Hurricane Ida, as well as the costs charged by, and the service provided by, each contractor.

D. Management of Restoration Resources

Q97. PLEASE DESCRIBE THE STRATEGY THAT ELL EMPLOYED TO BALANCE CREW AND MATERIAL NEEDS AND ACQUISITIONS IN THE DIFFICULT ENVIRONMENT PRECEDING AND FOLLOWING THE LANDFALL OF HURRICANE IDA.

A. ELL's IRP, coupled with the experience ELL and the other EOCs have gained from restoration of many storms within their service areas and elsewhere when the Company has served as a mutual-aid utility, has enabled ELL to be very effective in determining required resources for a given event. As I noted above, the primary tool used to evaluate initial resource requirements is a modeling program utilized by the SOR group which estimates resources based on potential damages as related to the category of hurricane, its

known characteristics, and its projected path. From this model, ELL estimates the potential damage, which aids in determining restoration material requirements.

In this instance, the Louisiana State Command Center assessed the damage to the ELL system based upon outage management data from the Distribution Operations Centers ("DOC"), Transmission Control Centers ("TCC"), and early reports from the field. Prior to Hurricane Ida's landfall, ELL dispatched scouts across key parts of its service area. The Damage Assessment coordinator collected the data from the scouts' aerial patrols and ground patrols to project damages based on current sampling and obtained an overview of the total estimated damages. The projected damage data was used to estimate the amount of personnel resources and material required to begin restoration.

Q98. HOW DID THE COMPANY ENSURE THAT IT DID NOT HAVE TOO MANY RESOURCES ENGAGED IN THE RESTORATION EFFORT?

A. During restoration, the State Incident Command, in communication with the network supervisors, assesses restoration progress and the ability to effectively and safely manage the work force several times a day. These assessments are made on an ongoing, dynamic basis throughout the event and are utilized to make adjustments to the pre-event estimates of material and resource requirements.

ELL pre-staged crews at strategic locations in anticipation of the storm's impact, then ramped up resources to a peak, followed by the re-allocation and release of crews as progress was made. As crews completed work at one location, they were shifted to another location based on need and skill set. Generally speaking, once the Company completed repairs in the areas that were the least damaged, crews were then "cascaded" into the more

damaged areas to speed up the restoration process. We attempted to keep crews at the same staging site, however, which depended on factors such as proximity to work location, material lay-down areas, and logistical support capabilities. As the restoration progressed and workers were shifted among networks, the State Command Center, with input from the network supervisors, made determinations regarding the number of crews that could effectively and safely work in an area. When it was determined that the effective number had been reached, we began releasing excess resources and decommissioning the staging sites supporting those resources. As a staging site was decommissioned, we assessed the number of contractors that the remaining staging sites could support, and we reassigned the remaining crews to other staging sites. ELL closely monitored crew needs to ensure that crews were utilized in an efficient manner, that we did not have more crews than we needed, and that we consolidated staging sites and logistical resources when it became possible to do so.

Q99. DID YOU COORDINATE THE RESOURCE MANAGEMENT OF CREWS WITH THE TRANSMISSION FUNCTION?

A. Yes. The key benefit of this joint effort during restoration was the coordination and prioritization needed to achieve grid stability and improve restoration efforts. Daily meetings were held to plan circuit restoration, manpower requirements, and materials needed. We also coordinated with the Transmission and Generation groups to stabilize the grid, ensuring load was ready for service. In addition, the release of crews was jointly coordinated between the Transmission and Distribution functions to evaluate options of shifting those resources between functions before release.

Q100. HOW DID THE COMPANY ENSURE THAT IT DID NOT OVERPAY FOR RESOURCES?

A. The Company has implemented a structured process to review the invoices received from contractors to ensure that they are accurate. As described by Ms. Harcus, the majority of the invoices that the Company received from a third-party contractor were audited under the supervision of the Entergy internal audit department or finance department prior to payment in full. Invoice processing teams were established to process the following types of storm-related invoices: (1) transmission and distribution line and vegetation; (2) facilities; (3) fossil; (4) nuclear; and (5) logistics. Ms. Harcus provides additional information about the process for capturing, verifying, and monitoring costs in her Direct Testimony.

E. Safety Performance

Q101. PLEASE DESCRIBE THE SAFETY PERFORMANCE OF THE HURRICANE RESTORATION WORKFORCE FOR HURRICANE IDA.

A. The safety of our employees and restoration workforce was the highest priority of ELL, and the restoration safety performance was generally outstanding. During storm restoration, our workforce is reminded to be aware of changing conditions, uneven terrain, heat exhaustion, and the many other hazards present in the field.

Despite very difficult circumstances in the field, there were zero fatalities among all of the workers involved in the restoration efforts in Louisiana following Hurricane Ida. The total number of Occupational Safety and Health Administration ("OSHA") recordable

injuries in Louisiana (for both ELL and ENO) was 34, with only 3 of those resulting in lost time. In addition, we experienced 37 ANSI reportable vehicle accidents.

Our enterprise safety organization is reviewing each injury and will be applying those lessons learned to future restoration efforts.

Q102. WHAT STEPS DID ELL TAKE TO ENSURE SAFETY AMONG ITS EMPLOYEES AND THE THOUSANDS OF CONTRACTOR PERSONNEL IN LINE CREWS, VEGETATION CREWS, AND OTHER CAPACITIES THAT WERE UTILIZED DURING THE HURRICANE IDA RESTORATION?

A. All employees helping with restoration were given a safety orientation prior to starting work. A copy of the orientation was also given to all of the supervisors of the visiting crews. The orientation included all safety rules, locations for medical attention, identification of local hazards, and contact numbers for all safety professionals in case questions arose. An Entergy System safety coordinator was assigned an area with instructions to make contact with all crews each day. Crew rosters were utilized to ensure all crews received the safety orientation presentation.

Entergy Crew Leads were provided updated safety information every day in order to inform the visiting crews where hazards had been identified. In addition, a "Safety Stand Down" topic was developed by our Safety department to be used in the Company-led safety meetings. Visiting contractors were encouraged to attend at least one safety meeting with their crews each day.

Workers were required to report all accidents to the Entergy System's Safety organization. Additionally, First Aid Stations located in staging areas reported each instance of first aid and medical attention.

VIII. STORM COSTS

A. Hurricane Ida Storm Costs

1. Distribution-Level Costs

Q103. WHAT ARE THE TOTAL DISTRIBUTION-LEVEL COSTS OF THE COMPANY'S RESTORATION EFFORT FOLLOWING HURRICANE IDA?

A. The total ELL Distribution costs were $2.2 billion. These costs include the distribution-related storm costs incurred through March 31, 2022, plus certain estimated costs related to specific projects that were not completed as of March 31, 2022, that are necessary to repair or replace Distribution facilities damaged by Hurricane Ida. These numbers do not include adjustments for carrying costs. Please see Exhibit JWH-1; Exhibit SMH-1 attached to the Direct Testimony of Ms. Harcus, which is a report summarizing costs by class and major resource category for ELL for Hurricane Ida; as well as Exhibit SMH-3 attached to Ms. Harcus's testimony, which includes the transactions underlying the total Distribution-level costs for Hurricane Ida.

Q104. WHAT ARE THE DISTRIBUTION RESTORATION COST CATEGORIES?

A. As discussed by Ms. Harcus, there are five major ELL cost categories: (1) Contract Work, (2) Employee Expense, (3) Labor, (4) Materials, and (5) Other. In addition, affiliate costs are assigned one of two major cost categories – ESL Billings or Loaned Resources. The

Loaned Resources category includes the total labor costs incurred on behalf of and charged to the Company by personnel from other EOCs. The remaining cost category is Uninvoiced Mutual Assistance, which cost category includes mutual assistance costs incurred but for which invoices had not been received as of March 31, 2022. Mutual Assistance costs for which invoices have been received by March 31, 2022 have been included in the Contract Work category of costs.

a. Contract Work

Q105. WHAT DISTRIBUTION DOLLARS ARE ASSOCIATED WITH THE RESTORATION COST CATEGORY "CONTRACT WORK"?

A. Contract Work costs incurred by ELL at the distribution level through March 31, 2022 were $1,791,458,722.

Q106. DESCRIBE THE COSTS INCLUDED IN THIS COST CATEGORY.

A. This cost category includes the costs of third-party contractors and workers supplied by other utility companies who assisted in the restoration effort at the distribution level. The types of contractors include: mutual-aid utility, line, vegetation, logistics, trucking and equipment, temporary staffing, investment recovery, engineering, and environmental, all of which resources I discussed above, and which are described in more detail in Exhibits JWH-7, JWH-8, JWH-9, JWH-10, and JWH-11.

Q107. WERE THE CONTRACT WORK COSTS REASONABLE AND NECESSARY?

A. Yes. As described in my testimony, those costs were necessary to restore service to ELL's customers and repair the extensive damage to the distribution system caused by Hurricane Ida. Given the massive damage to the system and the urgent need to restore service for the health, safety, and convenience of customers and the regional and national economies, ELL brought in contract personnel from a wide array of mutual-aid utilities and contractors. Through those efforts, an impressive restoration workforce was deployed throughout ELL's service area to address the damage caused by the hurricane. Working together with ELL's employees, these contractors did an outstanding job, working very long hours in extremely difficult circumstances, to restore service to our customers as quickly as reasonably possible. We are grateful for the assistance they provided us and the professionalism with which they performed their services.

As described in my testimony, ELL engaged these contractors as expeditiously as we could to commence rapid restoration efforts. We continuously monitored the level of contract resources we employed, initially to make sure we had adequate resources to cover all parts of the distribution system that were damaged, and then to make sure that we ramped down the number of resources as the restoration progressed and the level of contract resources needed diminished. This continued on a constant basis throughout the restoration process.

Furthermore, we implemented measures to ensure that the costs paid were reasonable. Before bringing in additional resources, ELL made sure our internal resources were fully utilized. We then called upon our utility partners in mutual-aid agreements to provide crews to assist with our restoration. The pricing terms under those contracts were

reasonable in that the providing utility supplied its crews on an at-cost, non-profit basis, as I explained above.

To the maximum extent possible, we utilized contractors with which we had pre-existing relationships (*i.e.*, their crews were already assigned to the ELL system) and pre-existing contracts. By utilizing contractors with pre-existing contracts, we ensured that the prices for the services had been determined on a competitively-procured basis and/or that they had been subject to negotiation with ELL under non-emergency circumstances, such that the unique circumstances presented in the aftermath of Hurricane Ida had not influenced the pricing. Next, we turned to contractors with which we have worked in the past and whose services and costs we deemed to be reasonable. The pricing terms for the services of those contractors were negotiated in advance of their commencing service. Pricing terms were negotiated as favorably as possible under the circumstances. Of course, due to the emergency circumstances, ELL did not have significant leverage to negotiate reduced prices with those contractors, but I can say with confidence that the contractors with whom we dealt treated us fairly, were cooperative in helping us in our moment of great need and did not take advantage of the situation to charge us unreasonable prices. For all of these reasons, the Contract Work costs were not only necessary, but also reasonable.

b. Employee Expense

Q108. WHAT DISTRIBUTION DOLLARS ARE ASSOCIATED WITH THE RESTORATION COST CATEGORY "EMPLOYEE EXPENSE"?

A. Employee Expense costs incurred by ELL at the distribution level through March 31, 2022 were $88,515,044.

Q109. PLEASE DESCRIBE THE COSTS INCLUDED IN THIS CATEGORY.

A. The Employee Expense cost category includes the costs of providing lodging, meals, and other logistical items to the internal restoration work force, with the exception of self-contained crews and the large logistical and catering vendors (the costs of which are included in the cost category Contract Work). This category also includes travel expenses, such as mileage, and other reimbursable expenses incurred by the Company's employees. For Hurricane Ida, these costs reflect challenges due to the general devastation in the ELL service territory, as well as maintaining COVID-19 safety and health protocols.

Q110. WERE THE EMPLOYEE EXPENSES COSTS REASONABLE AND NECESSARY?

A. Yes. The Employee Expense costs were essential to supporting the restoration workforce by providing the basic human needs of food, rest, shelter, and hygiene. It is a reasonable and necessary business practice to provide lodging and meals for workers who are assigned to a job site for storm restoration events. The costs were reasonable because many of the vendors charged rates similar to those for the same services under non-storm circumstances. There were some vendors who were retained because they were the only

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

Q111. HOW WERE THE EMPLOYEE EXPENSE COSTS CAPTURED AND MONITORED?

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

Storm invoices directly charged to ELL were reviewed for the accuracy of both quantity and rates, and their payment was approved by Entergy management. Meals and lodging for smaller work groups, as well as supplies for the workers at their job sites, were secured using storm credit cards. Entergy secured lines of credit with Citibank Corporation for credit cards to be used in the event of storm restoration activities. These credit cards were assigned to Entergy employees who were trained in the appropriate management and accounting of storm credit cards prior to the occurrence of Hurricane Ida. These employees procured meals, lodging, supplies, and miscellaneous items on an as-needed basis. The individual transactions on the credit card statements were reconciled with vendor receipts.

c. Labor

Q112. WHAT DISTRIBUTION DOLLARS ARE ASSOCIATED WITH THE RESTORATION COST CATEGORY "LABOR"?

A. Labor costs incurred by ELL at the distribution level through March 31, 2022 were $20,920,630.