Entergy Louisiana, LLC
Direct Testimony of Michelle P. Bourg
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The Company's response to the storm followed the various steps of the Company's storm plans: to alert and proactively ramp up the organization; to acquire and deploy resources, including coordination with mutual-assistance utilities, vendors, and third-party contractors; to predict and assess post-landfall damage; to prioritize restoration activities; and to continuously communicate with customers and government officials regarding the status of restoration. ELL was able to restore service to nearly all customers who were able to accept service (*i.e.*, customers who did not require reconstruction of their personal property) by September 27, 2021 (29 days after Hurricane Ida made landfall). As Mr. Hawkins explains, work continued after that date to restore power along some water routes and in the hardest hit areas of Port Fourchon and Grand Isle: The Company's restoration efforts were accomplished through the proactive actions of the Company and despite the additional challenges and difficulties caused by:

- The utter devastation and excessive damage to hard-hit coastal communities like
 Port Fourchon and Grand Isle;
- Competition with other affected entities for logistical support;
- The coordination required with governmental agencies; and
- The challenges brought about by the ongoing COVID-19 pandemic.

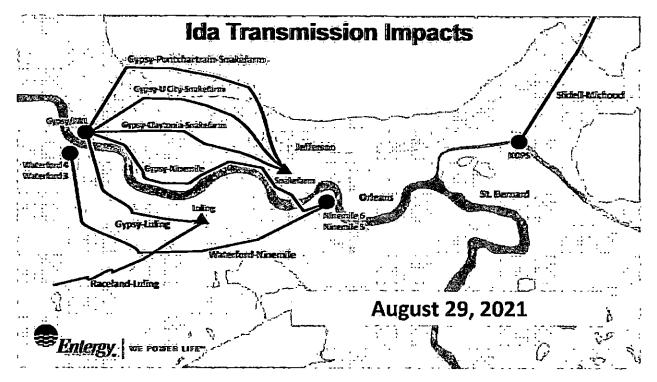
Additionally, as discussed by Company witness Phillip R. May, the Entergy System's communication with the public was continuous and included multiple daily updates to customers; the media; and local, state, and federal agencies. The Entergy System's accomplishments in restoring service as quickly and as safely as possible under the circumstances and challenges of Hurricane Ida were a testament to the Entergy System, its

1		employees, and the thousands of personnel from mutual-assistance utilities and contractors
2		who executed a well-prepared plan with precision.
3		
4	Q38.	HAS ENTERGY RECEIVED RECOGNITION FOR ITS STORM RESPONSE
5		EFFORTS DURING THE 2021 HURRICANE SEASON?
6	A.	Yes. As discussed by Mr. Hawkins, in January 2022, Entergy Corporation was honored
7		with an Emergency Response Award for Hurricane Ida by the Edison Electric Institute.
8		
9 10		V. RESTORATION OF THE TRANSMISSION SYSTEM FOLLOWING THE HURRICANES
11		A. Description of Restoration Efforts
12	Q39.	WHAT WERE THE TIME FRAMES FOR RESTORATION OF SERVICE
13		FOLLOWING HURRICANE IDA?
14	A.	As I noted above, power to nearly all customers who were able to safely accept service
15		(i.e., customers who did not require reconstruction of their personal property) was restored
16		by September 27, 2021 (29 days after Hurricane Ida made landfall).
17		
18	Q40.	WHAT WERE THE COMPANY'S PRIORITIES IN RESTORING THE
19		TRANSMISSION SYSTEM AFTER HURRICANE IDA?
20	A. .	In each hurricane response, the highest restoration priorities remain the safety of the public,
21	•	the safety of the restoration workers, and the restoration of critical services to all of the
22		affected communities in the parishes in which ELL provides service.

1	The re	storation of the transmission system post-landfall is generally prioritized to
2	facilitate:	
3	(1)	Generation availability and stability, which may include facilities necessary
4		for fuel, water, auxiliary power needs, etc., and could include off-site power
5		needs critical to nuclear safety.
6	(2)	Bulk Electric System and local transmission stability by establishing
7		generation to load interconnectivity, capacity, security, and redundancy.
8	(3)	Matters of national security, including national fuel supply, industrial
9		customers with strategic national importance, and military defense support.
10	(4)	State and local government disaster recovery services such as fire, police,
11		military, governmental, and medical transportation/treatment facilities.
12	(5)	National, state, and local command center facilities and emergency services
13		facilities, national disaster response facilities, the Federal Emergency
14		Management Agency, Homeland Security, etc.
15	(6)	Critical community support services such as pumping stations, food/water
16		supply to communities and evacuation centers, etc.
17	(7)	Distribution general area load restoration, including individual life support
18	_	needs in non-evacuation areas, backbone circuits, street lighting, traffic
19		control, etc.
20		

1	Q41.	WHAT IMPACT DID COVID-19 HAVE ON THE COMPANY'S HURRICANE IDA
2		RESTORATION EFFORT?
3	A.	As discussed by Mr. Hawkins, the Company had to ensure the safety of its workforce in
4		the face of COVID-19. The additional measures that had to be taken because of the
5		ongoing COVID-19 pandemic (including crews' traveling separately when possible
6		adjusting crew staging locations, cutting staging centers to half capacity, and increasing
7		the use of drones) also impacted the speed with which the Company was able to safely
8		assess the damage to its facilities and restore service to customers.
9		
10	Q42.	PLEASE DESCRIBE HOW THE COMPANY WAS ABLE TO RESTORE
11		TRANSMISSION SERVICE TO THE GREATER NEW ORLEANS AND
12		SURROUNDING AREAS FOLLOWING HURRICANE IDA.
13	A.	As I described above, Hurricane Ida resulted in the greater New Orleans area's complete
14		isolation from the bulk electric system, with all eight transmission lines into that region
15		rendered inoperable as a result of Hurricane Ida's devastating impact as shown in Figure
16		4. The eight lines went out of service between the hours of 3:00 pm and 6:00 pm on Augus
17		29, 2021. I note that Figure 4 (and Figure 5 that follows) depicts those eight lines, but i
18		does not show all transmission lines and facilities within the greater New Orleans area.

1 Figure 4



Our team of engineers quickly began working on two parallel paths for transmission restoration to the region. The preferred path was to re-establish connection to the grid, but we also were exploring the possibility of "islanding" the area (i.e., supplying load with generation located within an area disconnected from the bulk electric system).⁵ The plan was to have first power into the region by midnight September 1st.

In the early morning hours of September 1, 2021 (less than 48 hours after Hurricane Ida moved through the affected area), we successfully restored first light 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

The New Orleans Power Station ("NOPS"), owned by ENO, has full black start capability and was capable of starting and operating in an island configuration. After careful analysis by our engineering teams, it was determined that the plan with the least amount of risk for restoring service to customers and improving overall stability was to reestablish the transmission interconnection with the broader electric system to the greater New Orleans area.

and Terrebonne Parishes. This was accomplished when service was restored to the Front Street – Michoud 230 kV line at 12:07 a.m. on September 1,2021, interconnecting the region with the Eastern Interconnection⁶ through the Slidell area (as shown in Figure 6) and establishing first light at the Curran substation in New Orleans East, a full 24 hours ahead of our goal. In conjunction with the tie to the Eastern Interconnection, NOPS was brought online shortly after 1:00 a.m. and provided local generation to balance the greater New Orleans area without importing power, as the region and neighboring utility systems (Cleco, Mississippi Power, and various cooperatives within MISO) remained fragile.

By the end of the day on September 1, 2021, several substations and critical customers had been restored in both Orleans and Jefferson Parishes. Load continued to be added through strategic coordination among transmission, substation, and distribution groups.

The power system in the contiguous United States is made up of three main interconnections, which operate largely independently from each other with limited transfers of power between them. The Eastern Interconnection encompasses the area east of the Rocky Mountains and a portion of northern Texas.

Figure 5

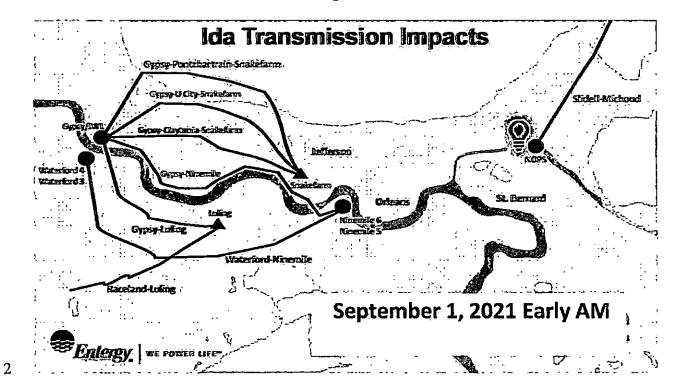


Table 4 summarizes the timeline for return to service of the 8 lines into the greater

New Orleans and surrounding areas.

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Table 4

Date	Transmission Path	Description
8/29/21	Lines 1 through 8 out of service	Hurricane Ida came ashore at 11:55
		a.m.
8/30/21		Damage assessment began at daylight,
		including helicopter patrols
9/1/21	Front Street – Michoud 230 kV	Line 1 returned to service at 12:07 a.m.,
		interconnecting the greater New
	•	Orleans region with the Eastern
· - ·		Interconnection through the Slidell
:		area (resulting in the greater New
		Orleans area being on a radial feed or
		"peninsula" connected to the Slidell
		area)
9/2/21	Little Gypsy – Claytonia 115 kV	Lines 2 and 3 returned to service
		(closing the "peninsula" and resulting
	Little Gypsy – University City	in the greater New Orleans area Eastern
	230 kV	

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		Interconnection being served with redundant operations)
9/3/21	Little Gypsy – Pontchartrain 230 kV	Lines 4, 5, and 6 returned to service (resulting in the region being fully secured from the transmission bulk
	Little Gypsy – Wesco 230 kV	electric system perspective)
	Waterford – Churchill 230 kV	
9/7/21	Little Gypsy – Luling 115 kV	Line 7 returned to service
	Waterford – Luling through the following transmission lines:	Line 8 returned to service
9/10/21	Waterford – Raceland 230 kV	
9/12/21	Paradis – Luling 115 kV	
10/13/21	Raceland – Paradis 115 kV	

Q43. PLEASE ELABORATE ON THE COMPANY'S PROCESS FOR RESTORING
 DAMAGED TRANSMISSION FACILITIES AFTER HURRICANE IDA.

The process of replacing destroyed transmission structures following Hurricane Ida required careful planning and coordination. Once damage to the transmission system was confirmed, transmission design engineering personnel worked closely with field construction leaders and supply chain personnel to develop a design for the restoration, identify suitable replacement materials, and begin mobilization of required replacement materials and equipment to the site. The logistics of moving large transmission structures was a particular challenge, especially since many of the transmission structures requiring replacement were located in areas not accessible by road. In these cases, matting was laid to provide access to the location of the failed structure, or other special equipment was procured. For example, to successfully restore the many transmission lines in the area,

including Front Street – Michoud 230 kV and Churchill – Waterford 230 kV, crews used air boats and other marsh equipment to reach structures located in the marsh. This specialized equipment was used to move personnel to the area of damage and assist in the restoration of the damaged transmission line facilities. In certain situations, a heavy lift helicopter was used to move transmission structures from a laydown yard⁷ to the construction location to expedite the replacement process.

Once required replacement materials and equipment were moved to the location of the destroyed structure, transmission crews then began the replacement process by installing the foundation for the new transmission structure. For most structure foundation designs, steel piles or vibratory caisson piles were installed to establish the foundation for the new structure. Once the foundations were installed, transmission line crews then erected the new structure, including all required hardware. Conductor was either re-used, if possible, or new conductor pulled and tensioned to achieve the desired line sag. Finally, clean up and post-construction restoration was often required considering the heavy equipment utilized in the response and the challenges faced with accessing the site.

As Mr. Hawkins explains, 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.

CUSTOMERS DURING THE HURRICANE IDA RESTORATION PROCESS AND 3 WHY WAS THIS COMMUNICATION IMPORTANT? 4 A. Hurricane Ida's area of impact included a large industrial complex with energy 5 infrastructure that is critical to the welfare and security of Louisiana and the United States. 6 In order to restore service safely, the Company had to understand its industrial customers' 7 ramp and power requirements, as well as prioritize to ensure that the transmission system 8 could meet customer reliability requirements for safety and environmental protection. 9 Stated differently, ELL had to closely coordinate with industrial customers to ensure that load that was picked up was matched or balanced with available generation. 10

Q44. HOW DID THE COMPANY COMMUNICATE WITH LARGE INDUSTRIAL

To accomplish this coordination, the Company's industrial account executives were working one-on-one with petroleum refineries, chemical manufacturers, major pipelines, liquefied natural gas exporters, and other large-load customers that make up the enormous industrial complex that spans the Gulf Coast region. Keeping load and generation in balance as the transmission system was restored and industrial customers began to rampup required constant communication and coordination by electrical experts from both the Company and the Company's customers.

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1 Q45. CAN YOU PROVIDE SPECIFIC EXAMPLES OF LARGE INDUSTRIAL

2 CUSTOMERS THAT WERE IMPACTED BY HURRICANE IDA AND THE EFFORTS

TAKEN BY THE COMPANY TO ENSURE THAT POWER WAS RESTORED TO

4 THOSE CUSTOMERS AS SOON AS POSSIBLE?

A. Yes. Large industrial customers that received the most impact were located on the eastern side of the storm's eyewall such as Shell Norco, Air Liquide Norco, and P66 Alliance Refinery.8

Hurricane Ida also affected many of ELL's large industrial customers whose facilities were not significantly damaged by the storm. Many of the customers along the Mississippi River corridor require nitrogen supplied by pipelines to keep their facilities safe from hydrocarbons during operation. The storm impacted the primary nitrogen supplier in the area (Air Liquide) which delivers both oxygen and nitrogen products to the majority of the chemical plants and refineries from Baton Rouge to New Orleans. The Company sustained damage to distribution facilities serving Air Liquide's facility in Plaquemine, Louisiana, along with minor damage to the transmission facilities feeding Air Liquide's facilities in Geismar, Louisiana. Without nitrogen supply on the pipeline system, refineries like ExxonMobil and Marathon Petroleum, along with chemical facilities such as Shintech and Westlake Chemical, cannot restart operations.

The Company understood this critical supply requirement and focused efforts to reestablish service to Air Liquide as soon as reasonably possible following Hurricane Ida's landfall. Through this process, the Company's industrial account executives understood

It is my understanding that P66 Alliance Refinery received such significant damage that it has been permanently shut down as a refining facility and will be converted to a fuel terminal.

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that the refiners could not restart until all feedstocks (such as crude, ethanol, sulfuric acid, and other chemicals used in the production of gasoline) were restored. Much of the crude used by ExxonMobil, Shell, Marathon Petroleum, and Valero is stored at various terminals located in St. James Parish, which is where the Department of Energy strategic oil reserves are routed through. This location, which was directly in the path of the eye of the storm, received significant damage to the transmission and distribution systems that supply power to these facilities. Just across the river in Gramercy, Louisiana, is a large terminal (Mt. Airy) that houses much of the ethanol used for blending in gasoline production. The Company focused a significant amount of resources to make the necessary repairs in this area, and power was restored within 10 days of the storm's landfall.

In parallel, the Company was mindful of crude supply from the Gulf of Mexico that is delivered through pipeline systems requiring power to compressor stations located in south Louisiana (in locations such as Houma, Port Fourchon, and Buras). The Company worked to identify locations that were significantly damaged from the storm where mobile generation became a better option to provide power until permanent service could be restored. Companies that received mobile generation from ELL included the Louisiana Offshore Oil Port, Shell Pipeline's Bengal Garyville Production Station, Harvest Pipeline, and Williams Energy Larose Station.

1 B. Restoration Resources

- 2 Q46. PLEASE SUMMARIZE THE TOTAL TRANSMISSION-RELATED PERSONNEL
- 3 RESOURCES EMPLOYED TO RESTORE ELL'S SYSTEM FOLLOWING
- 4 HURRICANE IDA.

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- 5 A. A total of 2,458 transmission-related restoration workers (including Entergy employees)
- 6 were utilized in the restoration effort as summarized in Table 5 below:

7 Table 5

Line Maintenance and Construction Entergy Employees ⁹	186
Line Maintenance and Construction Mutual Assistance	336
Line Maintenance and Construction Third-Party Contractors	1,338
Line Maintenance and Construction Total	1,860

Substation Entergy Employees	182
Substation Third-Party Contractors	195
Substation Total	377

Vegetation Entergy Employees ¹⁰	15
Vegetation Mutual Assistance	23
Vegetation Third-Party Contractors (Transmission Only)	183
Vegetation Total	221

Many of the off-system resources were acquired through our memberships and contacts with national and regional mutual-assistance groups. Through these associations, Entergy received the benefit of its mutual-assistance utility agreements, which provided for labor and materials at the assisting utility's cost with no mark-up, which is the same arrangement when Entergy assists other utilities in restoration.

All transmission line work was performed by contractors under the supervision of Entergy employees. Safety support resources are included in this category.

All vegetation work was performed by contractors under the supervision of Entergy employees.

2 HOW DOES THE COMPANY DETERMINE THE APPROPRIATE NUMBER OF Q47. 3 **TRANSMISSION** RESOURCES **NECESSARY** TO RESTORE SERVICE 4 FOLLOWING A STORM EVENT? 5 A. Ahead of a forecasted major weather impact, the Company acquires appropriate resources 6 to support restoration based on anticipated impacts to the grid. Following the weather 7 impact, Transmission performs a damage assessment of all transmission lines and 8 substations within the impact area to identify damages to the system. Damages to 9 transmission structures, lines, and substations are evaluated to determine the needed 10 materials, equipment, and skills to perform the necessary restoration in conformity with 11 the prioritization goals established as part of the overall restoration planning effort that is 12 focused on establishing a stable generation, transmission, and distribution network. Once 13 these requirements are identified, this work is matched to resources on hand and any

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Q48.

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1. Entergy Affiliate Resources

system, and/or mutual aid resources.

additional equipment and workers that are needed are sourced from existing baseload, off

TO WHAT EXTENT DID ELL RELY ON THE RESOURCES OF ESL AND OTHER

ENTERGY OPERATING COMPANIES TO ADDRESS THE STORM'S IMPACTS?

A. The support from many ESL employees was critical to our restoration efforts in Louisiana following Hurricane Ida. Our System Command Center was primarily staffed with ESL employees. Our System Command Center in Jackson, Mississippi, provided oversight of the storm event, such as coordinating the EOCs, Transmission, Generation, and many other

departments engaged in restoration efforts. The day-to-day management of personnel and resources committed to Louisiana restoration efforts, however, was conducted and coordinated by ELL management.

Other EOCs also supported the transmission restoration efforts by supplying "loaned resources," including field restoration workers, logistics personnel, safety specialists, and Supply Chain personnel. The knowledge that these personnel had of Entergy's standards, operating procedures, and safety rules was important in safely and efficiently restoring power. The EOCs also supplied other resources such as materials and equipment.

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2. **Mutual-Aid Resources**

TO WHAT EXTENT DID ENTERGY RELY ON OTHER ELECTRIC UTILITIES TO 13 PROVIDE ASSISTANCE IN RECONSTRUCTING THE TRANSMISSION SYSTEM 14 AFTER HURRICANE IDA IMPACTED ENTERGY'S SERVICE AREA? 15 A. Entergy often relies on other utilities for assistance in major events. ELL relied upon 16 mutual-assistance utilities such as Duke Energy Carolinas, LLC, CenterPoint Energy, and 17 Oklahoma Gas & Electric Company to support transmission restoration efforts by 18 supplying transmission line crews and other support personnel. The amounts charged by mutual assistance utilities (from whom invoices were received by March 31, 2022) can be 19 20 found on Exhibit MPB-3. Collectively, 336 mutual-assistance transmission linemen were

provided to support restoration following Hurricane Ida.

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1 Q50. WHAT SPECIFIC MUTUAL-AID AGREEMENTS DID THE TRANSMISSION 2 **GROUP RELY UPON?** 3 A. The Transmission group relied upon two mutual-aid agreements at the time of Hurricane 4 Ida: Southeastern Electric Exchange ("SEE") Procedures and Guidelines and Edison 5 Electric Institute ("EEI") Governing Principles Covering Emergency Assistance. EEI is 6 an industry trade association that represents all U.S. investor-owned utilities. EEI members 7 are grouped into seven Regional Mutual Assistance Groups. The Company is a member 8 of three of those Regional Mutual Assistance Groups, the SEE, the Midwest Regional 9 Mutual Assistance Group, and the Texas Regional Mutual Assistance Group. 10 Company uses the SEE agreement for mutual assistance with SEE member companies and 11 the EEI agreement with all other EEI investor-owned utility companies. Both agreements 12 are designed so that the supporting companies are reimbursed for their expenses with no 13 mark-up added. 14 15 WHAT ARE THE BENEFITS OF UTILIZING MUTUAL-AID UTILITIES IN O51. 16 **HURRICANE RESTORATION ACTIVITIES?** 17 A. By using mutual-aid support during times of emergency restoration, utilities can muster 18 work forces many times larger than they could if they relied on contract labor alone.

Workers from other utilities come with all the training, tools, and equipment needed to

immediately begin restoration work. Entergy is an industry leader in supplying restoration

support and has thereby established relationships through which it can readily obtain

support in times of need. Furthermore, mutual-aid support is provided at the mutual-aid

1		company's costs (including labor, equipment, and other resources), so there is no mark-up,
2		and the price is comparable to what the EOCs pay their own resources.
3		
4		3. Third-Party Personnel Resources
5	Q52.	TO WHAT EXTENT DOES THE COMPANY RELY ON THIRD-PARTY
6		CONTRACTORS TO ADDRESS TRANSMISSION-RELATED MAINTENANCE AND
7		STORM DAMAGE?
8	A.	ELL employs internal crews for substation maintenance and construction activities and
9		relies on third-party contractors year-round for transmission line maintenance and
10		vegetation management activities. For storm restoration, Entergy first draws on its internal
11		maintenance and capital construction crews before requesting mutual assistance from other
12		utilities or additional third-party contract crews.
13		
14	Q53.	PLEASE DESCRIBE THE PROCESS THROUGH WHICH THE COMPANY
15		ENGAGED CONTRACTORS TO ASSIST WITH HURRICANE RESTORATION
16		WORK FOLLOWING HURRICANE IDA.
17	A.	As soon as storm preparations were initiated ahead of Hurricane Ida's landfall, EOC base-
18		load11 contractors were notified that they might be deployed into storm-affected areas.
^{7,} 19		Next, transmission employees who were assigned the storm duty of acquiring off-system
. 20		resources began calling contractors from a database of contractors that have previous
21		experience with the EOCs. Contractors were polled for what resources and equipment they

In this context, "base-load" refers to contractors with existing agreements with the Company or the EOCs that work on the Company's system during both'storm and non-storm conditions.

had available. When that list was exhausted, the resource acquisition team began to contact contractors not in the current database. When the decision was made to commit to resources, the resource acquisition team notified the contractors and began to collect their employee roster information. This information was entered into the Crew Manager system, which aided in the tracking of contractor costs and logistical needs. At the appropriate time, the contractors were mobilized to report to a staging location. From there, the contractors were given safety and logistical orientation and their first reporting assignments.

- Q54. WHO WERE THE MAJOR CONTRACTORS UTILIZED BY THE COMPANY FOR
 TRANSMISSION-RELATED RESTORATION ACTIVITIES, AND WHAT COSTS
 WERE CHARGED BY EACH?

 A. The major contractors utilized for transmission-related restoration activities for Hurricane
 - Ida (those contractors from whom we received invoices in excess of \$100,000) and the costs charged by each are detailed in the attached Exhibit MPB-3. Additionally, attached as Exhibit MPB-4 is a summary description of the services provided by each of the more significant contractors (*i.e.*, those contractors from whom we received invoices in excess of \$1,000,000).

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PLEASE DESCRIBE THE PROCESS BY WHICH ENTERGY AND ELL RECEIVED, 1 Q55. 2 REVIEWED, AND APPROVED THE INVOICES SUBMITTED BY THIRD-PARTY CONTRACTORS ASSISTING IN THE TRANSMISSION-RELATED RESTORATION 3 4 PROCESS. 5 A. Entergy has a structured process in place to review the work performed by third-party 6 contractors and ensure the legitimacy and accuracy of submitted invoices. Ms. Harcus 7 addresses contractor invoice processing in more detail in her testimony. As Ms. Harcus 8 explains, because of the emergency nature and magnitude of the system restoration efforts 9 and the number of employees and outside parties involved, additional review processes 10 were implemented to supplement existing procedures to ensure the proper accounting of 11 the hurricane storm costs. 12 13 4. **Materials Resources** 14 HOW DOES ENTERGY NEGOTIATE AND ACQUIRE TRANSMISSION 15 MATERIALS RESOURCES FOR A MAJOR STORM RECONSTRUCTION? 16 A. Entergy retains several key vendors to supply materials on an ongoing basis. These 17 vendors are selected based upon price bidding and extensive performance evaluations. 18 Based on the results, Entergy contractually binds selected suppliers typically for a minimum of three years. Material supply partners are expected to maintain predetermined 19 emergency stock for contingent situations such as storm restoration. Demand for goods 20: 21 and services associated with major events such as Hurricane Ida can exhaust available

associated with production acceleration.

inventories. For these events, Entergy agrees to pay reasonable and expected costs

Additional vendors are also sought to manage supply/demand gaps. Entergy's material and contracts representatives negotiate pricing, terms, and conditions for these additional vendors to assure comparability to that of our partnered suppliers. While some price deviation from large contract pricing is expected from these additional vendors, these additional costs are necessary and justified to obtain necessary materials for expedited reconstruction. Vendors seeking to charge unreasonable or opportunistic prices for their products are not utilized. Further, Entergy endeavors to utilize contractors with preexisting rates before turning to additional vendors.

Α.

Q57. DOES ENTERGY MAINTAIN INVENTORIES THAT ARE SUFFICIENT TO ADDRESS THE DEGREE OF DAMAGE RESULTING FROM A STORM OF THE MAGNITUDE OF HURRICANE IDA?

Generally, no. While Entergy's material inventories are typically sufficient to address normal construction needs or damage resulting from smaller storm events, it would not be feasible or cost-effective for Entergy to maintain inventories sufficient to immediately address the widespread damage caused by major hurricanes.

Entergy leverages its long-term partnered contracts to shift inventory requirements to its key vendors. These arrangements reduce the amount of inventory required in Entergy stores, thereby reducing the inventory cost burden to customers. This strategy also reduces the amount of stores space required in Entergy facilities. Strategic storm reserves are part of negotiated contracts with these key vendors. The impact of Hurricane Ida on the EOCs depleted the strategic reserves and required additional materials, which were supplied by established suppliers.

1 5. Logistics WHAT IS MEANT BY THE TERMS "LOGISTICS" AND "LOGISTICAL SUPPORT"? 2 Q58. 3 A. The terms "logistics" and "logistical support" refer to the resources required to support the restoration personnel who are necessary to restore the system. Logistical support includes 4 5 lodging, food, beverages, laundry, portable toilets, showers, dumpsters, transportation, 6 staging area lighting, generators, HVAC systems, fuel, materials, vehicles, parking, 7 security, and other related functions. Logistical support also includes the planning, 8 preparing, managing, and delivery of such services in a manner that maintains safety and 9 provides for an efficient restoration. 10 HOW IS LOGISTICAL SUPPORT COORDINATED AMONG THE ENTERGY 11 Q59. 12 **OPERATING COMPANIES?** 13 A. At the Entergy System level, logistical support must be coordinated and supplied for all 14 functions of each of the affected EOCs in their respective service territories. When a storm 15 the size of Hurricane Ida, or past storms such as Hurricanes Laura and Delta, impact 16 multiple EOCs within short time spans, the logistical support required to restore service as 17 quickly and safely as possible is a massive and complicated undertaking. Entergy 18 endeavors to use commercial lodging when available, but that option is often limited either 19 due to damage to commercial lodging, power and water availability, or room availability (based on occupancy by residents or other restoration workers).

HURRICANE IDA.

1 Q60. CAN YOU DISCUSS THE IMPORTANCE OF LOGISTICS RELATIVE TO THE

2 RESOURCES PROCURED FOR RESTORATION?

3 Yes. While the men and women who traveled, some hundreds of miles, to Louisiana to A. 4 assist in the restoration are mission critical, it is equally critical that they have appropriate 5 logistical support. Without a place to sleep, food to eat, hydration, fuel, materials, supplies, 6 etc., a large restoration work force is rendered ineffective, and customers would face a 7 significantly longer restoration. Also, without reasonable logistical support, out of state 8 resources will be less eager to respond next time that Louisiana needs assistance. Needless 9 to say, ramping up logistics to support a Hurricane Ida restoration force of approximately 10 27,000 men and women in Louisiana, while complying with COVID-19 prevention 11 protocols, was a significant and costly undertaking.

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- 13 Q61. PLEASE PROVIDE A SUMMARY OF THE VOLUME OF LOGISTICAL
- RESOURCES UTILIZED IN THE ELL RESTORATION PROCESS FOLLOWING
- 16 A. The ELL logistical effort necessary to restore service following Hurricane Ida was a
- significant undertaking. Exhibit JWH-6 to Mr. Hawkins's testimony provides a listing of
- the logistics sites utilized by ELL during the restoration efforts following Hurricane Ida,
- including turn-key, 12 laydown, parking, catering, and other types of logistics sites, that
- were utilized at both the transmission- and distribution-level. The Company utilized 2,458

As Mr. Hawkins explains in his testimony, 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.

1		transmission restoration workers, all of whom needed basic necessities to work as safely
2		and quickly as possible.
3		
4	Q62.	WHAT STEPS DID ENTERGY TAKE DURING AND AFTER HURRICANE IDA TO
5		ENSURE THAT THE APPROPRIATE LEVEL OF RESOURCES WOULD BE
6		AVAILABLE FOR STORM RESTORATION?
7	A.	After landfall, damage assessments and feedback from the field resources provided
8		additional information that resulted in adjustments to the level of logistics resources sought
9		and the placement of those resources. Continuous communication between the System
10		Resource Section, transmission personnel, and the Louisiana Logistics Section ensured that
11		adequate logistics resources were available to complete restoration based on a planned
12		timeline.
13		
14	Q63.	PLEASE SUMMARIZE THE PERFORMANCE OF THE COMPANY, ITS
15		EMPLOYEES, AND ITS CONTRACTORS IN RESTORING SERVICE AFTER
16		HURRICANE IDA.
17	A.	The Company's employees, contractors, and workers from mutual-assistance companies
18		all performed at an outstanding level in restoring power after Hurricane Ida. The Entergy
19		System is an industry leader in storm response and support, and we continue to look for
20		ways to improve. Everyone worked long hours, many in very uncomfortable conditions,
21		to get power restored as quickly and safely as possible. We will not always break our own
22		speed records, but we will always strive to restore power as quickly as we can while
23		protecting the safety of our workers and the public.

1 VI. STORM COSTS 2 **Hurricane Ida Storm Costs** A. WHAT ARE THE TOTAL TRANSMISSION-RELATED COSTS 3 O64. THE 4 COMPANY'S RESTORATION EFFORTS FOLLOWING HURRICANE IDA? 5 A. The total ELL Transmission costs incurred in connection with Hurricane Ida total \$232.9 6 million. These costs include the transmission-related storm costs incurred through March 7 31, 2022. These numbers do not include adjustments for carrying costs. Please see Exhibit 8 MPB-2; Exhibit SMH-1 attached to the Direct Testimony of Ms. Harcus, which 9 summarizes costs by class and major resource category for ELL for Hurricane Ida; as well 10 as Highly Sensitive Protected Materials Exhibit SMH-3 attached to Ms. Harcus's Direct 11 Testimony, which includes the transactions underlying the total Transmission-level costs 12 for Hurricane Ida. 13 14 O65. WHAT ARE THE TRANSMISSION RESTORATION COST CATEGORIES? 15 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 16 17 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 18 to the Company by personnel from other EOCs. The remaining cost category is 19 · Uninvoiced Mutual Assistance, which cost category includes mutual assistance costs 20 21 incurred but for which invoices had not been received as of March 31, 2022.

1		1. Contract Work
2	Q66.	WHAT TRANSMISSION DOLLARS ARE ASSOCIATED WITH THE COST
3		CATEGORY "CONTRACT WORK"?
4	A.	Contract Work costs incurred by ELL through March 31, 2022 were \$207,826,363.
5		
6	Q67.	PLEASE DESCRIBE THE COSTS INCLUDED IN THIS COST CATEGORY.
7	A.	Contract Work captures the costs related to the third-party contractor personnel (including
8		both line and vegetation workers) and mutual-aid crewmembers who took part in the
9		restoration of ELL's transmission system following Hurricane Ida. These workers were
10		primarily transmission line workers, substation workers, and vegetation workers. This
11		category also includes the costs of vendors that provided specialized equipment and
12		vehicles and vendors that provided logistical services (which I described earlier in my
13		testimony).
14		
15	Q68.	WHAT SERVICES WERE PERFORMED BY LINE MAINTENANCE AND
16		CONSTRUCTION CONTRACTORS?
17	A.	Line maintenance and construction contractors were engaged to rebuild or repair damage
18		to transmission lines caused by Hurricane Ida. Work included repairing broken wire and
19		transmission line hardware; clearing highways, railroad ROWs, and waterways of downed
20		conductor; removing damaged transmission line structures, conductor, steel towers, and
21		foundations; installing new foundations; installing new pole structures; erecting new steel
22		towers along and across roads, marshes, and rivers; pulling in miles of new conductor and
23		shield wire; and cleaning up roads and ROWs of debris left from the storm and restoration

efforts. This work was necessary to restore a viable transmission delivery network for bulk power delivery across the ELL service area. A total of 336 mutual-assistance and 1,338 contracted line maintenance and construction workers were engaged in the transmission restoration effort following Hurricane Ida in the ELL service territory.

A.

Q69. WHAT SERVICES WERE PERFORMED BY SUBSTATION MAINTENANCE AND CONSTRUCTION CONTRACTORS?

Substation maintenance and construction contractors were engaged to reconstruct, replace, repair, or otherwise make operationally-ready substation assets such as steel supporting structures, fences, battery sets, protective relays, circuit breakers, regulators, transformers, lightning arrestors, switches, bus insulators, control wiring, conductors, supervisory control and data acquisition ("SCADA") remote terminal units, radio/fiber optic communications, and site control houses.

This work was necessary to re-energize substations to restore load to ELL customers as transmission lines were restored to service. Contract resources were utilized in this area to augment Entergy manpower resources to avoid delays as line restoration work proceeded expeditiously. A total of 195 contracted substation maintenance and construction workers were engaged in the transmission restoration effort following Hurricane Ida in the ELL service territory.

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1 Q70. WHAT SERVICES WERE PERFORMED BY VEGETATION CUTTING AND 2 REMOVAL CONTRACTORS?

Vegetation cutting and removal contractors were engaged to clear trees, limbs, and vegetation debris from roadways, transmission facilities, and ROWs. Services included the provision of manpower and equipment for cutting, lifting, chipping, hauling, and disposal of vegetation material. I note that the crews used for vegetation removal from transmission lines are usually not the same as, nor are they interchangeable with, the crews used to remove vegetation from distribution circuits. Transmission lines, being usually on open ROWs, require track-mounted machinery with a taller reach than the equipment used to remove vegetation from distribution lines, which can be tire-mounted and have a shorter reach. Transmission and distribution vegetation crews often have been trained with different skill sets as well.

These services were necessary to restore access to ELL's transmission facilities and to clear fallen trees and limbs from transmission conductors and structures. A total of 23 mutual assistance and 183 contracted transmission vegetation workers were used to clear trees off transmission lines and provide vegetation-related support in the ELL service territory following Hurricane Ida.

19 Q71. WERE THE CONTRACT WORK COSTS REASONABLE AND NECESSARY?

Yes. The costs incurred were reasonable based on a number of factors: (1) ELL estimated the number of necessary resource personnel based on its modeling and experience with other storms; (2) ELL continually monitored the number of resource personnel and began

releasing personnel as soon as possible; (3) a large number of the personnel were from

mutual-assistance utilities that provided at-cost personnel with no profit for storm-related work; (4) many of the other third-party contractors performed pursuant to contracts that were in existence prior to the storm, which means that they were entered into during non-emergency conditions and typically based on a competitive bidding process; (5) when ELL executed new contracts, it attempted to engage contractors with whom it had prior experience upon terms consistent with the prior services; and (6) ELL had a system in place to verify that invoices complied with contracted rates and that the work billed was actually performed.

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2. Employee Expense

- 11 Q72. WHAT TRANSMISSION DOLLARS ARE ASSOCIATED WITH THE
- 12 RESTORATION COST CATEGORY "EMPLOYEE EXPENSE"?
- 13 A. Employee Expense costs incurred by ELL through March 31, 2022 were \$130,293.

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- 15 Q73. PLEASE DESCRIBE THE COSTS INCLUDED IN THIS COST CATEGORY.
- 16 A. This cost category primarily includes expenses for the logistical effort of providing lodging
 17 and meals to Entergy employees and some contractors that are not captured under the
 18 logistical supply contractor costs in the Contract Work category. These costs also include
 19 travel expenses (mileage, airfare, small vehicle rentals, etc.) and other employee expenses
 20 (such as per diem rates when provided in lieu of lodging and meals, and other incidental

personal supply needs).

22

1	Q74.	WERE THE EMPLOYEE EXPENSE COSTS REASONABLE?
2	A.	Yes. The nature of transmission system damage and the duration of restoration efforts
3		required that work crews be located in proximity to the work they were performing.
4		Extended work schedules were developed to provide a safe but expedient restoration effort.
5		Sustaining an effort such as this required that crews be provided bedding, food, sanitation,
6		and other essential facilities and services. Based on my experience in storm restorations,
7		these costs were reasonable in view of the size and nature of the event along with the
8		scarcity of available, local resources.
9		
10		3. Labor
11	Q75.	WHAT TRANSMISSION DOLLARS ARE ASSOCIATED WITH THE
12		RESTORATION COST CATEGORY "LABOR"?
13	A.	Labor costs incurred by ELL through March 31, 2022 were \$1,777,775.
14		
15	Q76.	PLEASE DESCRIBE THE COSTS INCLUDED IN THIS COST CATEGORY.
16	A.	This cost category includes expenses for all direct payroll associated with ELL employees
17		involved in the restoration effort. The services provided by ELL employees in this category
18		were incremental to their normal job functions. These employees' services were necessary
19	. •	because they had first-hand knowledge of ELL's systems and operating procedures and
20		were uniquely suited to assist with the restoration.

1	Q77.	DOES THE COST CATEGORY "LABOR" INCLUDE OVERTIME?
2	A.	Yes. ELL employee overtime is included in the Labor cost category. Overtime was
3		incurred due to the need to expedite restoration and the need for ELL employees familiar
4		with the System to work as much as possible in order to restore power quickly.
5		Additionally, there are overtime charges included in the charges for third-party vendors in
6		the Contract Work category.
7		
8	Q78.	WERE THE LABOR COSTS REASONABLE AND NECESSARY?
9	A.	Yes. The Labor costs were reasonable and necessary because they were provided at the
10		employees' normal wage, so we were thereby assured that there was no premium added
11		for storm work. Moreover, these employees were typically familiar with ELL operating
12		procedures and its service area.
13		
14		4. Materials
15	Q79.	WHAT TRANSMISSION DOLLARS ARE ASSOCIATED WITH THE COST
16		CATEGORY "MATERIALS"?
17	A.	Materials costs incurred by ELL through March 31, 2022 were \$12,335,736.
18		
·19	Q80.	PLEASE DESCRIBE THE COSTS INCLUDED IN THIS COST CATEGORY.
20	A.	As discussed previously in my testimony, this cost category includes expenses for the
21		actual materials used in the transmission restoration effort, including structures, poles,
22		wires, conductors, insulators, hardware, and related materials. The majority of the
23		transmission-related materials were acquired from Entergy's inventory while other

1 materials were purchased from Entergy's key suppliers, who, I would note, provided 2 outstanding support during the restoration. Those materials were essential in the 3 restoration of the transmission system in order to restore a stable generation and 4 transmission network in the ELL service area. 5 6 HOW DID ELL DETERMINE THE AMOUNT OF MATERIALS THAT WOULD BE 7 NEEDED TO COMPLETE THE HURRICANE IDA RESTORATION? 8 A. Damage assessment analyses from the System Command Center Operations Section were 9 provided to Entergy Supply Chain representatives in the early stages of system restoration 10 in order to prepare estimates for material ordering requirements. As detailed damage 11 assessment information became available, and as restoration crews completed "wreck-out" 12 of destroyed facilities, material requirements were re-evaluated to avoid shortages and 13 over-runs. As part of the daily planning and prioritization conference meetings, material 14 issues were reported by the Transmission Line and Substation Managers in ELL, and 15 adjustments were made to material requisitions and/or staging locations to meet demands. 16 17 WERE THE TRANSMISSION-CLASS MATERIALS COSTS REASONABLE AND O82. 18 **NECESSARY?** 19 Yes, these costs were necessary to restore a stable transmission network in the ELL service area. The costs were reasonable because a large portion of the material ELL used to rebuild 20 : 21 the transmission system came from Entergy's own inventory, which means that these 22 materials were purchased from key suppliers during non-emergency conditions and there 23 was no premium for expedited manufacture or delivery. ELL also leveraged contracts with key partner vendors to acquire additional materials, and these purchases were made in accordance with pricing agreements that were not affected by the storm. In those instances where ELL had to acquire materials from any vendor with which it did not have a pre-existing contract, prices for materials were compared to prices of similar materials that ELL typically secures under contract and further weighed against ELL's experience and the exigent circumstances.

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5. Other

- 9 Q83. WHAT TRANSMISSION DOLLARS ARE ASSOCIATED WITH THE 10 RESTORATION COST CATEGORY "OTHER"?
- 11 A. Costs included in the "Other" category incurred by ELL through March 31, 2022, were \$6,281,989.

- 14 Q84. PLEASE DESCRIBE THE COSTS INCLUDED IN THIS CATEGORY.
- 15 A. This cost category includes expenses from several sub-categories but mostly consists of 16 indirect capital expense labor costs for all Entergy transmission employees supporting 17 capital work but not charging time directly to system restoration project codes. Labor 18 charged to capital expense includes services for transmission and substation design: 19 material procurement services; technical support for relay settings and SCADA .20 configuration development; operations planning and switching services; general field and 21 contractor supervision; and project management services. Other sub-categories within 22 "Other" include restoration of public land/property damage resulting from right-of-way

1 ingress/egress, IT/Telecom expenses, transportation expenses, and miscellaneous small 2 equipment rentals. 3 4 Q85. WERE THESE "OTHER" COSTS REASONABLE AND NECESSARY? 5 A. Yes. The costs included in the "Other" category were necessary to enable ELL to perform 6 the work required to restore its transmission system. The rates and prices for these cost 7 items are reasonable and are generally consistent with pre-established rates. In addition, 8 the costs for specialized equipment were reasonable because the equipment was obtained 9 at rates that were negotiated based on pre-storm operating conditions. 10 11 6. **Affiliate Costs** 12 WHAT WERE THE TRANSMISSION DOLLARS ASSOCIATED WITH "ESL Q86. 13 BILLINGS" AND WHAT DO THOSE COSTS INCLUDE? 14 A. ESL Billings incurred by ELL through March 31, 2022 were \$2,109,589. These costs 15 include expenses for ESL employee salaries (including overtime) employee expenses, 16 material, and transportation associated with ESL services provided and charged directly to, 17 or in a few limited cases allocated to, the ELL system restoration codes. These services 18 include engineering design and support, logistics support, operational planning, project 19 management, right-of-way, technical support, systems operations support, damage 20 assessment, contractor supervision, and others. . . . 21

1	Q87.	WHAT WERE THE TRANSMISSION DOLLARS ASSOCIATED WITH "LOANED
2		RESOURCES" AND WHAT DO THOSE COSTS INCLUDE?
3	A.	Loaned Resources costs incurred by ELL through March 31, 2022 were \$1,445,362. These
4		costs include expenses for the salaries of other EOC employees, including overtime, who
5		worked on or supported the ELL restoration effort. Such costs were charged to the ELL
6		storm project. For example, such expenses include salaries for loaned transmission line
7		construction crew personnel from other EOCs.
8		
9	Q88.	WHAT PROCESSES WERE IN PLACE TO ENSURE THAT THESE COSTS WERE
10		ACCURATE?
11	A.	All supervisory-level Entergy personnel are periodically reminded of the importance of
12		accurate payroll time entry with regard to storm restoration and support activity. All
13		timesheet entries (including labor charged to capital suspense) in the storm project must be
14		verified for accuracy and approved by a minimum of one level of supervision/management
15		before being uploaded into the Entergy payroll system.
16		
17	Q89.	WERE THESE "AFFILIATE" COSTS REASONABLE AND NECESSARY?
18	A.	Yes. These costs were both necessary and reasonable to the Hurricane Ida restoration.
19	ı	These costs were predominantly associated with employees from our regulated affiliate
20		companies who provided direct restoration support such as post-storm patrols and damage
21		assessment, line construction, operation and staffing of staging sites, and support and
22		staffing of logistics management.

These services were both necessary and reasonable for several reasons. With regard to managing the restoration efforts following Hurricane Ida, the employees of the other EOCs are familiar with our administrative systems and company procedures, whereas outside contractors or utilities generally are not. The construction resources were necessary to affect a timely restoration just like the non-affiliated construction resources provided by ELL, contractors, other utilities, and other third parties. These costs were reasonable because ELL paid the direct labor costs and expenses of using these resources. The labor was provided at cost. Non-affiliated companies would either operate less effectively in these roles or have increased costs built into their pricing to account for the training, preparation, and guaranteed availability already in existence for each affiliate's own operational needs.

7. Uninvoiced Mutual Assistance Costs

- 14 Q90. WHAT IS THE TOTAL AMOUNT OF UNINVOICED MUTUAL ASSISTANCE
 15 COSTS INCURRED FOR THE HURRICANE IDA RESTORATION?
- 16 A. The total amount of restoration costs incurred by ELL for transmission mutual assistance 17 that had not yet been invoiced as of March 31, 2022, was \$1,025,640.¹³

Uninvoiced mutual assistance costs amounts are itemized separately in my Exhibit MPB-2 as well as in Exhibit SMH-1 to Ms. Harcus's testimony.

Q91. WERE ALL OF THE MUTUAL ASSISTANCE COSTS REASONABLE AND

2 NECESSARY?

A. Yes. As I explained above, when the Company requires aid from its mutual assistance partners, 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. Moreover, mutual-aid utilities were essential for the restoration following Hurricane Ida due to the damage to ELL's transmission system.

IS ELL ALSO REQUESTING THE RECOVERY OF ANY ESTIMATED COSTS

NECESSARY TO COMPLETE THE RESTORATION PROCESS FOLLOWING

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8. Estimated Costs

14 HURRICANE IDA? 15 Yes. All of the estimated costs that ELL is requesting are either distribution- or generation-A. 16 level costs and are discussed in more detail by Mr. Hawkins and Company witness Jason 17 E. Willis, respectively. As noted by Mr. Hawkins, ELL is requesting \$22,323,088 in 18 estimated costs associated with repairs to the Caminada 34.5 kV substation in Grand Isle, Louisiana, which project was not completed as of March 31, 2022. The estimated costs 19 20 associated with that project will close to a Distribution FERC account; therefore, they are 21 included as Distribution costs. Because the Transmission organization is managing and 22 overseeing the Caminada 34.5 kV substation project, however, a summary of the associated 23 estimated costs are summarized in Exhibit MPB-5 to my testimony.

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2 Q93. CAN YOU PLEASE DESCRIBE THE CAMINADA 34.5 KV SUBSTATION PROJECT

IN MORE DETAIL?

A. Yes. The substation will be rebuilt in the same location at an elevation of 20 feet above grade on a pre-fabricated concrete platform. The major equipment at the new substation will include two 20 MVA 34.5/13.8 kV power transformers, two 34.5 kV circuit breakers, two 13.8 kV circuit breakers, and a new control house. At this time, the Company anticipates that the new substation will be placed in service by March of 2023.

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VII. CONCLUSION

- Q94. WERE THE TRANSMISSION-RELATED COSTS INCURRED BY THE COMPANY
 TO ADDRESS HURRICANE IDA REASONABLE AND NECESSARY?
- 13 A. Yes. The transmission-related storm costs related to Hurricane Ida were all reasonable and
 14 necessary. The Company's focus was to restore service to its customers as fast and as
 15 safely as possible. The labor and materials utilized by the Company were necessary to
 16 restore service to customers and rebuild ELL's damaged transmission facilities following
 17 Hurricane Ida. Without the significant labor and material resources utilized, the Company
 18 would not have been able to rebuild the transmission system and therefore would not have
 19 been able to restore service to customers in the timely manner that it did.

The Company followed its established, well-rehearsed restoration plan, and the labor and materials costs were largely incurred pursuant to previously-negotiated contracts and cost-based mutual-assistance agreements. We implemented a thorough process to engage vendors, assign and monitor the labor and materials they provided, and review their

1 invoices to ensure that they were accurate. Despite the circumstances surrounding back-2 to-back years of major hurricanes impacting the Company's service area, together with the 3 logistical challenges associated with COVID-19, I am not aware of any instance of price 4 gouging, and I believe the vast majority of service providers cooperated with the Company 5 and endeavored to be of assistance to the Company in addressing the emergency situation 6 rather than taking advantage of it. 7 8 O95. IN THE LIGHT OF THE FACTS KNOWN TO THE COMPANY AT THE TIME, WAS 9 IT NECESSARY AND REASONABLE FOR THE COMPANY TO ACQUIRE AND 10 UTILIZE THE TRANSMISSION-RELATED RESOURCES THAT IT DID TO 11 COMPLETE RESTORATION OF SERVICE AND RECONSTRUCTION OF ITS 12 TRANSMISSION FACILITIES FOLLOWING HURRICANE IDA? 13 A. Yes. 14 15 DOES THIS CONCLUDE YOUR DIRECT TESTIMONY? Q96. 16 A. Yes, at this time.

AFFIDAVIT

STATE OF LOUISIANA

PARISH OF ORLEANS

NOW BEFORE ME, the undersigned authority, personally came and appeared,

Michelle P. Bourg, who after being duly sworn by me, did depose and say:

That the above and foregoing is her sworn testimony in this proceeding and that she knows the contents thereof, that the same are true as stated, except as to matters and things, if any, stated on information and belief, and that as to those matters and things, she verily believes them to be true.

Muhelle P. Bourg

SWORN TO AND SUBSCRIBED BEFORE ME

THIS <u>| 3</u> DAY OF APRIL, 2022

NOTARY PUBLIC

My commission expires: at death

Listing of Previous Testimony Filed by Michelle P. Bourg

<u>DATE</u>	<u>TYPE</u>	SUBJECT MATTER	REGULATORY BODY	DOCKET NO.
09/25/2013	Direct	ETI 2013 Rate Case	PUCT	41791
10/18/2016	Direct	ENO GAS AMI	CCNO	UD-16-04
11/22/2016	Direct	ELL GAS AMI	LPSC	U-34320
05/02/2017	Direct	ELL Gas Storm Restoration	LPSC	U-34445
09/15/2017	Rebuttal	ENO Gas Infrastructure	CCNO	UD-07-02
		Rebuild		
-09/21/2018	Direct	ENO 2018 Rate Case	CCNO	UD-18-07
03/22/2019	Rebuttal	ENO 2018 Rate Case	CCNO	UD-18-07
04/30/2021	Direct	ELL Storm Recovery Filing	LPSC	U-35991
05/21/2021	Direct	ENO Storm Application	CCNO	UD-21-02
07/23/2021	Supplemental Direct	ELL Storm Recovery Filing	LPSC	U-35991

Summary of Transmission Storm Costs for Hurricane Ida

Description	Transmission
Direct	
Contract Work	\$ 207,826,363
Employee Expenses	130,293
Labor	1,777,775
Materials	12,335,736
Other	6,281,989
ESL Billings	2,109,589
Loaned Resources	 1,445,362
	231,907,106
Uninvoiced Mutual Assistance	1,025,640
Total Costs incurred as of 3/31/2022	232,932,746
Estimated Costs ¹	-
Total Storm Costs	\$ 232,932,746
Capital	174,113,887
O&M / Other	 58,818,859
Total Costs	\$ 232,932,746

Notes:

1: Estimated costs related to repairs to the Caminada 34.5 kV substation in Grand Isle, Louisiana, will close to a Distribtion FERC account and are therefore included on Exhibit JWH-1 (Summary of Distribution Storm Costs for Hurricane Ida). Because the Transmission organization is managing and overseeing the Caminada project, a detailed description of the estimated costs is included in Exhibit MPB-5.

Transmission Mutual-Assistance and Third-Party Contractor Vendors List (over \$100,000)

IRBY CONSTRUCTION COMPANY	60,641,240
POWER LINE SERVICES INC	41,394,031
UTILITY LINES CONSTRUCTION SERVICE INC	19,068,588
MID-CON ENERGY SERVICES INC	12,170,336
LINETEC SERVICES LLC	12,042,820
ROWC LLC DBA DIAMOND D INDUSTRIES	11,553,376
DASHIELL CORPORATION	10,569,361
MACRO COMPANIES INC	6,177,051
SOUTHERN ELECTRIC CORP	2,540,084
MASTEC NORTH AMERICA INC	2,124,913
PAR ELECTRICAL CONTRACTORS INC	1,851,370
SOUTHERN POWER SYSTEMS	1,806,983
UTILITY CONSTRUCTION SERVICES LLC	1,671,680
SHREDHEDZ LLC	1,646,604
CAPITAL ELECTRIC LINE BUILDERS INC	1,509,149
B&B ELECTRICAL & UTILITY CONTRACTORS	1,477,248
SPX TRANSFORMER SOLUTIONS INC	1,446,385
EMPIRE MAT INC	1,416,293
WILLIAMSON CONSTRUCTION AND EQUIPMENT	1,398,800
ASPLUNDH TREE EXPERT CO	1,381,784
APC CONSTRUCTION LLC	1,192,746
POWER ENGINEERS INC	991,997
CHEM SPRAY SOUTH INC	920,506
GREAT SOUTHWESTERN CONSTRUCTION INC	868,461
DUKE ENERGY CAROLINAS LLC	828,241
T BAKER SMITH LLC	761,913
GUNNISON FINANCE LLC DBA WOODSON	643,012
PIKE ELECTRIC LLC	611,644
NORTH AMERICAN SUBSTATION SERVICES LLC	494,927
WOODSON TREE LLC	468,647
NORTH HOUSTON POLE LINE LP	444,244
CAPITOL ULTRASONICS LLC	440,050
AMPIRICAL SOLUTIONS LLC	389,168
MOREAU REFRIGERATION & HEATING INC	341,368
WEED CONTROL SERVICES LLC	309,255
OKLAHOMA GAS & ELECTRIC CO	298,231
SERVICE ELECTRIC COMPANY	272,262
SHERMCO INDUSTRIES INC	251,545
ERA GROUP INC DBA ERA HELICOPTERS LLC	247,369
HOWARD DEDICATED OPERATIONS INC	235,171
HEADWATERS INC	198,876

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WOODSON INC	197,308
PROFORCE LLC	194,609
CAIN INC	185,669
SABER POWER SERVICES LLC	178,297
DONALD ANSARDI DBA DONALDS BOAT SERVICE	161,591
NOLAN POWER GROUP LLC	158,141
PFES DBA PLANET FORWARD ENERGY	141,587
JMS CONTRACTORS, LLC	134,200
CHANCELLOR INC	127,738
PCS 2000 LLC	105,201
H BROWN INC	104,679

Transmission Vendor Services (over \$1 million)

Vendor Name	Cost	Service Provided
IRBY CONSTRUCTION COMPANY	60,641,240	Line
POWER LINE SERVICES INC	41,394,031	Line
UTILITY LINES CONSTRUCTION SERVICE INC	19,068,588	Line
MID-CON ENERGY SERVICES INC	12, 170,336	Line
LINETEC SERVICES LLC	12,042,820	Line
ROWC LLC DBA DIAMOND D INDUSTRIES	11,553,376	Vegetation, Matting
DASHIELL CORPORATION	10,569,361	Substation
MACRO COMPANIES INC	6,177,051	Vehicle Fuel
SOUTHERN ELECTRIC CORP	2,540,084	Line
MASTEC NORTH AMERICA INC	2,124,913	Line
PAR ELECTRICAL CONTRACTORS INC	1,851,370	Line
SOUTHERN POWER SYSTEMS	1,806,983	Substation
UTILITY CONSTRUCTION SERVICES LLC	1,671,680	Line
SHREDHEDZ LLC	1,646,604	Vegetation
CAPITAL ELECTRIC LINE BUILDERS INC	1,509,149	Line
B&B ELECTRICAL & UTILITY CONTRACTORS	1,477,248	Line
SPX TRANSFORMER SOLUTIONS INC	1,446,385	Substation
EMPIRE MAT INC	1,416,293	Matting
WILLIAMSON CONSTRUCTION AND EQUIPMENT	1,398,800	Vegetation, Matting
ASPLUNDH TREE EXPERT CO	1,381,784	Vegetation
APC CONSTRUCTION LLC	1,192,746	Substation

Caminada Substation Estimated Costs by Vendor

Vendor Name	Cost	Service Provided	
DASHIELL CORPORATION	16,523,088	Substation EPC	
IRBY CONSTRUCTION COMPANY	1,400,000	Distribution Construction	
MULTIPLE VENDORS INCLUDING ELL	600,000	Distribution Materials	
PFES DBA PLANT FORWARD ENERGY	1,500,000	Construction Oversight	
PRIVATE LANDOWER	600,000	Land Purchase for Laydown & Maintenance	
ENTERGY LOUISIANA LLC	500,000	Internal Payroll	
LAND MANAGEMENT SERVICES LLS	400,000	ROW	
TRC COMPANIES INC DBA	300,000	Engineering Oversight	
SPX TRANSFORMER SOLUTIONS INC	500,000	Transformer Refurbishment	
Total Estimated Costs	22,323,088	•	
	DASHIELL CORPORATION IRBY CONSTRUCTION COMPANY MULTIPLE VENDORS INCLUDING ELL PFES DBA PLANT FORWARD ENERGY PRIVATE LANDOWER ENTERGY LOUISIANA LLC LAND MANAGEMENT SERVICES LLS TRC COMPANIES INC DBA SPX TRANSFORMER SOLUTIONS INC	DASHIELL CORPORATION 16,523,088 IRBY CONSTRUCTION COMPANY 1,400,000 MULTIPLE VENDORS INCLUDING ELL 600,000 PFES DBA PLANT FORWARD ENERGY 1,500,000 PRIVATE LANDOWER 600,000 ENTERGY LOUISIANA LLC 500,000 LAND MANAGEMENT SERVICES LLS 400,000 TRC COMPANIES INC DBA 300,000 SPX TRANSFORMER SOLUTIONS INC 500,000	DASHIELL CORPORATION IRBY CONSTRUCTION COMPANY MULTIPLE VENDORS INCLUDING ELL PFES DBA PLANT FORWARD ENERGY PRIVATE LANDOWER ENTERGY LOUISIANA LLC LAND MANAGEMENT SERVICES LLS TRC COMPANIES INC DBA SUbstation EPC 1,400,000 Distribution Construction 600,000 Construction Oversight 600,000 Land Purchase for Laydown & Maintenance Internal Payroll 400,000 ROW TRC COMPANIES INC DBA 300,000 Engineering Oversight Transformer Refurbishment

Exhibit MPB-6 LPSC Docket No. U-Page 1 of 1

More Recently Installed Transmission Facilities Performed Well During Hurricane Ida

