Q. DESCRIBE HOW CENTERPOINT HOUSTON COMMUNICATED RESTORATION PROGRESS DURING THE EVENT.

A. Throughout the storm, CenterPoint Houston remained committed to keeping customers informed by leveraging multiple communication channels. Despite initial challenges due to broadband capacity limitations in the Houston area, which briefly delayed Power Alerts, the Company took proactive steps to provide timely updates. While the outage tracker and estimated restoration times for individual customer meter locations were unavailable, CenterPoint Houston worked diligently to ensure customers received clear and transparent information about the restoration process.

To enhance communication, CenterPoint Houston utilized all available platforms to share regular updates on restoration progress, explain the restoration process, and address customer concerns. Crews and field resources provided direct updates, helping to keep the public informed.

Q. WAS CENTERPOINT HOUSTON'S RESTORATION FROM HURRICANE BERYL DAMAGE REASONABLE?

A. Yes. CenterPoint Houston's restoration efforts following Hurricane Beryl were highly effective, demonstrating a swift and well-coordinated response. Within just 36 hours of the storm leaving the area, the Company successfully restored power to 1.1 million customers—an achievement that outpaced the restoration timelines of peer utilities facing similar events. This rapid progress was the result of the Company's grid performing as designed, and its strategic resource mobilization,

efficient deployment of crews, and proactive coordination with mutual assistance partners.

VII. MAJOR EVENT RESTORATION LOGISTICS

Q. WAS CENTERPOINT HOUSTON ABLE TO PUT IN PLACE THE NECESSARY LOGISTICAL SUPPORT TO ENABLE MUTUAL ASSISTANCE RESOURCES TO WORK EFFECTIVELY DURING THE RESTORATION?

A. Yes. CenterPoint Houston utilized a combination of internal resources and external partners to arrange hotel accommodations for crews and set up "man camps." Some of these man camps were located directly at staging sites, while crews at other locations were transported by bus from hotels to the staging areas. Staging sites serve as central hubs, providing necessary materials, trucks, fuel, and food for crews. Four staging sites were activated on Sunday, July 7, and by the end of Wednesday, July 10, a total of 21 staging sites were operational.

Q. WHICH IS MORE COST EFFECTIVE, HOTELS OR MAN CAMPS?

A. For utility restoration projects, hotels, if available, have proven to be more cost-effective than man camps when considering total project expenses. When hotels are available, they reduce setup and maintenance requirements, reduce logistical complexity, and provide immediate availability, which helps lower both direct and indirect costs. Additionally, enabling mutual assistance crews to get a good night's sleep supports the core focus of restoring service as safely, quickly and efficiently as possible. Hotels contribute to that goal by streamlining operations and supporting worker readiness.

Q. WHY DIDN'T ALL CREW MEMBERS STAY IN HOTELS, GIVEN THEIR COST-EFFECTIVENESS?

A. Not all crew members were housed in hotels, as nearby accommodations quickly reached capacity. Securing additional rooms farther away would have required extra transportation resources and logistical coordination, driving up costs and reducing operational efficiency. In these cases, man camps became the more cost-effective solution, offering proximity to work sites and compatibility with existing support infrastructure.

VIII. HURRICANE BERYL COSTS

Q. WHAT WERE THE COSTS INCURRED BY CENTERPOINT HOUSTON FOR HURRICANE BERYL RESTORATION?

A. CenterPoint Houston has incurred approximately $1,107 million for the restoration associated with Hurricane Beryl. As shown in Table DH-4 below, and further discussed in the direct testimony of Mr. Wright, these costs are broken down by major cost category.

Table DH-4

Costs Incurred by Cost Category

Cost Category	Distribution (million)	Transmission (million)	Total (million)
Payroll	$69.27	$5.81	$75.07
Contract Services	$807.20	$4.72	$811.92
Hotels	$18.69	-	$18.69
Security	$5.12	$0.003	$5.12
Logistics	$144.65	$0.01	$144.66
Materials & Supplies	$30.56	$0.65	$31.21
Fleet, Fuel, & Transportation	$18.97	$0.40	$19.37

Cost Category	Distribution (million)	Transmission (million)	Total (million)
Facilities	$0.41	-	$0.41
Employee Expenses	$0.67	$0.00003	$0.67
Totals Incurred	**$1,095.54**	**$11.59**	**$1,107.13**

Q. ARE THESE COSTS REASONABLE FOR THE RESTORATION OF AN EVENT OF THIS NATURE?

A. Yes. I believe the overall costs for Hurricane Beryl restoration are reasonable. I developed this opinion by first analyzing the detailed cost components within each major category. To ensure accuracy, I then cross-checked my findings with a broader comparison of the total restoration cost for Hurricane Beryl.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE PAYROLL COSTS?

A. In a major restoration event like the restoration following Hurricane Beryl, where large quantities of external resources from outside the greater Houston area are required to accomplish the restoration in a reasonable timeframe, internal line resources are both the least cost resources and the most valuable resources. They are generally least cost because, while hourly pay rates are reasonably similar across the industry, internal line resources do not require significant logistical support for their work during the restoration event nor do their hourly rates include any profit margin or contribution to overhead, as routinely found in mutual assistance contractor rates. They are the most valuable because they can do so many tasks, given their CenterPoint Houston system knowledge, lock out tag out certification, immediate availability, and local knowledge, among other attributes.

Similarly, other CenterPoint Houston internal resources bring extensive training, local knowledge, and immediate availability to the restoration effort, at an hourly cost that does not include any margin or contribution to overhead, and salaried employees are paid without any overtime premiums.

To validate these expectations, I compared the hourly cost for a CenterPoint Houston first class line worker as billed to the restoration effort to the rates charged for similar resources from a native CenterPoint Houston contractor, a representative utility that provided mutual assistance resources, and a representative mutual assistance contractor. I did this for both straight time and double time, noting that double time is often the most common hourly rate charged across the various resource providers and their associated contract terms.[9] The comparisons are presented in Table DH-5 below.

Table DH-5

Mutual Assistance/Resource Comparison – Line worker

Role	First Class Line Worker Straight Time	First Class Line Worker Double Time
CenterPoint Houston Line Worker[10]	$71.88	$121.78
Native Contractor 1 Line Worker[11]	$118.80	$216.00
Utility Mutual Assistance 1 Line Worker [12]	$211.94	$240.48

[9] For CenterPoint Houston, line workers are entitled to double time, after the first day, for all hours worked for the duration of the restoration event because the 16-hour on, 8-hour off work schedule does not provide for 10 hours of rest between shifts.

[10] Represents a simple average across the cost center categories associated with the "Lineman" role.

[11] Sample native contractor entity represented.

[12] Example utility mutual assistance rate is from a utility entity, and they use the same rate for all role types. Rates are based upon PA analysis of the utility entity's invoice.

Role	First Class Line Worker Straight Time	First Class Line Worker Double Time
Contractor Mutual Assistance 1 Line Worker[13]	$253.80	$338.40

I also compared the typical CenterPoint Houston hourly cost for operations supervisors as billed to the restoration effort with the rate CenterPoint Houston paid for general foremen from its native contractors, mutual assistance utilities and mutual assistance contractors (see Table DH-6 below).

Table DH-6

Mutual Assistance/Resource Comparison – General Foreman

Role	Straight Time	Double Time
CenterPoint Houston Operations Supervisor[14]	$102.09	$102.09
Native Contractor 1 GF[15]	$134.40	$225.60
Utility Mutual Assistance 1 GF[16]	$211.94	$240.48
Contractor Mutual Assistance 1 GF[17]	$264.40	$352.80

Both of the above comparisons confirm that CenterPoint Houston's internal resources are its least cost restoration resources.

[13] Straight time is reflected as OT in the invoice provided by this supplier.

[14] Represents a simple average of rates associated with the "Operations Supervisor" role. This role is not eligible for OT / DT, but rather is paid at ST for all hours worked past 40 per week during major storm restorations.

[15] Sample native contractor entity represented.

[16] The utility mutual assistance entity uses the same rate for all labor classifications and for all role types. Rates are based upon PA analysis of the utility entity's invoice.

[17] Straight time is reflected as OT in the invoice provided by this supplier.

Q. ARE THERE EXAMPLES OF PAYROLL COSTS THAT COULD BE INAPPROPRIATE?

A. Yes. While internal resources are extremely valuable during a major restoration, all resources need to be managed cost effectively and all labor needs to be used productively. For example, work shifts during the restoration that resulted in significant rest time payments could be an example of resources not being managed cost effectively. In terms of labor productivity, it could be possible to assign too many internal resources to supporting roles during the restoration. To check on the reasonableness of CenterPoint Houston's restoration payroll costs, I reviewed two factors. These were:

- work schedules and any implications for paid rest time incurred over the restoration event; and
- use of non-CenterPoint Houston employees to support the restoration.

My review confirmed that most CenterPoint Houston resources shifted to standard 16-hour emergency shifts starting on July 8, 2024, with 8-hour rest periods between shifts. This is a contractually agreed reduction in the required rest time between shifts from the 10 hours required under non-emergency conditions. While there may have been minor amounts of paid rest time for certain individuals as crews shifted from the weekend and call out schedules of Sunday, July 7, to the emergency restoration schedule beginning Monday, July 8, CenterPoint Houston planned and managed the schedule change efficiently and effectively. And, this work schedule was maintained for internal resources for the balance of the emergency restoration period.

To check the reasonableness of CenterPoint Houston's deployment of non-CenterPoint Houston resources for the restoration event, I reviewed the total number of employees from CERC (from both its Texas and Minnesota divisions), CenterPoint Energy Intrastate Pipeline, the Service Company, Indiana Gas Company, Southern Indiana Gas & Electric Company, and Vectren Utility Holdings, who charged time to the restoration efforts and the total hours they charged. Many of these employees support major restoration events by serving in roles at the Command Center or at one of the staging areas. Example roles that these employees served in include Patrol Analyst Strike Team, Distribution Patrol Inspector Strike Team, and Staging Site Manager.

Table DH-7

Breakdown of CenterPoint Employee Resources[18]

CenterPoint Entities Supporting Beryl Restoration	Total Hours Charged to Restoration Activities	Employees Supporting Restoration Activities	Avg Hours Charged per Employee
CenterPoint Energy Entex	41,865	331	126
CenterPoint Energy Intrastate Pipeline	101	1	101
CenterPoint Energy Minnesota Gas Company	1,592	14	114
CenterPoint Service Company	111,839	1,031	108
Indiana Gas Company	281	1	281
Southern Indiana Gas & Electric Company	6,753	55	123
Vectren Utility Holdings	911	13	70

[18] Rounded to the nearest whole number.

In fact, one of the major restoration event improvement opportunities CenterPoint Houston is evaluating is how it could leverage even greater use of its local affiliate employees to accelerate restoration efforts in the future.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE PAYROLL COSTS?

A. I conclude that CenterPoint Houston's payroll costs for the Hurricane Beryl restoration are reasonable. CenterPoint Houston resources are the lowest cost and most effective line resources available for the restoration event. CenterPoint Houston made full use of these resources, consistent with its EOP and its labor agreement.

Beyond CenterPoint Houston labor, CenterPoint Houston leveraged roughly 1,446 employees from its affiliates to support the restoration. These resources are both cost effective and efficient, as they are mostly local and able to be immediately deployed, often without any incremental logistical support cost.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE CONTRACT SERVICES COSTS?

A. First, I broke the Contract Services cost category into several sub-categories for Hurricane Beryl.

Then, I reviewed each sub-category based on the comparability of hourly rates, the application of good procurement business practices, the application of good time management practices, and the mobilization and de-mobilization costs relative to the available time in Houston. Table DH-8 below presents the costs by sub-category for Hurricane Beryl.

Table DH-8

Contract Services Costs by Sub-Category

Contract Services Sub-Category	Distribution	Transmission	Total
Mutual Assistance/Contractors	$800,552,954	$4,531,797	$805,084,752
Other Contractor Services	$4,065,906	$188,465	$4,254,371
External Line Locators	$971,602	-	$971,602
Claims	$1,593,130	-	$1,593,130
Miscellaneous	$12,356	-	$12,356
Grand Total	**$807,195,948**	**$4,720,262**	**$811,916,211**

Q. ARE THERE DIFFERENCES IN THE COST OF SIMILAR RESOURCES?

A. Yes. As shown above in the labor cost comparisons, native contract resources (including resources brought onto the CenterPoint Houston system for the restoration from elsewhere) and utility mutual assistance line resources are lower cost than the mutual assistance contractor resources. The native contractor resources are typically available under labor and equipment rates established through a standard competitive procurement process, while the utility mutual assistance labor and equipment rates are set consistent with an agreed cost recovery approach.

In contrast, mutual assistance contractor labor and equipment rates are based on rate sheets provided by the contractors at the time of activation. As the comparisons above showed, these are typically the highest cost resources, but for major events they are a necessity for prompt service restoration.

Q. DID CENTERPOINT HOUSTON MAKE FULL USE OF THE AVAILABLE LOWER COST RESOURCES?

A. Yes. CenterPoint Houston optimized the lower cost resources that were offered, putting them to work beginning on Monday, July 8 in many cases. And, specific to the restoration work required on the transmission system, this was accomplished with the use of Company resources and native contract resources exclusively, thereby using the most cost effective resources available for that work.

Q. DID YOU ANALYZE VEHICLE AND EQUIPMENT CHARGES WITHIN THE CONTRACT SERVICES COSTS?

A. Yes. Table DH-9 below compares vehicle charges across a range of restoration resources.

Table DH-9

Mutual Assistance/Resource Comparison – Vehicle Charge

	Equipment				
	4x4 Pickup Truck	55ft Bucket Truck	Material Trailer	Digger Derrick	Digger/ Digging Unit
Contractor Mutual Assistance 1 (Line)	$35.00	$72.00	$25.00	$80.00	$210.00
Utility Mutual Assistance 1[19]	$57.81	$57.81	$57.81	$57.81	$57.81
Native Contractor 1	$176.00	$112.00	$224.00	$112.00	$112.00

[19] Hourly rates estimated by PA analysis.

Q. DID CENTERPOINT HOUSTON MAKE APPROPRIATE USE OF THE MUTUAL ASSISTANCE RESOURCES?

A. Yes. CenterPoint Houston made appropriate and effective use of mutual assistance resources to support a restoration effort of this scale. In total, 15,660 crew members were deployed by July 19. The company acted swiftly, issuing calls for mutual assistance on Saturday, July 6, and began onboarding crews as early as Monday, July 8. Resources continued arriving throughout the week, with the final crews joining the effort on Saturday, July 13. Nearly all of these personnel remained active through the completion of restoration on Friday, July 19. This timely and strategic mobilization ensured the necessary support was in place to restore power as quickly and safely as possible.

Q. HOW DID CENTERPOINT HOUSTON DECIDE WHICH MUTUAL ASSISTANCE RESOURCES TO RELEASE FIRST?

A. Due to the extent of storm damage from Hurricane Beryl and the scope of restoration efforts, all mutual assistance crews remained engaged throughout the duration of the restoration period. The release of resources was based on the natural progression of the work and the decreasing need for external support as restoration neared completion. The majority of vegetation management personnel were released on Thursday, July 18, followed closely by the distribution line resources, who were released on Friday, July 19 and Saturday, July 20.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE CONTRACT SERVICES COSTS?

A. I concluded the contract services costs were reasonable given the severity of Hurricane Beryl and the extent of the damage to the CenterPoint Houston system. CenterPoint Houston used all of the lower cost, native contractor resources, and utility mutual assistance resources it could get. CenterPoint Houston then filled the rest of its immediate resource requirement with mutual assistance contract resources and contracted with them on typical industry terms, substantially similar to the terms previously agreed for the Derecho.

In a large-scale restoration event like this, a significant number of external resources from outside the greater Houston area are required to restore power in a timely manner for the majority of the restoration work. External contractors bring specialized expertise and are able to mobilize quickly, making them a more efficient choice for handling large restoration efforts.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE COMPANY'S HOTEL COSTS?

A. I reviewed the room nights procured for the mutual assistance crew personnel and other personnel for Hurricane Beryl and found that CenterPoint Houston procured 82,729 room nights. These room nights cost $18.69 million, or $225.90 per night.

These hotel rooms were procured with the support of Helms Briscoe, a firm that specializes in contracting for hotel rooms. The Helms Briscoe Catastrophe Team contract has been in place since 2009 and only supports incident response per

their guidelines. The Catastrophe Team is a separate group of the larger Helms Briscoe Meeting & Events Services.

It is also important to understand that there is generally some mismatch between the rooms/beds available at a given hotel and the size of the team from a specific utility or contractor. Again, focusing on restoration as fast as practical, it is important to enable the mutual assistance resources to get a good night's sleep and to minimize administration and transportation time associated with the hotel room assignment. Thus, it is much more productive to slightly over procure rooms, than to discover at 10:00 pm that a few people do not have an assigned bed.

Assuming an 11-night stay for most of the over 15,000 mutual assistance resources, this room night volume is also reasonable. CenterPoint Houston used double occupancy for crew personnel where rooms with two double beds were available and generally provides single rooms for management personnel. This is a standard industry practice.

I also considered the cost of a man camp, which is the alternative to hotels that is sometimes used for mutual assistance resources when suitable hotel rooms are not readily available. That cost would decline somewhat with a longer stay length, but as an example, the experience during Hurricane Beryl resulted in a 6 or 7-day 1,008 bed man camp costing approximately $335 per bed per night, as shown in Table DH-10 below.

Table DH-10

Logistics Analysis – Man Camps

Hurricane Beryl	Pasadena	Tomball
Cost	$2,336,457.75	$2,035,592.14
# Beds	1,008	1,008
Vendor	Lodging Solutions	Lodging Solutions
# Days	7	6
Cost per night	$331.13	$336.57

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE HOTEL COSTS?

A. CenterPoint Houston, with the support of Helms Briscoe, successfully secured appropriate lodging for the approximately 15,000 mutual assistance personnel brought in to support restoration efforts following Hurricane Beryl. This played a key role in enabling a smooth and effective restoration. In addition, the accommodations were secured at a lower per-room-night cost than the alternative of using man camps, demonstrating both practicality and cost-efficiency in the lodging strategy.

On this basis, I conclude that the hotel costs for Hurricane Beryl are reasonable.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE LOGISTICS COSTS?

A. CenterPoint Houston performed a competitive request for proposals ("RFP") for logistics services with multiple turnkey vendors to ensure competitive pricing. This RFP was conducted in April 2022 for a five-year term. I reviewed the vendor proposals and CenterPoint Houston's procurement scorecard to validate the

competitive bid and evaluation process. The primary turnkey vendors CenterPoint Houston used for Hurricane Beryl were selected and put under contract through this competitive process.

The RFP had demonstrated that local vendors could both mobilize quickly and do so at a lower cost, thus providing efficient and effective support for the restoration efforts. While the table below shows that CenterPoint Houston primarily used five vendors for logistics services, one of those, who has local Houston operations, totaled over 51% of the total logistics costs for the restoration (see Table DH-11 below).

Table DH-11

Staging Site & Logistics Costs by Vendor

Vendor # Service	Amount
Logistics Vendor 1	$70,843,206
Logistics Vendor 2	$43,327,453
Logistics Vendor 3	$5,630,541
Logistics Vendor 4	$5,550,703
Logistics Vendor 5	$4,377,300
All Other Logistics Vendors	$9,319,819

I focused my cost reasonableness review on the services provided by that vendor and note that based on the RFP responses, alternative out of town suppliers for these same services would most likely have been more expensive.

Q. DID CENTERPOINT HOUSTON NEGOTIATE DISCOUNTS FROM THE TURNKEY VENDORS AFTER THE EVENT?

A. Yes. While CenterPoint Houston had indicative pricing from the 2022 RFP process, the actual cost negotiation for staging site services occurs after the fact for an event of this nature.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE LOGISTICS COSTS?

A. Logistics vendor selection, including indicative pricing for key services, was established through a competitive RFP process conducted in 2022. The turnkey providers utilized during Hurricane Beryl were selected through that process and were able to leverage their local presence to respond quickly and effectively to CenterPoint Houston's needs during this significant weather event. These same providers had also supported CenterPoint Houston during the May storms, and their familiarity with the Company's systems, procedures, and restoration priorities enabled a faster, more coordinated deployment.

The service level delivered by these vendors effectively supported a smooth and efficient restoration effort. CenterPoint Houston's decision to negotiate discounts on portions of the originally contracted services further demonstrates thoughtful cost management. Based on the competitive selection process, strong vendor performance, and prudent financial oversight, I find the logistics costs to be reasonable.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE MATERIAL & SUPPLIES COSTS?

A. CenterPoint Houston manages its routine material and supply procurement through a sophisticated, competitive purchasing and logistics system designed to optimize cost efficiency, availability, and handling. To the extent that materials and supplies used for Hurricane Beryl restoration were sourced through this established process, I find those costs to be reasonable.

The materials used for distribution system restoration primarily came from pre-assembled "storm kits," which are stocked with frequently used distribution components. These kits were strategically transported to mutual assistance staging areas as those sites were activated.

In addition, the quantities of major material items used during the storm remained well within normal inventory levels. Aside from sourcing additional poles from CenterPoint Houston's pole supplier, there were no significant material shortages, which helped avoid the need for expedited procurement and kept costs under control.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE MATERIALS & SUPPLIES COSTS?

A. Review of the $31.21 million in Materials & Supplies expenses indicates that the vast majority were acquired through CenterPoint Houston's established competitive procurement process. Restoration efforts did not encounter material shortages, and there were no notable instances of non-competitive or high-cost

emergency purchases. Given these conditions, the Materials & Supplies expenditures appear to be justified and appropriate.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE FLEET, FUEL, AND TRANSPORTATION COSTS?

A. To analyze the reasonableness of the fleet, fuel, and transportation category, I first worked to understand what costs are included in this category. Through discussions with CenterPoint Houston Finance staff and a review of some of the specific charges to this category, I have determined that this category consists primarily of fuel charges. As shown in Table DH-12 below, fuel charges that are associated with the mobile fueling of mutual assistance vehicles at the CenterPoint Houston staging areas are the primary cost in this category.

Table DH-12

Fleet and Fuel Charges[20]

G/L Account	Amount
M&S Exp-Purch Vehicle Fuel	$15,248,446
M&S Exp - Non-Inventory	$397,107
Contr & Svcs Exp-Other Services	$105,204
Fleet Fuel Non-Labor	$95,797
Other Expenses	$16,799

To analyze the reasonableness of the fuel costs, I reviewed sample invoices to determine that the price charged for #2 USLD on-highway fuel ranged between $2.47 and $2.62 a gallon delivered to the staging sites. This cost includes the labor for on-site fueling of each mutual assistance truck, as well as applicable fuel taxes.

[20] Rounded to the nearest dollar.

The pricing compares favorably to the $3.60 Gulf Coast region average retail price for the week of July 8, 2024, as reported by the Energy Information Administration ("EIA").[21]

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE FLEET, FUEL, AND TRANSPORTATION COSTS?

A. Based on the price comparison results for the fueling costs, I conclude that the costs in the Fleet, Fuel, and Transportation costs are reasonable.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE SECURITY COSTS?

A. Industry experience across many restoration events in many geographic areas has demonstrated that site security for temporary crew work headquarters, such as CenterPoint Houston's staging areas, and temporary material storage locations is needed. CenterPoint Houston's Texas electric EOP calls for security at these types of sites and CenterPoint Houston's security team executed that plan.

CenterPoint Houston utilized 24/7 site security for the duration of the event. These services were procured through its existing contracts with DSI Security Services and Investigation & Polygraph Services. These established contracts were the result of a competitive RFP process and pricing for the types of services used at the temporary staging areas was pre-established in the contracts.

[21] EIA data series "Gulf Coast (PADD 3) Gasoline and Diesel Retail Prices." Weekly Gulf Coast No 2 Diesel Ultra Low Sulfur (0-15 ppm) Retail Prices for July 8, 2024.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE SECURITY COSTS?

A. Based on CenterPoint Houston's actions consistent with the standard industry practice of providing around the clock physical security at temporary staging sites during major restoration events and CenterPoint Houston's procurement of these security services through a pre-established, competitively sourced security contract, I believe the security costs for the Beryl restoration event are reasonable.

Q. DID YOU COMPARE THE TOTAL COST OF THE RESTORATION TO OTHER SIMILAR EVENTS?

A. Yes. Table DH-13 below compares CenterPoint Houston's estimated total and per customer restoration costs for previous hurricanes.

Table DH-13

Major Event Comparison – Estimated Per Customer Restoration Cost

Major Event	Customer Outages	CenterPoint Restoration Costs	Estimated Restoration Cost Per Customer
Hurricane Beryl	2.2M	$1.107B	$503.25
Hurricane Ike	2.1M	$608M	$289.52
Hurricane Nicholas	460,000	$450M	$978.26

Given the severity of Hurricane Beryl and the need to rapidly respond, restoration costs spanning one to two weeks can easily surpass several hundred million dollars.

Recent industry experience with major storm restorations show that the restoration cost per day can range to upwards of $125 million per day and restoration costs per customer can run as high as $875 per customer interrupted. For reference, the May 2024 Derecho restoration cost $47 million per day and $407

per customer interrupted, while Beryl cost $100 million per day and $500 per customer interrupted.

Q. ARE THERE COSTS INCLUDED IN THIS FILING THAT YOU DID NOT REVIEW FOR REASONABLENESS?

A. Yes. I did not review the costs associated with facilities, employee expenses, or temporary generation procured through mutual assistance.

IX. HURRICANE BERYL CONCLUSIONS

Q. HOW LONG DID IT TAKE TO RESTORE POWER TO ALL OF THE OVER 2.2 MILLION CENTERPOINT HOUSTON CUSTOMERS WHO LOST POWER FOLLOWING HURRICANE BERYL?

A. The full restoration of power to the over 2.2 million CenterPoint Houston customers affected by Hurricane Beryl took a total of 11 days.

Q. WERE THESE RESTORATION TIMES IN AGGREGATE REASONABLE?

A. Yes.

Q. WHAT DID YOU CONCLUDE ABOUT THE COSTS OF THESE RESTORATION EFFORTS?

A. I conclude that the restoration costs for Hurricane Beryl are, in total, reasonable. I have analyzed the major cost categories associated with the event and determined that the costs for each category are justified. While there are a few minor cost categories I have not reviewed in detail, they are insignificant in the overall assessment.

Additionally, I have compared CenterPoint Houston's total restoration costs for Hurricane Beryl to reported costs for similar severe weather events both at

CenterPoint Houston and nationally and found them to be consistent with industry experience.

Q. WHAT IS YOUR CONCLUSION ABOUT THE REASONABLENESS OF CENTERPOINT HOUSTON'S OVERALL RESPONSE TO THIS EVENT AND THE ASSOCIATED COSTS?

A. I find CenterPoint Houston's preparation for and response to this event reasonable, and I find the associated costs for the preparation and restoration reasonable as well.

X. HURRICANE FRANCINE

Q. WHEN DID CENTERPOINT HOUSTON FIRST BECOME AWARE OF HURRICANE FRANCINE?

A. CenterPoint Houston first identified Tropical Cyclone 6, which would later become Hurricane Francine, on Friday, September 6, 2024. On that day, the storm was developing in the Bay of Campeche, just off the eastern coast of Mexico's Yucatán Peninsula. Having recently emerged from a tropical wave, it began to organize as it moved into the warm waters of the Gulf Coast. At that time, it had sustained winds of 50 mph and was expected to strengthen into a tropical storm by the following day.

Q. WHAT WAS THE ANTICIPATED WEATHER IN THE GREATER HOUSTON AREA DURING THIS TIME?

A. On Sunday, September 8, Tropical Storm Francine was rapidly intensifying. By that afternoon, the storm had sustained winds of 65 mph and was approaching hurricane strength. The National Hurricane Center's 24-hour forecast projected peak winds of around 63 mph by Tuesday morning, with wave heights reaching up to 20 feet. At that time, forecasts indicated that Francine would continue to

strengthen and was expected to make landfall as a Category 2 hurricane with winds around 100 mph. However, Hurricane Francine moved eastward in the Gulf off the Texas coast, before eventually making landfall well north and east of Houston, as shown by its track in Figure DH-4.

Figure DH-4

NOAA Forecasted Path of Hurricane Francine

Q. WHEN DID HURRICANE FRANCINE EVENTUALLY MAKE LANDFALL?

A. Hurricane Francine made landfall near the mouth of the Atchafalaya River in Louisiana, approximately 30 miles south-southwest of Morgan City, Louisiana, at 5:00 PM CT on Wednesday, September 11, 2024.

Q. WHY DID CENTERPOINT HOUSTON TAKE EARLY PRECAUTIONS IN RESPONSE TO HURRICANE FRANCINE?

A. CenterPoint Houston remained vigilant, with the experience of Hurricane Beryl fresh in everyone's mind. Given the unpredictable nature of hurricanes, preparations were made early, as it appeared that the storm could potentially head toward the region. The storm's track seemed to be heading directly toward the area, and the growing intensity only heightened concerns. It was not until Tuesday, September 10, when the storm had passed to the southeast of the service area, that it became clear the Greater Houston area would not be directly impacted. However, the decision to prepare early proved to be the right one, as the storm's rapid intensification and shifting path made it clear that the situation could have taken a dangerous turn. The caution and readiness in the days leading up to the storm ultimately ensured that any potential impacts would be mitigated.

XI. HURRICANE FRANCINE PREPAREDNESS

Q. WHEN DID CENTERPOINT HOUSTON ACTIVATE THE EOC AND REQUEST MUTUAL ASSISTANCE RESOURCES?

A. On Sunday, September 8, 2024, CenterPoint Houston activated its EOC and began securing work sites, preparing crews and equipment, and coordinating additional frontline resources from mutual assistance companies. As part of these preparations, the Company requested approximately 1,600 distribution linemen and 700 vegetation management personnel to arrive between Monday, September 9, and Tuesday, September 10, ensuring they were safely in place and ready to respond ahead of Hurricane Francine's anticipated impact.

Q. HOW MANY STAGING SITES WERE ESTABLISHED IN ADVANCE OF HURRICANE FRANCINE?

A. On Monday, September 9, CenterPoint Houston identified five staging sites for activation: AstroWorld, Reed Road, Galveston County Fairgrounds, Brazoria County Fairgrounds, and Moody Gardens.

Q. WHEN DID MUTUAL ASSISTANCE RESOURCES ARRIVE ONTO CENTERPOINT HOUSTON'S SYSTEM FOR HURRICANE FRANCINE?

A. Approximately 700 vegetation management personnel arrived on Monday, September 9, followed by 500 distribution line workers on Tuesday, September 10. Upon arrival, all crews were immediately deployed to their designated staging sites for assignment.

Q. HOW DID THE COMPANY PLAN TO ASSIGN MUTUAL ASSISTANCE CREWS WHEN THEY ARRIVED ON SITE?

A. On Monday, September 9, CenterPoint Houston activated its Reed Road staging site, assigning all vegetation management personnel to the location. The AstroWorld staging site was also prepared for activation, with plans to deploy distribution line workers there the following day, Tuesday, September 10. Moody Gardens remained on standby, with plans for activation once conditions allowed for safe operations. Despite not being fully operational at the time, distribution line resources were also to be directed to Galveston County Fairgrounds and Brazoria County Fairgrounds in preparation for their activation.

Q. WERE MUTUAL ASSISTANCE RESOURCES PUT TO WORK IN ADVANCE OF HURRICANE FRANCINE'S ANTICIPATED LANDFALL?

A. Yes. Mutual assistance vegetation management crews that arrived on Monday, September 9, were dispatched from Reed Road to complete additional storm prep trimming on high-risk circuits. CenterPoint Houston was able to use these pre-staged storm resources to complete 50 incremental circuit miles of tree trimming, enhancing the system's readiness for Francine. This work occurred on Tuesday, September 10, while the storm's path was still uncertain. On Wednesday, September 11, after it became clear that Hurricane Francine would not impact Houston, the mutual assistance vegetation crews were released.

Q. WHERE AND WHAT PORTION OF THE SYSTEM RECEIVED THE MUTUAL ASSISTANCE VEGETATION WORK?

A. Mutual assistance vegetation crews were directed to areas identified as potential risks through visual inspections and feeder performance analysis. This proactive work was essential in preparing for what could have been the fourth major event to affect the Greater Houston area within five months. During Hurricane Beryl, downed vegetation and uprooted trees were primary contributors to the number of customer outages and the duration of those outages. Recognizing this, CenterPoint Houston took proactive measures to mitigate risks, making excellent use of mutual assistance vegetation management resources while awaiting Francine's final path and landfall.

Q. DID THE COMPLETION OF THIS WORK COST CENTERPOINT HOUSTON ADDITIONAL EXPENSES AS COMPARED TO THE COST ALREADY INCURRED FOR CALLING IN MUTUAL ASSISTANCE RESOURCES?

A. No. Once mutual assistance resources are requested and agreed, they are "on the payroll" until released by the utility and able to return home (or to another utility in need). The completion of this work did not result in any incremental expense beyond what CenterPoint Houston had already committed to and resulted in enhanced storm readiness for the thousands of customers served by the 50 circuit miles trimmed.

Q. DOES CENTERPOINT HOUSTON'S APPROACH AND UTILIZATION OF MUTUAL ASSISTANCE VEGETATION CREWS AHEAD OF HURRICANE FRANCINE REFLECT INDUSTRY BEST PRACTICES?

A. Yes. Pre-staging mutual assistance vegetation crews in advance of major storms is definitely a best practice, as vegetation work is often the critical path work to be done early in major storm restorations. And, if arrival timing and weather conditions allow pre-staged mutual assistance resources to go to work in the field, using them to accomplish incremental preventative trimming of high-risk areas in advance of the storm is certainly a best practice. This both reduces the risk of customer outages and that benefit comes at almost zero incremental cost.

Q. WHEN CENTERPOINT HOUSTON LEARNED THAT HURRICANE FRANCINE HAD CHANGED PATHS, WHAT HAPPENED TO THE MUTUAL ASSISTANCE CREWS?

A. On Tuesday, September 10, mutual assistance resources originally bound for AstroWorld (950 distribution line personnel), and Galveston County Fairgrounds (150 distribution line personnel) were released prior to arriving in Houston to support utilities facing more immediate needs. By 11:00 AM that day, the crews were either demobilized to return home or reassigned to neighboring utilities, such as Entergy Louisiana. As a result, both staging sites were deactivated.

Moody Gardens was also never activated. By the end of the day, Reed Road remained operational, supporting 700 vegetation management personnel, while Brazoria County Fairgrounds was still being set up to accommodate 500 distribution line resources.

Q. WHEN DID CENTERPOINT HOUSTON DEACTIVATE THE EOC?

A. The EOC was deactivated on Wednesday, September 11.

Q. WHEN DID CENTERPOINT HOUSTON RELEASE THE REMAINING MUTUAL ASSISTANCE CREWS?

A. The remaining distribution line personnel departed early on the morning of Wednesday, September 11, followed by the release of the 700 vegetation management resources later that day.

Q. WAS CENTERPOINT HOUSTON'S PREPARATION FOR AND RESPONSE TO HURRICANE FRANCINE REASONABLE?

A. Yes, CenterPoint Houston's preparation for and response to Hurricane Francine was reasonable and proactive. The Company took early action by requesting mutual assistance crews ahead of the storm and effectively utilizing them to complete proactive vegetation management. This was done in areas identified as potential risks through visual inspections and feeder performance. By preparing in advance, CenterPoint Houston mitigated potential risks that were similar to those experienced during Hurricane Beryl, where downed vegetation and uprooted trees caused significant outages. Had CenterPoint Houston not made these advanced preparations, and had Hurricane Francine actually impacted the Greater Houston area, the Company might have lacked adequate resources on hand to timely respond to storm damage. The decision to release mutual assistance resources once it became clear that Houston would not be impacted further demonstrated CenterPoint Houston's ability to adapt quickly and responsibly, ensuring that crews were available to assist other utilities in need. Overall, their approach exemplified a proactive, risk-aware strategy for ensuring system reliability in the face of uncertain conditions.

XII. HURRICANE FRANCINE PREPAREDNESS COSTS

Q. WHAT WERE THE COSTS INCURRED BY CENTERPOINT HOUSTON'S PREPARATION FOR HURRICANE FRANCINE?

A. CenterPoint Houston has incurred approximately $23.49 million[22] for the preparation associated with Hurricane Francine. As shown in Table DH-14 below,

and further discussed in the direct testimony of Mr. Wright, these costs are broken down by major cost category.

Table DH-14

Costs Incurred by Cost Category

Cost Category	Total (million)
Payroll	$0.23
Contract Services	$19.04
Hotels	$0.41
Security	$0.02
Logistics	$3.66
Materials & Supplies	$0.08
Fleet, Fuel, & Transportation	$0.00
Facilities	$0.03
Employee Expenses	$0.02
Totals Incurred	**$23.49**

Q. ARE THESE COSTS REASONABLE FOR THE PREPARATION OF AN EVENT OF THIS NATURE?

A. Yes. I believe the overall costs for Hurricane Francine restoration are reasonable. I developed this opinion by first analyzing the detailed cost components within each major category. To ensure accuracy, I then cross-checked my findings with a broader consideration of the total cost for Hurricane Francine.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE PAYROLL COSTS?

A. Fundamentally, the vast majority of the costs for Hurricane Francine are associated with the pre-staging of mutual assistance resources in advance of the storm. As the

[22] Costs accrued through March 31, 2025.

actual storm path unfolded, there was limited need to interrupt regularly scheduled field work by CenterPoint Houston crews and native contractors. As payroll expenses reflect costs for the time of CenterPoint Houston and affiliate employees who pause their regular work to undertake storm related work, the modest $0.23 million payroll expense is mostly associated with employees involved in the activation of the Emergency Operations Center and the selected staging areas.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE PAYROLL COSTS?

A. I found the payroll costs associated with the preparations for Hurricane Francine to be reasonable, including the Company's efforts to largely avoid disrupting regularly planned work for its field employees as the storm's path unfolded.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE CONTRACT SERVICES COSTS?

A. First, I analyzed the sub-categories that made up Contract Services for Hurricane Francine. In doing so, I confirmed that the vast majority of Contract Services costs for Francine were for distribution line crews and vegetation management crews.

Then, I looked to see if the rates paid for these line and vegetation management contract resources were substantially the same as those paid for these resource types during Hurricane Beryl. Lastly, I spot checked the mutual assistance call sheets and the contractor invoices to confirm that the hours charged reflected the specifics of the event, including the release of some resources to respond to the needs of other utilities impacted by Francine.

Q. ARE THERE DIFFERENCES IN THE COST OF SIMILAR RESOURCES BETWEEN HURRICANES BERYL AND FRANCINE?

A. While there are some minor differences in the specific labor and equipment rates CenterPoint Houston paid between Hurricanes Beryl and Francine, many of them are identical. For example, line skill aggregation contractor CSR agreed to a rate sheet with CenterPoint Houston at the time of the Derecho (May 2024) and delivered resources under those same rates for both Hurricanes and for Winter Storm Enzo.

Q. HOW DID CENTERPOINT HOUSTON RELEASE MUTUAL ASSISTANCE RESOURCES?

A. When it was clear that Francine would not impact the Greater Houston area, CenterPoint Houston began releasing mutual assistance resources. The first resources released were crews from several contractors that had not yet arrived. Releasing these crews allowed them to be picked up by other utilities in need, and minimized the costs incurred by CenterPoint Houston. The following morning the remaining line resources were released, so that they could travel to utilities in need, and the vegetation resources were released upon completion of their assigned work.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE CONTRACT SERVICES COSTS?

A. I concluded that the contract services costs associated with Hurricane Francine were reasonable, reflecting CenterPoint Houston's prudent decision to stage restoration resources in advance of the storm. As the storm track shifted away from the Greater Houston area, the Company acted quickly to release mutual assistance crews—both

those en route and those already on-site—thereby avoiding unnecessary costs and allowing those resources to be redirected to areas in greater need. Through these proactive actions, CenterPoint Houston not only reduced the overall cost of contracted services but also maximized the value of those expenditures for its customers as conditions evolved.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE COMPANY'S HOTEL COSTS?

A. The Company spent approximately $414,000 on hotel rooms for the mutual assistance resources. At an average room rate of $225 per night, that equates to slightly more than 1,800 room nights. Given that the activation plan was for more than 2,000 mutual assistance resources to be on site for three days or more, to only incur hotel costs for roughly 1,800 room nights is a strong cost management result.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE HOTEL COSTS?

A. I conclude that the hotel costs are reasonable.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE LOGISTICS COSTS?

A. Vendors were asked to stand up 5 staging areas, each with facilities to support hundreds of mutual assistance resources. While the extent of activation and, if activated, the number of operational days varied across the 5 sites, the average cost of approximately $730,000 per staging area for mobilization and demobilization is comparable to the costs incurred for staging area services for the Derecho and Beryl.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE LOGISTICS COSTS?

A. I conclude that the logistics costs for the 5 planned staging areas are reasonable.

Q. ARE THERE COSTS INCLUDED IN THIS FILING THAT YOU DID NOT REVIEW FOR REASONABLENESS?

A. Security, materials and supplies, facilities, employee expenses, and fleet, fuel, and transportation expenses were all very modest amounts and, as such, did not warrant detailed analysis.

XIII. HURRICANE FRANCINE CONCLUSIONS

Q. WHAT IS YOUR OVERALL CONCLUSION ABOUT THE REASONABLENESS OF CENTERPOINT HOUSTON'S RESPONSE TO HURRICANE FRANCINE AND THE ASSOCIATED COSTS?

A. CenterPoint Houston identified the potential risk Hurricane Francine posed to the Greater Houston area. Given this risk, the Company used its Emergency Operations Plan to prepare for the possibility of another major storm coming ashore in its Service Territory. These preparations included the decision to acquire mutual assistance resources in advance of the storm, so as to speed customer restoration in the storm's wake. I believe that was a reasonable decision given the facts available at the time and I believe the costs associated with that mobilization plan are reasonable as well.

XIV. WINTER STORM ENZO

Q. PLEASE DESCRIBE THE WEATHER IN THE DAYS LEADING UP TO WINTER STORM ENZO IN THE GREATER HOUSTON AREA.

A. In the days leading up to Winter Storm Enzo, the Greater Houston area experienced a marked shift in weather conditions. On Friday, January 17, 2025, the day began with chilly temperatures and patches of coastal fog. As the day progressed, skies turned mostly cloudy and milder air moved in, with afternoon highs climbing into the upper 60s.

By Saturday morning, January 18, forecasts began to point to a dramatic weather change driven by an approaching Arctic front associated with a polar vortex. This front was expected to bring a sharp drop in temperatures, with overnight lows plunging into the teens across much of Houston and the mid-20s in Galveston. Forecasters also indicated a 30–50% chance of snow across the Houston metropolitan area for Monday, January 20, and Tuesday, January 21.

On Sunday, January 19, the National Weather Service issued a winter storm warning for the Greater Houston area. The warning called for up to 6 inches of snow and sleet, along with potential ice accumulations of up to one-tenth of an inch. In response, numerous school districts and universities across the region canceled classes from Monday, January 20, through Wednesday, January 22, in anticipation of hazardous road conditions.

Overall, the lead-up to Winter Storm Enzo marked a rapid transition from mild, overcast conditions to severe winter weather alerts and warnings. The primary concern was the risk of a significant icing event, with snow, sleet, and freezing rain all possible depending on narrow temperature swings—sometimes as little as 2 to 3 degrees Fahrenheit. These conditions prompted both residents and local officials to prepare for potentially dangerous and disruptive impacts across the region.[23]

Q. WHEN DID WINTER STORM ENZO OCCUR AND WHAT WAS ITS DURATION?

A. While the storm initially threatened the Greater Houston area, forecasts in the days leading up to it, from Friday, January 17, through Sunday, January 19, began to show that Winter Storm Enzo would not significantly impact Houston. Despite early concerns about possible snow, sleet, and freezing rain, by late Sunday, it became clear that as the storm tracked further inland, the Houston area would largely avoid severely damaging weather. Instead, the brunt of the storm shifted southward toward areas like Corpus Christi and east along the Gulf Coast, with the most significant impacts occurring between Monday, January 20, and Wednesday, January 22.

Q. PLEASE DESCRIBE WINTER STORM ENZO.

A. Winter Storm Enzo wasn't a typical powerhouse storm, but rather the result of a perfect mix of arctic air, deep Gulf moisture, and upper-level atmospheric energy.

[23] Belles, Jonathan, et al. "Winter Storm Enzo Brought Historic Snow, Ice, To South, Including New Orleans, Florida." *The Weather Channel*, 28 Jan. 2025, https://weather.com/storms/winter/news/2025-01-21-winter-storm-enzo-forecast-south-gulf-coast-snow-ice-historic.

Without a strong central low-pressure system, the storm still managed to unleash widespread wintry weather beginning Monday, January 20.

Cold air pouring into Texas combined with Gulf moisture sparked snow, sleet, and freezing rain across a broad area—from Austin and San Antonio all the way down to the Rio Grande Valley. Treacherous road conditions led to a fatal crash in Zavala County, claiming five lives and injuring seven others. Interstate 10 between San Antonio and Houston turned slick with snow and sleet, leading to numerous accidents as the storm moved east.

In South Texas, near Corpus Christi, up to a quarter inch of ice built up early Tuesday, January 21, causing power outages in some areas. Meanwhile, the Houston metro area recorded over four inches of snow, with flurries even reaching Galveston and snow briefly falling as far south as Brownsville—accompanied by wind gusts up to 44 mph.

The storm effectively brought Houston to a standstill, shutting down schools and closing both major airports. More than 1,700 flights were canceled over several days due to the extreme weather.[24]

[24] The Weather Channel. "Winter Storm Enzo Forecast: South Braces for Snow, Ice in Historic Gulf Coast Event." *The Weather Channel*, 21 Jan. 2025, https://weather.com/storms/winter/news/2025-01-21-winter-storm-enzo-forecast-south-gulf-coast-snow-ice-historic.

Q. WAS WINTER STORM ENZO IN LINE WITH WEATHER FORECASTS PREDICTED FOR THE GREATER HOUSTON AREA AS PROVIDED BY THE NATIONAL WEATHER SERVICE AND THE COMPANY'S CONTRACT WEATHER SERVICE?

A. Yes, Winter Storm Enzo unfolded largely as predicted by the National Weather Service and CenterPoint Energy's contracted weather services for the Greater Houston area. In the days leading up to the storm, forecasts indicated the potential for significant winter weather, including snow, sleet, and freezing rain. The National Weather Service issued a Winter Storm Warning effective from Monday evening through Tuesday, anticipating hazardous conditions.

As the storm progressed, the Greater Houston area experienced freezing temperatures and wintry precipitation, consistent with earlier predictions. Despite these conditions, more than 99% of CenterPoint Houston's customers maintained normal electric service throughout the event, with crews promptly addressing scattered outages.

This outcome aligns with the initial forecasts and the Company's proactive measures, indicating that the impact of Winter Storm Enzo on the Greater Houston area was in line with the weather predictions provided by the National Weather Service and CenterPoint Energy's contracted weather service.[25]

[25] CenterPoint Energy. "Final Winter Storm Enzo Update: More than 99 Percent of CenterPoint Energy Customers Maintained Power Through Extreme Winter Weather; Company Deactivates Emergency Operations Center." *CenterPoint Energy*, 5 Feb. 2025, https://investors.centerpointenergy.com/news-releases/news-release-details/final-winter-storm-enzo-update-more-99-percent-centerpoint.

Q. WHAT WAS THE DAMAGE CAUSED BY WINTER STORM ENZO?

A. The damage caused by Winter Storm Enzo was primarily related to increased customer demand due to the harsh weather conditions, rather than direct damage to CenterPoint Houston's infrastructure. There was no significant impact to the grid infrastructure itself; the poles, wires, and other critical components sustained no major damage. This is entirely consistent with the system's design, as the infrastructure is built to withstand ice loading and wind gusts typically experienced during such storms. The grid's performance during the event demonstrated the robustness of the assets, which are specifically engineered to handle these conditions. The system was well-prepared, and the infrastructure functioned exactly as it was designed to throughout the storm.

Q. DID CENTERPOINT HOUSTON EXPERIENCE ANY OUTAGES DURING WINTER STORM ENZO?

A. During Winter Storm Enzo, 32 transformers failed due to overload, likely caused by the surge in power demand as temperatures dropped significantly. These transformers needed to be replaced or upgraded to restore service and ensure continued reliability.

At peak demand, no more than 10,000 customers were without power at any given time. The average outage duration was approximately 3 hours. The preparedness efforts in place, including securing additional resources and pre-staging materials, helped minimize the overall impact on the grid.

Table DH-15

Winter Storm Enzo Outages[26]

Trouble Level	Outage Average Duration (minutes)	Outage Max Duration (minutes)
T - Transformer	178.13	713.55
C - Circuit	158.26	529.13
L - Local	83.92	382.5
F - Fuse	188.11	720

XV. WINTER STORM ENZO PREPAREDNESS

Q. WHEN DID CENTERPOINT HOUSTON BEGIN PREPARING FOR WINTER STORM ENZO, AND WHEN WAS THE EOC ACTIVATED IN RESPONSE TO THE FORECASTED CONDITIONS?

A. On Wednesday, January 15, CenterPoint Houston's Emergency Response and Preparedness and Meteorology teams began closely monitoring weather forecasts in anticipation of cold and potentially icy conditions, initiating early preparations to help ensure safe and reliable energy delivery. As the forecast became more severe, CenterPoint Houston activated its EOC on the afternoon of Monday, January 20.

On Friday, January 17, the Electric Reliability Council of Texas ("ERCOT"), the organization responsible for managing the state's electric grid, issued a Weather Watch for January 20 through January 23, citing extreme cold temperatures across the region, elevated electricity demand, and the potential for lower operating reserves.

[26] Forced and Outside Causes Only; Sustained Interruptions Only.

Q. HOW DOES CENTERPOINT HOUSTON'S EOP PREPARE THE COMPANY TO RESPOND TO WINTER STORMS, GIVEN THAT THEY DIFFER FROM HURRICANES?

A. CenterPoint Houston's EOP ensures the Company is prepared to respond to all types of weather events, including winter storms. The plan outlines specific procedures and protocols for mobilizing resources, ensuring the safety of both employees and customers, and maintaining reliable service during extreme conditions. For winter storms, the plan includes guidelines for monitoring weather forecasts, staging necessary equipment, and coordinating with mutual assistance partners to quickly restore power in the event of outages. This proactive approach ensures that CenterPoint Houston can effectively manage the challenges posed by winter weather and maintain the resilience of the grid.

Q. WHAT STEPS DID CENTERPOINT HOUSTON TAKE TO PREPARE FOR THE POTENTIAL IMPACTS OF THE STORM?

A. Beginning Saturday, January 18, CenterPoint Houston initiated preparations for potential storm impacts by readying work sites, staging crews and equipment, and securing an additional approximately 420 vegetation management workers and 780 distribution line workers to support anticipated restoration efforts. That same day, CenterPoint Houston also increased call center staffing in anticipation of increased customer call volume.

Q. DID THE CITY OF HOUSTON CONDUCT ANY PREPAREDNESS ACTIVITIES?

A. Yes, the City of Houston conducted several preparedness activities in response to Winter Storm Enzo. These included identifying 10 warming stations for residents in need, shutting down schools, and advising people to work from home to ensure their safety during the storm.

Q. HOW DID CENTERPOINT HOUSTON APPROACH PUBLIC SAFETY?

A. CenterPoint Houston prioritized public safety by deploying five mobile generating units to locations identified by the city as warming stations. This ensured that these critical sites had the power needed to support residents in need. The remaining units were then placed at strategic staging areas to facilitate a quick response and assist with restoration efforts as required.

Q. WHEN DID MUTUAL ASSISTANCE RESOURCES ARRIVE ON THE CENTERPOINT HOUSTON SYSTEM?

A. By noon on Monday, January 20, vegetation management and distribution line crews had arrived on the CenterPoint Houston system ready to support storm response efforts.

Q. HOW DID CENTERPOINT HOUSTON PREPARE FOR THE POTENTIAL IMPACT OF THE STORM AND ENSURE A SWIFT RESPONSE?

A. CenterPoint Houston began mobilizing external resources promptly as part of a proactive risk mitigation strategy. Three key staging sites were set up in the southern region—at AstroWorld, Moody Gardens, and Brazoria County Fairgrounds—where the highest risk of icing was anticipated. Crews and local

contractors were stationed on Galveston Island to ensure access, anticipating potential difficulties in reaching the island during or after the storm due to potential icing of the Galveston Causeway, the main transportation artery from the mainland onto the island. Additional materials were also provided to support restoration efforts. To maximize preparedness, work shifts were adjusted, and a 16-hour workday schedule was implemented starting Monday afternoon for both CenterPoint Houston crews and local contractors. Mutual assistance crews arrived on Monday and transitioned to the 16-hour shifts by Tuesday, ensuring a swift and efficient response. This early mobilization played a critical role in CenterPoint Houston's ability to effectively manage the storm's impact.

Q. WERE THOSE INITIAL PREPAREDNESS EFFORTS TO WINTER STORM ENZO REASONABLE?

A. Yes, ahead of Winter Storm Enzo, CenterPoint Houston implemented extensive preparedness measures to mitigate the storm's impact during a critically cold period, ensuring system reliability and customer safety. Forecasts indicated that the storm would bring significant snowfall, with accumulations up to six inches in some areas, strong winds of 40-50 mph near the coast, and dangerously low temperatures, including lows in the teens across most of the service territory. Recognizing these risks, CenterPoint Houston took proactive steps to prepare, reducing the likelihood of widespread outages, infrastructure damage, and prolonged service disruptions. Given the severity of the expected conditions, failing to take these actions could have led to significant operational, financial, and safety consequences, including

equipment failures, extended power losses, and increased risks to public health and safety.

XVI. WINTER STORM ENZO RESTORATION

Q. WHAT WAS THE CONDITION OF THE GRID BEFORE JANUARY 20?

A. The grid was designed to remain fully functional during and after extreme weather events, including conditions like those presented by Winter Storm Enzo. The infrastructure is built to handle such challenges, ensuring that service is maintained even in the face of severe weather. True to this design, the grid performed as expected during the storm—delivering reliable energy without significant disruptions. This demonstrated the resilience of the system, with minimal impacts on service despite the harsh conditions brought by Winter Storm Enzo.

Q. PLEASE DESCRIBE CENTERPOINT HOUSTON'S RESTORATION EFFORTS DURING WINTER STORM ENZO.

A. During Winter Storm Enzo, CenterPoint Houston focused its restoration efforts on addressing various impacts, even though the storm's most severe winter weather—ice accumulation—did not occur on a widespread scale. The distribution substations and the overall distribution system remained energized, and restoration efforts were prioritized for isolated failures.

On Tuesday night, January 21, and Wednesday morning, January 22, when the Houston area experienced its coldest temperatures, CenterPoint Houston anticipated potential transformer failures due to overload. Crews responded quickly, replacing or upgrading transformers as needed to prevent further disruptions.

Throughout the event, power outages remained relatively limited, with no more than 10,000 customers affected at any one time. In total, approximately 28,500 customers experienced service interruptions during the storm. CenterPoint Houston's prompt response minimized service disruptions, restoring power to critical infrastructure and industrial customers while ensuring reliable service for the majority of the service area. A total of 32 transformers were either replaced or upgraded during the response efforts

Q. WHEN WERE MUTUAL ASSISTANCE RESOURCES RELEASED FROM THE CENTERPOINT HOUSTON SYSTEM?

A. On Tuesday, January 21, 2025, at 1:00 p.m., CenterPoint Houston began transitioning customer service operations back to standard 8-hour shifts for call center personnel, signaling a return to normal staffing levels as conditions improved. An hour later, at 2:00 p.m., the Operations and Logistics teams coordinated the closure of two staging sites, Brazoria County Fairgrounds and AstroWorld. As part of this process, all non-native distribution line and vegetation management resources assigned to these locations were released. The Moody Gardens staging site remained active to support ongoing needs in the area.

Q. HOW DID CENTERPOINT HOUSTON CONCLUDE ITS RESTORATION EFFORTS FOLLOWING WINTER STORM ENZO?

A. On Wednesday, January 22, 2025, CenterPoint Houston announced that more than 99% of its customers had maintained power through the extreme winter conditions brought on by Winter Storm Enzo. With restoration efforts nearly complete, the Company officially deactivated its EOC and resumed normal business operations

by midday. The Moody Gardens staging site was also closed on Wednesday, January 22, as operations continued to return to normal. The night before, on Tuesday, January 21, CenterPoint Houston had released the roughly 1,200 mutual aid workers that were brought in ahead of the storm. Crews and contractors continued working to restore power to the remaining customers still impacted, ensuring a full return to service.

XVII. WINTER STORM ENZO PREPAREDNESS AND RESTORATION COSTS

Q. WHAT WERE THE COSTS INCURRED BY CENTERPOINT HOUSTON FOR WINTER STORM ENZO?

A. CenterPoint Houston has incurred approximately $36.59 million, for the preparation and restoration efforts associated with Winter Storm Enzo. As shown in Table DH-16 below, and further discussed in the direct testimony of Mr. Wright, these costs are broken down by major cost category.

Table DH-16

Costs Incurred by Cost Category

Cost Category	Distribution (million)	Transmission (million)	Total (million)
Payroll	$4.74	$0.43	$5.18
Contract Services	$25.96	$0.07	$26.03
Hotels	$0.53	-	$0.53
Security	$0.16	-	$0.16
Logistics	$3.61	$0.003	$3.61
Materials & Supplies	$0.18	$0.008	$0.19
Fleet, Fuel, & Transportation	$0.82	$0.02	$0.84
Facilities	$0.04	-	$0.04
Employee Expenses	$0.01	-	$0.01
Totals Incurred	**$36.05**	**$0.54**	**$36.59**

Q. ARE THESE COSTS REASONABLE FOR THE PREPARATION OF AN EVENT OF THIS NATURE?

A. Yes. I believe the overall costs for Winter Storm Enzo restoration are reasonable. I developed this opinion by first analyzing the detailed cost components within each major category. To ensure accuracy, I then cross-checked my findings with a broader comparison of the total restoration cost for Winter Storm Enzo.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE PAYROLL COSTS?

A. My understanding of how CenterPoint Houston approached its preparation for and response to Enzo was that it started with making full use of all of its internal resources, affiliate resources, and native contractors, and then supplemented mutual assistance resources as necessary. I expected that this order of resource usage was aligned with the respective costs for these resources.

To validate these expectations, I compared the hourly cost for a CenterPoint Houston first class line worker as billed to the restoration effort to the rates charged for similar resources from a native CenterPoint Houston contractor and a representative mutual assistance contractor. I did this for both straight time and double time, noting that double time is often the most common hourly rate charged across the various resource providers and their associated contract terms.[27] The comparisons are presented in Table DH-17 below.

Table DH-17

Mutual Assistance/Resource Comparison – Line worker

Role	First Class Line Worker Straight Time	First Class Line Worker Double Time
CenterPoint Houston Line Worker[28]	$71.88	$121.78
Native Contractor 1 Line Worker[29]	$235.52	$235.52
Utility Mutual Assistance 1 Line Worker	N/A	N/A
Contractor Mutual Assistance 2 Line Worker[30]	N/A	$317.04

I also compared the typical CenterPoint Houston hourly cost for an operations supervisor as billed to the restoration effort with the rate CenterPoint

[27] For CenterPoint Houston, line workers are entitled to double time, after the first day, for all hours worked for the duration of the restoration event because the 16-hour on, 8-hour off work schedule does not provide for 10 hours of rest between shifts.

[28] Represents a simple average across the cost center categories associated with the "Lineman" role.

[29] Sample native contractor entity has the same rate listed for its Journeyman Lineman role for ST, OT, and DT.

[30] The Contractor Mutual Assistance 2 entity did not list ST rates on its invoices associated with Winter Storm Enzo.

Houston paid for general foremen from its native contractors and mutual assistance contractors (see Table DH-18 below).

Table DH-18

Mutual Assistance/Resource Comparison – General Foreman

Role	Straight Time	Double Time
CenterPoint Houston Operations Supervisor[31]	$102.09	$102.09
Native Contractor 1 GF[32]	$271.21	$271.21
Utility Mutual Assistance 1 GF	N/A	N/A
Contractor Mutual Assistance 2 GF[33]	N/A	$336.44

Both of the above comparisons confirm that CenterPoint Houston's internal resources are its least cost restoration resources.

Q. ARE THERE EXAMPLES OF PAYROLL COSTS THAT COULD BE INAPPROPRIATE?

A. Yes. While internal resources are extremely valuable during a major restoration, all resources need to be managed cost effectively and all labor needs to be used productively. One area that could result in inappropriate payroll costs could be the use of employees from CenterPoint Houston's affiliate companies.

To check the reasonableness of CenterPoint Houston's deployment of resources from CenterPoint Houston affiliates for the restoration event, I reviewed the total number of CenterPoint Houston employees from CenterPoint Energy

[31] Represents a simple average of rates associated with the "Operations Supervisor" role. This role is not eligible for OT / DT, but rather is paid at ST for all hours worked past 40 per week.

[32] Sample native contractor entity has the same rate listed for its General Foreman role for ST, OT, and DT.

[33] The Contractor Mutual Assistance 2 entity did not list ST rates on its invoices associated with Winter Storm Enzo.

Entex and CenterPoint Service Company who charged time to the restoration efforts and the total hours they charged. Many of these employees support major restoration events by serving in roles at the Command Center or at one of the staging areas. Example roles that these employees served in include Fleet Fuel Staging Site Coordinator, Logistics Coordinator, Site EOP Facilities Coordinator, and Staging Site Manager.

Table DH-19

Breakdown of CenterPoint Employee Resources[34]

CenterPoint Entities Supporting Enzo Restoration	Total Hours Charged to Restoration Activities	Employees Supporting Restoration Activities	Avg Hours Charged per Employee
CenterPoint Energy Entex	162	9	18
CenterPoint Service Company	7,689	407	19

The average hours charged per employee is consistent with their typical roles, either at the Command Center or at a staging area. Mobilization, operation, and demobilization over a 3- or 4-day timeframe is consistent with average time charges per employee of roughly 19 hours.

Q. **WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE PAYROLL COSTS?**

A. I conclude that CenterPoint Houston's payroll costs for the restoration are reasonable. CenterPoint Houston resources are the lowest cost and most effective line resources available for the restoration event. CenterPoint Houston made full use of these resources, consistent with its EOP and its labor agreement.

[34] Rounded to the nearest whole number.

Beyond CenterPoint Houston labor, CenterPoint Houston leveraged roughly 416 employees from its CERC and Service Company affiliates to support the restoration. These resources are both cost effective and efficient, as they are local and able to be immediately deployed, often without any incremental logistical support cost.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE CONTRACT SERVICES COSTS?

A. First, I broke the Contract Services cost category into several sub-categories for Winter Storm Enzo.

Then, I reviewed each sub-category based on the comparability of hourly rates, the application of good procurement business practices, the application of good time management practices, and the mobilization and de-mobilization costs relative to the available time in Houston. Table DH-20 below presents the costs by sub-category for Winter Storm Enzo.

Table DH-20

Contract Services Costs by Sub-Category

Contract Services Sub-Category	Distribution	Transmission	Total
Mutual Assistance/Contractors	$25,897,132	70,095	$25,967,227
Other Contractor Services	$64,056	-	$64,056
Grand Total	**$25,961,188**	**$70,095**	**$26,031,283**

Q. ARE THERE DIFFERENCES IN THE COST OF SIMILAR RESOURCES?

A. Yes. As shown above in the labor cost comparisons, native contract resources (including resources brought onto the CenterPoint Houston system from elsewhere)

are lower cost than the mutual assistance contractor resources. The native contractor resources are typically available under labor and equipment rates established through a standard competitive procurement process.

In contrast, mutual assistance contractor labor and equipment rates are based on rate sheets provided by the contractors at the time of activation. As the comparisons above showed, these are typically the highest cost resources, but for major events they are a necessity for prompt service restoration.

Q. DID YOU ANALYZE VEHICLE AND EQUIPMENT CHARGES WITHIN THE CONTRACT SERVICES COSTS?

A. Yes. Table DH-21 below compares vehicle charges across a range of restoration resources.

Table DH-21

Mutual Assistance/Resource Comparison – Vehicle Charge

	Equipment				
	Pickup Truck	55Ft Bucket Truck	Material / Pole Trailer	Digger Derrick	Backyard / Easement Machine
Contractor Mutual Assistance 2 (Linc)	$37.33	$75.57	$23.63	$75.57	$60.58
Utility Mutual Assistance 1	N/A	N/A	N/A	N/A	N/A
Native Contractor 1	$45.00	$94.83	$9.00	$94.83	$95.98

Q. DID CENTERPOINT HOUSTON MAKE APPROPRIATE USE OF THE MUTUAL ASSISTANCE RESOURCES?

A. Yes. In anticipation of Winter Storm Enzo, and especially with the potential for an icing event, mutual assistance resources were secured in advance to enable CenterPoint Houston to rapidly respond to any large-scale service interruptions that

might occur. As the storm played out, there was no major ice accumulation on the CenterPoint Houston system and the Company promptly released the out-of-town crews as soon as this was clear.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE CONTRACT SERVICES COSTS?

A. The level of mutual assistance requested was reasonable given the potential for a major icing event and the labor and equipment rates for the mutual assistance resources were consistent with previous events, adjusted for annual inflation increases. And, the Company managed the mobilization and demobilization process in a timely manner, thereby minimizing the total hours charged. Therefore, I conclude that the contract services costs are reasonable.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE COMPANY'S HOTEL COSTS?

A. I reviewed the room nights procured for the mutual assistance crew personnel and other personnel for Winter Storm Enzo and found that CenterPoint Houston's hotel spend was approximately 2% of its mutual assistance resource costs. This 2% level of spend is typical for hotel-based accommodations for mutual assistance resources, and is generally consistent across CenterPoint Houston's recent storm events requiring mutual assistance resources.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE HOTEL COSTS?

A. I concluded that the approximate cost for hotel accommodations of $530k for Enzo was consistent with the 2% of mutual assistance resource costs level CenterPoint

Houston has experienced during other events, and on that basis found the costs reasonable.

Q. HOW DID YOU ANALYZE THE REASONABLENESS OF THE LOGISTICS COSTS?

A. I considered the number of staging areas set up for operations, the location of the staging areas, the number of mutual assistance resources brought in to operate out of those staging areas, and the number of days the staging areas were in operation.

Q. WHAT DID YOU CONCLUDE AS TO THE REASONABLENESS OF THE LOGISTICS COSTS?

A. I concluded that to mobilize 3 staging areas supporting upwards of 1,200 crew resources and to subsequently demobilize these three sites for $3.61 million is reasonable.

Q. ARE THERE COSTS INCLUDED IN THIS FILING THAT YOU DID NOT CONDUCT A DETAILED REVIEW FOR REASONABLENESS OF?

A. Yes. Due to the modest level of expenditures, I did not conduct a detailed review of Materials & Supplies, Facilities, and Employee Expenses. Additionally, I did not conduct a detailed review of Security costs or Fleet, Fuel, and Transportation costs as these costs were modest in nature and followed the same procurement practices as occurred for Hurricane Beryl. I reviewed these costs in greater detail for Hurricane Beryl and found the process for which the costs were incurred reasonable. Please refer to earlier sections of my testimony regarding the reasonableness of the Security and Fleet, Fuel, and Transportation costs for Hurricane Beryl.

XVIII. WINTER STORM ENZO CONCLUSIONS

Q. WHAT IS YOUR CONCLUSION ABOUT THE REASONABLENESS OF CENTERPOINT HOUSTON'S OVERALL RESPONSE TO WINTER STORM ENZO AND THE ASSOCIATED COSTS?

A. Winter Storm Enzo threatened the Greater Houston area with the potential for a significant icing event, which can be devastating to an electric grid. CenterPoint Houston took the proactive measures discussed above to ensure that they were prepared to respond rapidly to such an event. They did so in a thoughtful, measured way, consistent with their EOP and with good utility practice.

The costs incurred in activating the EOC, mobilizing mutual assistance resources in advance of the storm, and in responding to the limited number of localized outages that occurred during the event were expended consistent with the Company's EOP, its pre-established commercial agreements, and good industry practice. Therefore, I find the costs for the Enzo preparation and response to be reasonable.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

DEREK HASBROUCK

PARTNER

Derek HasBrouck advises utility industry clients and investors on topics ranging from utility strategy to operations improvement. He is an expert in benchmarking electric and gas utility businesses, utility regulation, and network reliability. He has led after action reviews of a dozen major storms for utilities throughout the Eastern Interconnect, and serves as the Independent Engineer for Interconnections for the Hawaii Public Utilities Commission. He has served as a Third-Party Neutral for construction disputes on a major transmission construction project, advised uninsured bondholders in the financial restructurings of the Puerto Rico Electric Power Authority and is leading vendor due diligence activities in the purchase and sale of interests in several electric, gas, and water utilities.

PRIMARY EXPERTISE

- Utility Operations & Performance Improvement
- Financial Management
- Regulatory Strategy
- Reliability & Cost Reduction analyses and related regulatory matters
- Extensive FERC, State regulatory, and court testimony experience

CURRENT UTILITY CLIENTS

- Consolidated Edison of New York
- Long Island Power Authority
- Los Angeles Dept. of Water & Power
- Commonwealth Edison
- Florida Power & Light
- TNMP

HIGHLIGHTED CONSULTING EXPERIENCE

Long Island Power Authority

Partner in Charge of a series of assignments for the Long Island Power Authority in support of their oversight of PSEG Long Island, the contract operator that operates LIPA's electric transmission and distribution system. These assignments have included virtually all aspects of emergency planning and response focused on major storms, including deep dives into senior executive crisis management, storm damage assessment, foreign crew guides, vegetation management practices, and transmission control center design. Other recent assignments for LIPA reviewed PSEG Long Island's capital project playbook, overtime management and controls, fleet management, and end to end property records management.

Top Ten Investor Owned Utility

Partner in Charge for the commercialization evaluation by a top ten investor-owned utility of an artificial intelligence and machine learning based system to identify and locate precursors of electric faults caused by vegetation contacts, equipment failures, and other failure modes on medium voltage utility distribution systems. The objective of this initiative is to cost effectively shift the entire distribution asset management paradigm from "run to failure" to "just in time replacement".

Utility Industry Supplier

Partner in Charge for a market and comparative advantage analysis of composite pole products for utility applications. We conducted market research into specific use cases and identified the comparative advantages and disadvantages of using composite engineered poles versus wood, concrete, and steel alternatives. High value use cases include areas with extreme wind exposure and rear lot line pole replacement.

Vermont Electric Power Company
Partner in Charge of the reorganization of this company's transmission assets to form VT Transco LLC. This restructuring enabled equity and debt raises of more than $500M to fund an extensive transmission and fiber build-out, and reduced costs to Vermont electric customers by more than $10M annually in perpetuity.

OTHER CONSULTING EXPERIENCE

- Partner in Charge of developing and implementing a "sole ownership" pole strategy to resolve a dispute over pole loadings, pole replacement determinations, pole replacement work scheduling, asset sale amounts due, and third-party attachment management across three electric operating companies. We modelled the Company's actual pole installation and ownership costs, their cost recovery under the existing Joint Ownership Agreements, and analyzed rate base treatment under HPUC rules. We supported a several year negotiations with the Local Exchange Carrier with technical, attachment fee, financial, and regulatory analyses to help the parties reach an agreement to transition ownership of the pole fleet to a sole ownership model by Hawaiian Electric.
- Partner in Charge for commercial and regulatory due diligence services for the potential acquisition of a major utility services contractor. Diligence activities included an evaluation of pole inspection, treatment, and restoration services in the marketplace, the market size for these services, and the regulatory and accounting construct that applies to these services.
- Partner in Charge for a review of Santee Cooper's Renewable Generation Procurement Plan and Integrated Resource Plan on behalf of the South Carolina Public Service Commission.
- Partner in Charge for a feasibility assessment of the digitization of vegetation management at the Long Island Power Authority.
- Partner in Charge for a reliability and resiliency diagnostic assessment for a major southwestern electric utility. Opportunities to expand the use of AMI data, integrate outage management and SCADA systems, and enhance asset management and resiliency planning were identified.
- Partner in Charge of a series of IT program management and testing assignments for the Los Angeles Department of Water and Power, the largest municipal electric utility in the country. Developed and implemented new program and project management processes and templates for all technology projects. Provided independent testing and quality assurance services for the deployment of an upgrade to the Department's Oracle customer billing system.
- Partner in Charge of a review of a natural gas utility's approach to capitalizing a portion of its administrative and general costs. Following the review, we designed and conducted a repeatable time study across the A&G organizations to support an updated capitalization rate. Study results were delivered in a report suitable for use in future regulatory proceedings.
- Partner in Charge of a series of regulatory projects for a Southwestern natural gas utility. We provided revenue requirement and rate design modelling services in preparation for a rate case and conducted A&G capitalization studies over a five year period.
- Partner in Charge for a review of a multi-state utility's approach to capitalizing a portion of its administrative and general costs. Following the review, we designed and conducted a repeatable time study across the A&G organizations to support an updated capitalization rate for each state specific operating company. Study results were delivered in state specific reports suitable for use in future regulatory proceedings.
- Partner in Charge for a review of a multi-state utility's approach to capitalizing a portion of its administrative and general costs. Following the review, we designed and conducted a repeatable time study across the A&G organizations to support an updated capitalization rate for each regulated and non-regulated affiliate. Our approach and results were reviewed and accepted by a newly selected external auditor. Study results were delivered in state specific reports suitable for use in future regulatory proceedings.
- Partner in Charge for commercial and regulatory due diligence services for the potential acquisition of a minority stake in a major electric and gas utility in the Pacific Northwest. Reviewed electric and gas capital and O&M spending plans, load forecasts, resource plans, reliability performance, rate case outcomes, regulatory rules and processes, and other business critical commercial and regulatory issues.
- Partner in Charge for the preparation of a draft report benchmarking electric utility industry electric reliability and AMI investments and reliability performance results across a 20-year period for use in a class action litigation matter.
- Partner in Charge for the operations and maintenance performance, staffing, and expense review of a major coal fired generating station in the eastern US.
- Partner in Charge for the establishment of studies to support the allocation, and potentially capitalization, of certain amounts of corporate administrative and general expenses that support activities at a jointly owned electric generating station operated by our client.

- Partner in Charge for commercial and regulatory due diligence services for the potential acquisition of a minority stake in a FERC regulated electric transmission company operating in an ISO. Reviewed electric capital and O&M spending plans, load forecasts, generation interconnection queues, reliability performance, formula tariff filings, regulatory rules and processes, and other business critical commercial and regulatory issues.
- Partner in Charge for commercial and regulatory due diligence services for the potential acquisition of a minority stake in a major electric and gas utility in the Midwest. Reviewed electric and gas capital and O&M spending plans, load forecasts, resource plans, reliability performance, major customer business profiles, regional macro-economic drivers, de-carbonization plans, rate case outcomes, regulatory rules and processes, and other business critical commercial and regulatory issues.
- Partner in Charge for the quality assurance review of a major California electric utility's AI based planning and modelling systems, including data, models, governance, and human use for optimizing wildfire risk mitigation spend.
- Partner in Charge for a reliability performance assessment for a mid-sized electric utility in the Southwest. Lightning, tree contacts, and high winds were all major causes of outages, while shift configuration, dispatch, and staffing were all major drivers of outage duration.
- Partner in Charge of the development of the "Other Operating Revenue" (OOR) Business Plan for a major West Coast Electric Utility. The vast majority of the existing and anticipated OOR revenue streams were from pole attachment, conduit rental, and antenna attachment services. We analyzed attachment formulas, attachment and rental rates, market prices of alternative solutions, expected growth rates, and developed a series of strategies to enhance revenue growth, optimize cost recovery, and grow market share across local exchange and competitive local exchange carriers.
- Partner in Charge of providing financial analysis and fund-raising support to fund the Vermont Public Power Authority's 2008 and 2009 investments, including $35M of transmission and $25M for a new peaking unit.
- Partner in Charge for the review of service company cost allocation procedures and the audit of service company transactions for a multi-state water utility.
- Partner in Charge for the regulatory management audit preparation and audit support during the management audit of a major electric and gas utility.
- Third Party Advisor and Reviewer of the Human Resources and Compensation Audit of HydroOne by the Ontario Auditor General's Office. Provided expert advice on the audit workplan and a detailed critique of the draft audit report.
- Partner in Charge for the benchmark assessment of external stakeholder relations for a top 10 electric utility. This recurring annual assessment spans the company's economic regulator and the other energy, environmental and land use regulators it regularly deals with.
- Designated Third Party Neutral for the rapid resolution of construction related disputes amongst the owners of a major new transmission project.
- Partner in Charge for the development of a Joint Pole Strategy for a major New York State electric utility, in the face of public and NYPSC pressure on "double woods", local municipal pressures for timely completion of pole construction/replacement projects, resiliency and grid hardening objectives, and the financial and regulatory pressures applicable to all parties. The preferred strategy was to transition from an "out of compliance" parity model to a sole ownership model for at least new/replaced poles and ideally the entire pole fleet, but after a labor negotiation this became unrealistic. The strategy's secondary path identified and implemented a wide range of actions to better align cost recovery with expended costs between the parties, improve financial planning and work efficiencies across joint owners, and help the NYPSC, municipal leaders, and the public at large have visibility into who the accountable party(s) are for specific issues.
- Partner in Charge of a series of generation resource planning, performance management and benchmark metric assignments for Hawaiian Electric Company. Identified significant opportunities to improve regulatory and external stakeholder communications through the use of industry benchmark data and assisted the regulatory team incorporate these data into 3 rate case filings and several high-profile reports to the Hawaiian Public Utilities Commission.
- Partner in Charge of a Succession Planning and Executive Development Program for a major public utility. Conducted independent assessments of each executive and worked with each executive to develop an individual development plan. Worked directly with the CEO to design an executive re-assignment plan, including a significant reorganization of the Customer Service, Sustainability, and Corporate Services functions, to further the development of each executive.
- Partner in Charge of PA's support for a consortium of leading utilities that benchmark financial and operational performance of Finance, Accounting, Human Resources, Information Technology, Supply Chain, Regulatory & Governmental Affairs, Legal, Environmental Affairs, Communications and Advertising.

- Creator of PA's ReliabilityOne™ awards program, annually recognizing America's most reliable electric utilities since 1999.
- Founder of PA's Polaris T&D and Customer Service benchmarking programs. These programs have benchmarked North American electric utility operating costs, operational performance, and reliability metrics. Over 150 electric utilities have participated in these annual programs over the last twenty-five years.
- Partner in Charge for the pre-audit preparation and audit management of a regulator sponsored distribution network reliability audit of an East Coast utility. The preparation included a business risk assessment, development of desired audit outcomes, an audit management strategy and plan, interview preparation, data request management and draft report review.
- Engagement Director for the comprehensive, proactive review of the reliability of the T&D system for a major Midwestern utility. The analysis included primary customer research, employee focus groups, a comprehensive inspection of the physical system using a sampling protocol, a review of design, operating, maintenance and restoration policies, procedures and performance, and a benchmark analysis of system performance.
- Engagement Director for the post-mortem analysis of emergency preparedness and restoration efforts following a major ice storm for a major electric utility. We benchmarked the state of the system, guided client teams through route cause analysis, developed recommended improvements in emergency planning and developed reports on these topics for several interested regulatory and governmental bodies. Topics analyzed included emergency planning, resource mobilization, customer communications, pre-event maintenance and the supporting information systems.
- Senior Energy Partner responsible for the design and implementation of the new competitive wholesale electricity market for the Republic of Singapore. This advanced market co-optimizes energy, reserves and ancillary services using locational marginal pricing for all generation resources. PA delivered a complete market solution, from the initial market rules through to development and implementation of the wholesale market software.
- Partner in Charge of real-time, hands-on assistance in managing electric restoration efforts in the aftermath of two hurricanes in Florida.
- Partner in Charge for the due diligence reviews of several proposed sales of electric transmission assets. The due diligence reviews focused on the actual transmission assets to be transferred, their condition, levels of O&M and capital anticipated to be required to run the assets on an ongoing basis, and the related service contracts for the provision of some of these engineering, construction, operations, and maintenance services.
- Partner in Charge for the development of a Midwestern electric utility's operational excellence strategy. This business strategy used benchmarking techniques to establish top decile performance objectives for its coal generation, electric delivery, and customer service business units. Generation capital expenditures for emission controls were a significant driver in projecting top decile performance standards.
- Partner in Charge for the pre-audit preparation and audit management of a regulator sponsored distribution network reliability audit of an East Coast utility. The preparation included a business risk assessment, development of desired audit outcomes, an audit management strategy and plan, interview preparation, data request management and draft report review.
- Partner in Charge for the transformation of the contact center of a major publicly owned utility. Our team took over day to day management of this center for a year, as we transformed its performance based on the principles of execution excellence, accountability, learning organization, and fully leveraging available technology.
- Partner in Charge for sourcing and selection advice for a new Director of the Purchase to Pay process at a major public utility.
- Engagement Director for the regulatory and public affairs intervention following a major distribution system failure at a major East Coast utility. We researched, analyzed and prepared internal and external reports covering the technical issues, the regulatory issues and the related financial issues. We project managed the development of an Independent Review Board, the retention of an international engineering firm and targeted research by an industry research consortium.
- Engagement Director for the development of a strategic business plan for a newly formed electric and gas delivery company. Plans addressed tactical issues of improving reliability and service while under a rate freeze and longer-term strategic issues of business structure, profitability of system expansion and contestability of core work.
- Lead Consultant for the development of cost projections and associated revenue requirements for the proposed municipal utility resulting from a major municipalization case.
- Engagement Director for the comprehensive, proactive review of the reliability of the T&D system for a major Midwestern utility. The analysis included primary customer research, employee focus groups, a comprehensive

inspection of the physical system using a sampling protocol, a review of design, operating, maintenance and restoration policies, procedures and performance, and a benchmark analysis of system performance.

- Engagement Director for the post-mortem analysis of emergency preparedness and restoration efforts following a major ice storm for a major electric utility. We benchmarked the state of the system, guided client teams through route cause analysis, developed recommended improvements in emergency planning and developed reports on these topics for several interested regulatory and governmental bodies. Topics analyzed included emergency planning, resource mobilization, customer communications, pre-event maintenance and the supporting information systems.
- Engagement Director for the concept development, business plan development and rapid launch of an outsourced distribution facility management subsidiary for a major utility holding company. We developed the business case, financial modelling tools for prospective transactions, marketing and sales collateral, information systems architecture plans, and we provided direct sales and transaction execution support for the first few customers. The first-year value creation of the subsidiary exceeded $100 million.
- Engagement Director for a benchmark evaluation of distribution O&M costs and reliability for an East Coast electric utility. Results demonstrated a high level of reliability and identified over $10 million in feasible operating cost reductions.
- Lead Consultant in the restructuring of a major Midwestern utility's retail operations. Competitive business units and businesses were established with the objective to minimize the degree and extent of future regulation while increasing near-term profits.
- Engagement Director for the benchmark evaluation of T&D material management for a major Midwestern utility. The study identified, focused management attention on, and set forth a plan to achieve savings of over $8 million annually.
- Engagement Director for a process reengineering project for a Northeastern combination utility's electric and gas metering operations. Client team achieved annual operating cost savings of over $2 million, inventory investment reduction of $3 million, and customer satisfaction improvements of 20%.
- Engagement Director for the process reengineering and specification of an integrated Work Management System and Geographic Information System for the retail section of a Fortune 500 utility.
- Engagement Director for a market and competitor assessment for a broadband utility communications provider. Key results included prioritized sales targets, key product discriminators and targeted sales messages.
- Engagement Director for the concept evaluation and business plan preparation for a proposed wholesale power market service. Based on this plan, the holding company board approved a new subsidiary with projected revenues of up to $100 million.
- Engagement Director for a benchmarking evaluation of retail energy marketing practices for a combination utility. Customer loyalty programs and specialized services for key accounts are now in place, based on study recommendations.
- Engagement Director for a benchmark evaluation of LNG plant operations in the United States. World class plant design, operations and maintenance practices were identified and internalized for use within our client's business.
- Engagement Director for a process reengineering assignment focusing on the customer inquiry process. Redesigns not requiring a new CIS resulted in 30% reductions in costs with measured, significant improvements in customer perception and satisfaction.
- Engagement Director for the determination of optimal and minimal regional staffing for a major electric and gas utility. Linear programming techniques were used to analyze workloads, service levels, and resource requirements by work headquarters. Recommendations led to the consolidation of eight work headquarters and an 18% reduction in full-time staff. Cost savings of over $10 million per year were achieved.
- Engagement Director for a market potential assessment for a distribution automation product. The electric utility and water distribution markets were analyzed, and no attractive niche was identified. Product development resources were shifted to alternative product concepts.
- Engagement Director for a multi-functional benchmarking and process improvement program for a major electric and gas utility. Targeted areas benchmarked by a joint client-consultant team resulted in annual savings of over $5 million, and service level improvements of 15% to 30%.
- Engagement Director for the development and implementation of a product management approach and organization for a major electric utility. This leading-edge management approach is designed to leverage proven consumer goods marketing techniques to help shape deregulation and drive performance improvement.
- Engagement Director for the design and implementation of a strategic planning, goal setting and incentive compensation system for a major Southeastern electric utility. The program replaced a fragmented,

unstructured planning process that led to poor and sometimes conflicting departmental goals. The Board of Directors, front-line employees and all levels of management in between now clearly understand what is expected and are motivated to achieve.

- Engagement Director for the development of a corporate benchmarking program for an Eastern gas and electric utility. The program established a cohesive set of corporate-wide benchmark measures and designed a process to stimulate functional benchmarking as part of the ongoing management process.
- Engagement Director for the development of a new, market-driven approach to the outdoor lighting business for a major Western utility. Product options were dramatically increased to meet the needs of specific customer segments, resulting in substantially increased market share, improved profitability and improved relations with local municipalities.
- Engagement Director for the review, benchmarking and process improvement of the inventory accuracy measurement system for a major Midwestern utility. Revised reporting system clearly highlighted operational problems, while requiring significantly less manual entry, review and auditing.
- Engagement Director for the business process analysis and reengineering across the retail operations of a major electric utility. The project team identified, analyzed, and reengineered the fundamental business processes of the utility, helping to achieve a product/market orientation throughout the organization, while reducing capital and operating costs substantially.
- Engagement Director for the effectiveness review of the corporate engineering and corporate T&D departments of a major Southwestern utility. The study identified critical gaps in responsibility for costs, schedules and the introduction of new technologies and approaches. Recommendations included a revised organization, new cost controls, improvements to internal and external customer service and a structured approach to evaluate and implement new technologies.
- Engagement Director for the evaluation of an Eastern natural gas distribution company's Automated Meter Reading (AMR) demonstration project. Customer satisfaction, operational savings and related operational benefits were quantified and modelled relative to the system's cost. This model was subsequently used to evaluate alternative implementation scenarios and develop the company's AMR strategy.
- Engagement Director for the diagnostic review of engineering and construction functions at a large Southern water utility. Identified design process, contract administration and workforce management improvement opportunities worth in excess of $5 million.
- Engagement Director for a distribution construction improvement program at a large Southern municipal utility. Facilitated the development by client analysts of an improvement plan with significant customer service improvements and construction savings of 15% annually.
- Project Manager for a review of electric operations at a major Southern utility to develop a long-range labor relation's strategy. Reviewed fossil and hydro generation, T&D construction and maintenance, dispatch, engineering, metering, meter reading and related support activities. Developed a three bargaining cycle plan to fundamentally alter the employer-employee relationship.
- Lead Consultant for a diagnostic review and productivity improvement program at a major Northwestern municipal utility. Responsible for the hydro generation, engineering, substation, materials management, and T&D functional areas. The project resulted in reorganization, redefinition of job responsibilities, revised maintenance programs, and improved training activities which dramatically improved the work environment, customer service performance, and cost competitiveness of the utility.
- Project Manager for a generating station operations study for a leading Southwestern investor-owned electric utility. Project assessed the strategic direction for plant operations through a benchmarking approach, restructured the station organization and identified methods for improved cost performance by 40% and production reliability by 10% in a competitive bulk power market.
- Project Manager for market potential assessments of utility provided electric service monitoring and solar cell generation services. Identified high potential customer segments, key product attributes and the competitive advantages of the product and the supplier. Recommended essential product and service modifications to achieve marketplace success.
- Lead Consultant for a diagnostic review of line crew, labor crew and tree crew operations for a large West Coast municipal utility. Identified opportunities to achieve a 20% reduction in field forces.
- Project Manager for the development of a power supply planning process and 20-year supply plan for the City of Glendale Public Service Department. The planning process evaluated all supply options given the new emission regulations, established the least cost compliant supply strategy and identified key external trigger events to be monitored.
- Project Manager of two concurrent improvement projects for the City of Glendale Public Service Department. These projects identified and implemented significant effectiveness and efficiency improvements in engineering

and construction, and defined material management improvements that eliminated the need for additional warehouse space and reduced inventory investment by 15%.

- Lead Consultant for the development of a workload-based expense budgeting process for gas and electric operations at a major West Coast utility. Implemented management process changes to improve cost-performance evaluations by line management of ongoing and proposed maintenance activities.
- Project Manager for the development and implementation of a workload-based expense budgeting process for the bulk power transmission and substation maintenance organization of a major utility. Designed the management processes used to evaluate and prioritize work volumes and funding levels for the O&M budget.
- Lead Consultant for a review of the capital and O&M budgeting process at a large East Coast utility. Identified improvement opportunities in the process and staffing reductions within the function.
- Project Manager for a study of senior management information needs at a large Eastern holding company. Inventoried and evaluated approximately 1,000 existing reports. Defined 100 key indicators for senior management. Guided changes in information reporting philosophy and systems to increase the quality and decrease the quantity of executive information.
- Lead Consultant on a joint consultant/client team at a major electric utility, studying crew staffing and supervision. Identified, recommended, and implemented a 30% reduction.

Derek HasBrouck Testimony Experience

DEREK HASBROUCK

TESTIMONY EXPERIENCE

NHEC vs. Consolidated Communications

Filed expert report, supplemental expert report, and rebuttal report addressing the differences between the terms of the pole joint use contract between the parties and the current administration of and billings under that contract. This matter was brought before the New Hampshire Superior Court in Hillsborough County.

Matters related to the Puerto Rico Electric Power Authority

Filed declarations as to the appropriate financial management of the Puerto Rico Electric Power Authority (PREPA) and extent of the damage caused by Hurricane Maria to the PREPA system before the United States District Court for Puerto Rico on behalf of certain un-insured bondholders of PREPA.

Vermont Electric Power Company

Testified regularly before the Vermont Public Service Board and FERC on transmission business issues ranging from construction cost estimates and project financing requirements to transmission company tariffs and tariff disputes during my tenure as the Company's Chief Financial Officer.

Southern Minnesota Municipal Power Agency and the City of Rochester, MN.

Expert Witness for financial management issues in a dispute between Southern Minnesota Municipal Power Agency and the City of Rochester, MN in Federal Court.

Central Maine Power

Expert Witness on the level of corporate costs allocated to Central Maine Power and the assignment of those costs between CMP's Transmission and Distribution businesses on behalf of Central Maine Power before the Maine Public Utilities Commission.

EPCOR

Expert Witness on corporate cost issues on behalf of EPCOR before the Alberta Energy Commission. The necessity of certain indirect costs to provide utility service, the cost effectiveness of the provision of those services, and the appropriate allocation of the cost of these services between business units were addressed.

2003 Blackout Litigation

Expert witness for research on historical network reliability performance for two major pieces of litigation arising from the August 2003 blackout. Expert Witness on transmission business management issues, including resource allocation, capital spending, maintenance spending and asset performance on behalf of First Energy in two class action lawsuits before the Public Utility Commission of Ohio.

Public Service of Colorado

Expert Witness on distribution capital & O&M spending, distribution reliability measurement and service level standard setting issues on behalf of Public Service of Colorado before the Colorado Public Utilities Commission.

Northern States Power (MN)

Expert Report filed with the Minnesota Public Utilities Commission in response to allegations of fraudulent electric outage reporting raised by the Minnesota Attorney General and St. Paul newspaper.

We conducted an extensive business process review and statistical sampling analysis of electric outages state-wide to determine the impact, if any, of the alleged under-reporting.

Major Chemical Company

Expert Witness for reliability issues in a dispute between a major petrochemical company and the local transmission service provider in Federal Court.

Derek HasBrouck Testimony Experience

Hydro One Network

Expert Witness on distribution rate impact mitigation approaches on behalf of Hydro One Networks before the Ontario Energy Board.

PHI Holdings

Expert Witness on service quality and reliability issues on behalf of Potomac Electric Power Company and Conectiv Energy as part of their merger application before the utility regulatory commissions of Maryland, Delaware, New Jersey, and the District of Columbia.

Commonwealth Edison

Expert Witness on T&D reliability indices and the analysis of T&D reliability data on behalf of Commonwealth Edison before the Illinois Commerce Commission.

Delmarva Power & Light

Expert Witness on T&D service quality standards, reliability indices, and associated performance incentive and penalty mechanisms on behalf of Delmarva Power & Light before the Delaware Public Service Commission.

Entergy Texas

Expert Witness on T&D system restoration performance following a major ice storm on behalf of Entergy Texas before the Public Utility Commission of Texas.

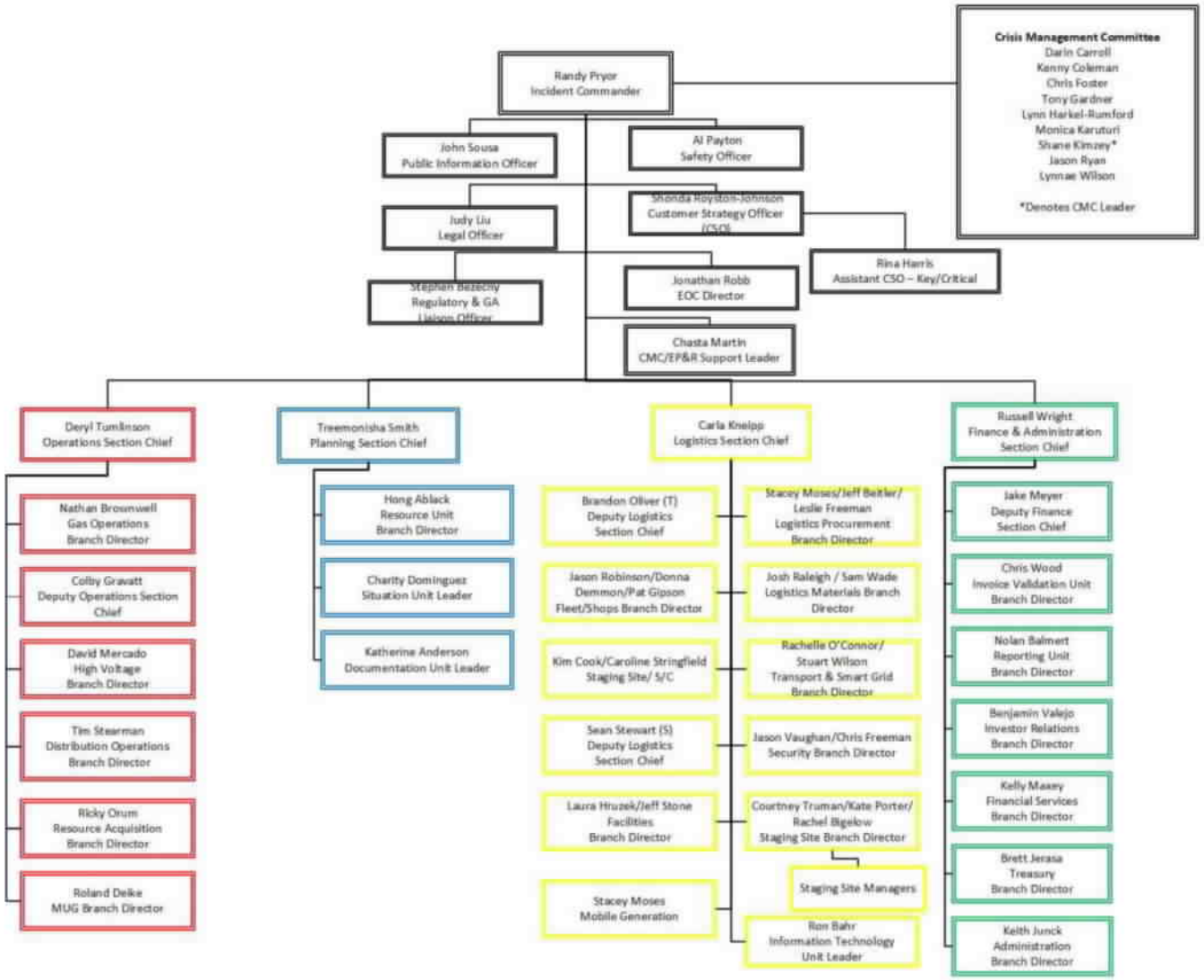
CenterPoint Energy

Expert Witness regarding CenterPoint Houston's preparedness for and response to the May 2024 Derecho and May 28 thunderstorms, including associated response costs, presented before the Public Utility Commission of Texas.

STAKEHOLDER INTERVIEWS AND TITLES

CNP Interviewee	CNP Position Title
Albert Lopez	MANAGER IT
Bradley Diehl	MANAGER TRANSMISSION POLICY
Carla Kneipp	SVP SUPPLY CHAIN
Charity Dominguez	SENIOR COORDINATOR EMERGENCY PREPAREDNESS
Chasta Martin	VP FIELD SERVICES
Chau Nguyen	MANAGER CEHE ENGINEERING ELECTRIC
Colby Gravatt	DIRECTOR SERVICE AREA
Courtney Truman	DIRECTOR CAPITAL PROGRAM MANAGEMENT
Deryl Tumlinson	VP REGIONAL OPERATIONS
Eric Easton	VP GRID TRANSFORMATION & INVESTMENT STRATEGY
Geno Guerrero	MANAGER OPERATIONS ELECTRIC
Hong Ablack	DIRECTOR ENGINEERING ELECTRIC
JD Wright II	MANAGER CEHE ENGINEERING ELECTRIC
Jesus Guerra	DIRECTOR ENGINEERING ELECTRIC
Johnnie Johnson	MANAGER SERVICE AREA ELECTRIC
Jonathan Robb	DIRECTOR EMERGENCY PREPAREDNESS & RESPONSE
Lester Petitt	DIRECTOR SERVICE AREA
Mandie Shook	VP ENGINEERING
Marianne Scott Prioleau	DIRECTOR SAFETY
Melvin Schoech	MANAGER CEHE ENGINEERING ELECTRIC
Micheal Davis	MANAGER DISTRIBUTION PROTECTION
Pablo Garcia	SENIOR ANALYST SYSTEMS
Paul Mathew	DIRECTOR HIGH VOLTAGE OPERATIONS
Randy Pryor	VP REGIONAL OPERATIONS
Rhonda Welch	DIRECTOR DISTRIBUTION PLANNING
Robert Bridges	MANAGER DER ENGINEERING & ANALYTICS
Scott Duhon	DIRECTOR ENVIRONMENT COMPLIANCE POLICY
Steve Bezecny	VP RATES & REGULATORY PORTFOLIO MGMT
Takea Reeder	VP GAS STRATEGY & OPERATIONS STANDARDS
Tim Stearman	DIRECTOR REGIONAL OPERATIONS
Treemonisha Smith	MANAGER EMERGENCY PREPAREDNESS & RESPONSE

INCIDENT COMMAND STRUCTURES



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3. Organizational Chart

STORM KIT CONTENTS

Material	Material Description	Quantity
102609	CROSSARM, D.E., GALV, 6' LONG	21
108027	WIRE,600MCM AAC,MEADOWSWEET,0.891"DIA	17,280
108044	COVERED WIRE, 3/C, 4/0 ALTW LEPAS/HD	834
108262	BAR,BUSS,1/4"X6"X20',COPPER	40
108293	CONNECTOR,TERM,COMP,TAP,2STR,1/0STR	200
108315	CONNECTOR,COMP,4 STR,LUG,TERMINAL	113
108316	TERM,CMPRSN 2 AL-CU	215
108319	TERM,CMPRSN 3/0 AL-CU	110
108320	TERMINAL,LUG,COMPRESSION,4/0 STRAND	82
108507	LUG,TRMNL CMPRSSN FOR 600 MCM ALUMINUM	130
108508	4/0-1/0 CONNECTOR,COMP,PARAL TAP,4/0STR	252
108514	CNCTR,COMP PRLL TAP,4/0-2,4,6SOL	150
108639	SPLICE,TENSION,COMP,AL,336AAC	66
108640	SPLICE,TENSION,COMP,AL,600AAC	426
108645	SPLICE,TENSION,COMP,AL,4 ACSR,AAAC	472
108647	SPLICE,TENSION,COMP,AL,1/0 ACSR,AAAC	1,021
108648	SPLICE,TENSION,COMP,AL,4/0 ACSR,AAAC	480
108657	CLAMP,STRRP #2-1/0 AAAC, ACSR	140
108658	STIRRUP,AL 4/0 ACSR,4/0AAC,HOT	332
108659	CLAMP,STIRRUP,AL,FOR 600 AAC OR 795 AAC	689
108669	CLAMP,MSSNGR 127,154 ACSR,AW	50
108671	CLAMP,SPRT TWIST SEC	525
108687	CLAMP, STRAIN SHOE, AUTO DE 4/0 CU	60
108704	CONNECTOR,SOLDERLESS, 2 #6 SOLID CU	40
108705	CONNECTOR,SOLDERLESS,2 #4 STRANDED CU	250
108706	CONNECTOR,SOLDERLESS,2#2 STR CU	1,150
108709	CONNECTOR,SOLDERLESS,2#4/0 STRANDED CU	605
108715	SPLICE,AUTO 4/0 AAAC,ACSR	1,367
108755	CONNECTOR,TERMINAL,TIN PLATED FOR 500MCM	246
108756	CNCTR,PRLL 1000MCM CU	5
108768	CONNECTORS- 3/0-500 DBL, TIN, UNIV CABLE	30
108797	CONNECTORS-1000 DBL, TIN PLATE, UNIV CBL	20
108886	CLAMP, # 2 DE SHOE	263
108890	STRAIN CLAMP,4/0-336AAC,STRGHT	370
108891	STRAIN CLAMP, 600AAC, STRGHT L	1,460
109033	CNCTR,INSLTD CMPRSN 4-10	400
109037	4/0-1/0 CONNECTOR-COMPRESSION-5/8" INS	4,000
109107	CNCTR,INSLTD CMPRSN 4-6	500
109138	CNCTR,INSLTD CMPRSN 2-4	500
109140	ELBOW, 15KV, 200A, LB, TEST PT, 1/0 AL	340
109141	CNCTR,INSLTD CMPRSN 2-2	100
109142	CNCTR,INSLTD CMPRSN 1/0-4	1,025
109143	CNCTR,INSLTD CMPRSN 1/0-2	1,000
109147	CNCTR,INSLTD CMPRSN 1/0-1/0	1,500
109185	INSULATOR,SPOOL,WHITE PORCELAIN, CL 53-2	236
109220	INSLTR, POLY, DE, DS46, CLVS-TNG, 300KV	767

STORM KIT CONTENTS

Material	Material Description	Quantity
109240	INSLTR, PORC, POST, 57-2, F-NECK, 180KV	252
109254	INSLTR, PIN,1" HOLE,F-NECK,ANSI CL 55-5	162
109261	BRACKET, SMALL T-ARM	45
109267	BRACKET,FIBERGLASS,CUTOUT/ARRESTOR,18"	31
109271	BRACKET,INSULATOR POST 35KV(TURKEY WING)	662
109288	BRACKET "L" TYPE FOR MTGING AR	400
109292	RACK,HVY DTY,TRANSFMR,H2POLE 1	7
109293	RACK,HD,120DEG,3POSITION,H2 WO	16
109295	RACK, MEDIUM DUTY CLUSTER	13
109356	RACK,SEC 7 PT	9
109369	BRACKET,VERTICAL,POST INSLTR 18"	224
109370	BRACKET,VRTCL INSLTR 18"MLTPL	169
109371	BRACKET,SNGL POST INSLTR	201
109373	ADAPTER, MNTNG FOR CHNL STL CRS	355
109409	NUT,EYE,5/8",C135.5,.13.5K	50
110290	BOLT,D-A,5/8"X 18",C135.1 W/4 SQ NUTS	50
110571	WASHER,CURVED,HVY,4"X4"X3/16"-3/4"	50
110574	BOLT,D-A,5/8"X20",C135.1 W/4 SQ NUTS	75
110577	WASHER,FLAT,2&1/4"X2&1/4"X3/16"-3/4"	77
110578	WASHER,FLAT, 4"X4"X3/16"-3/4"	56
110589	WASHER,SPRING,3/4"	778
110591	BOLT,D-A,5/8"X24",C135.1 W/4 SQ NUTS	800
110592	BOLT,STUD,3/4"X3&11/16" W/1HX NT&2S,WSHR	100
110605	BOLT,D-A,3/4"X18",C135.1 W/4 SQ NUTS	25
110612	BOLT,D-A,3/4"X26",C135.1 W/4 SQ.NUTS	370
110620	BOLT,D-A,3/4"X30",C135.1 W/4 SQ.NUTS	93
110636	BOLT,EYE,OVAL,5/8"X10" W.1 SQ NUT	9
110797	BOLT,SQ-HEAD,5/8"X24",C135.1 W/1 SQ.NUT	3
110871	WASHER,CURVED,3"x3"x1/4"-3/4"	1,300
110894	BOLT,SQ-HEAD,5/8"X10",C135.1,W/1 SQ.NUT	150
110895	BOLT,SQ-HEAD, 5/8"X12",C135.1,W/1 SQ.NUT	175
110896	BOLT,SQ-HEAD,5/8"X14",C135.1 W/1 SQ.NUT	302
110897	BOLT,SQ-HEAD,5/8"X16",C135.1 W/1 SQ.NUT	304
110898	BOLT,SQ-HEAD,5/8"X18",C135.1 W/1 SQ.NUT	106
110919	Helix Eye, ASSMBLY,TRIPLEYE GUYING ROD	86
110951	CLEVIS,EYE-45-RT,3/4"P,1&1/6"EH,45K	25
111075	POLE EYE PLATE/GUY HOOK COMBINATION	1,125
111089	FORK,DE	50
111094	HOOK,SRV GALVANIZED STL W/GIML	600
111095	ANCHOR,SCREW 10" DIA.	20
111097	LINK,FIGURE 8,7/8"X1&1/8"E,4&1/2"LNG,30K	50
111103	PIN, POLE TOP, 1" HEAD, 18" LONG	315
111107	PIN-STEEL 3/4"X 6 1/2" SHANK	383
111109	ANCHOR,SCREW MULTI HELIX, 7'	35
111126	GRIP,DEAD-END,FORMED FOR 336.4	145
111127	TIE, TOP, FOR F NECK INSLTR_#2 AWG	110

STORM KIT CONTENTS

Material	Material Description	Quantity
111212	DEAD END GRIP, #6 CU SOL	300
111216	DEAD END GRIP, #4 CU STR	90
111225	GRIP,DE 4 AAAC	214
111228	GRIP,DE 1/0 ACSR,AAAC	317
111229	GRIP,DE 1/0 AAC TWST SRVC DRP	580
111231	GRIP,DE 336 AAC	60
111233	GRIP, DE 1/0 CU PI	15
111234	GRIP,DE 4/0 CU PI	50
111235	GRIP,DE 500 CU PI	150
111238	GRIP, GUY, 3/8"	758
111243	TIE, TOP, FOR F NECK INSLTR_600 KCMIL	170
111244	SIDE TIE "F" NECK 600AAC CNDCTR	450
111246	TIE,TOP LINE INSULATOR #4/0AAA	310
111249	TIE,SIDE LINE INSULATOR #4/0AA	200
111261	WIRE,TIE,#16,IRON	20
112432	CUTOUT, LINKBREAK, 35KV, 150KV BIL, 100A	91
112465	CAP,FUSE, CUTOUT CAP ,FUSE TUBE	105
112466	FUSE TUBE,STANDARD, 15KV,110KV BIL, 100A	36
112467	LINK BREAK FUSE, 35KV, 100 A	84
112475	CUTOUT, COASTAL, 15KV, 110KV BIL, 100A	24
112493	ARRESTER,6KV	125
112494	CAP, KEARNEY, 15KV & 35KV, 100A	75
112512	FUSE TUBE,KEARNEY,15KV,100A	11
112948	FUSE LINK,35KV,40A,TYPE "T"	25
112949	FUSE LINK,35KV,50A,TYPE T	150
112950	FUSE LINK,35KV,65A,TYPE T	25
112951	FUSE LINK,35KV,80A,TYPE T	6
112952	FUSE LINK,35KV,100A, TYPE "T"	80
112956	FUSE,LIMITING,CURRENT,12K,BACK-UP,TO 22K	552
112957	FUSE- 25K BACK UP CURRENT LIMI	624
112958	FUSE LINK,35KV,30A,TYPE K	50
112959	FUSE LINK,35KV,10A,TYPE K	100
112989	25KV BACK UP CURRENT LIMITING	120
113012	FUSE LINK,35KV,3A,TYPE K	240
113015	FUSE LINK,35KV,15A,TYPE K	112
113016	FUSE LINK,35KV,12A,TYPE K	100
113061	FUSE LINK,12KV,3A,TYPE T	200
113062	FUSE LINK, 12KV, 6A,TYPE T	10
113064	FUSE LINK, 12KV, 10A, TYPE T	20
113065	FUSE LINK, 12KV, 12A, TYPE T	200
113068	FUSE LINK, 12KV, 25A, TYPE T	130
113071	FUSE LINK, 12KV, 50A, TYPE T	10
113072	FUSE LINK, 12KV, 65A, TYPE T	10
113074	FUSE LINK, 12KV, 100A, TYPE T	200
113075	FUSE LINK,12KV,140A,TYPE T	325
133817	COVER,CONNECTOR,MASTIC,4X4X1/8 PADS	52

STORM KIT CONTENTS

Material	Material Description	Quantity
134160	SECONDARY SPREADER FOR 3/C TWI	500
134207	TAPE,INSULATING,1-1/2"X66', Wide 22	100
136512	UNIT,FIRST AID,PVP IODINE,TOPICAL ANTISE	120
136521	BARRICADE,SAFETY,28",PLASTIC, W/ LOGO	204
137256	NAIL,GALV,8D,RING SHANK	50
137266	NAIL,COPPER,8D	50
200139	LUG, COPPER PAD LUG FOR 4/0 Al.	250
200154	BRACKET,PIN,FIBERGLASS,POLETOP,15"	12.500
200409	WASHER, FLAT, 1/2", STAINLESS	2,600
200719	BOLT,HEX-HD,SS,1/2"X1&1/2"W/NT,TYPE 18-8	400
200720	BOLT,HEX-HD,SS,1/2"x2"W/HX NUT,TYPE 18-8	750
200819	INSLTR, SR, CLAMPTOP, 51-14, 200KV	378
201303	DEADEND GRIP FOR #4 COPPER, F NECK TYPE	300
202465	BRACKET,FIBERGLASS,INSULATOR,POST,14"	84
225800	REFERENCE SAP # 112475	15
231074	CONNECTOR, WEJTAP, AL.-600AAC/336.4AAC	195
231075	CONNECTOR, WEJTAP, AL.-600AAC TO 4/0AAAC	30
242893	RACK, MEDIUM DUTY CLUSTER	22
243037	GRIP, GUY, 3/8", ZINC-ALUMINUM	500
243039	GRIP, SLACK DE, AL ALLOY, #2, C-F NECK	63
243040	GRIP,SLACK DE, AL ALLOY,600AAC, C-F NECK	440
243041	GRIP,SLACK DE, AL ALLOY, 4/0, C-F NECK	55
243147	BOLT, EYE, 5/8" X 12', COASTAL	0.500
262896	CUTOUT, LINKBREAK, 15KV, 110KV BIL, 100A	4
290600	ARRESTER,SURGE,DIST,HD,10KV	30
290602	ARRESTER,SURGE,DIST,RP,10KV	5
290603	ARRESTER,SURGE,27KV,DIST,RISER POLE	40
290604	ARRESTER,SURGE,DIST,HD,27KV	22

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
15527AK4	200819	INSULATOR,VERT,POLY-SR,CLAMP-TOP POST	**N/A**
A06013 2	109254	INSLTR, PIN,1" HOLE,F-NECK,ANSI	**84**
A08001-02	102609	CROSSARM, D.E., GALV, 6' LONG	**58**
A08003	109271	BRACKET,INSULATOR POST 35KV(TURK	**630**
A08004	109285	BRACKET,VERTCL 30",PIN OR POS	**71**
A08005-06	109287	BRACKET-LARGE T-ARM-CUTOUT,THREE	**39**
A08007	102605	CROSSARM, DEAD ENDING, 4' GALV	**54**
A08009-10	109261	BRACKET, SMALL T-ARM	**25**
A09013	109370	BRACKET,VRTCL INSLTR 18"MLTPL	**82**
A09014 2	109293	RACK,HD,120DEG,3POSITION,H2 WO	**4**
A09016A-K	109240	INSLTR, PORC, POST, 57-2, F-NECK	**952**
A10002 2	110589	WASHER,SPRING,3/4"	**1,235**
A10007	110871	WASHER,CURVED,3"x3"x1/4"-3/4"	**618**
A10008	109171	INSLTR, PORC, CLAMPTOP, 57-13, 2	**35**
A10009	110896	HEAD,5/8"X14",C135.1 W/1	**494**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
A10010	110592	BOLT,STUD,3/4"X3&11/16" W/1HX NT	**525**
A10011 2	109295	RACK, MEDIUM DUTY CLUSTER	**10**
A10016	109185	INSULATOR,SPOOL,WHITE PORCELAIN,	**280**
A10017	109289	BRCKT-HEX NUT,FUSE MTGNG-14"	**154**
A10018	110895	BOLT,SQ-HEAD, 5/8"X12",C135.1,W/	**494**
A10019	108659	CLAMP,STIRRUP,AL,FOR 600 AAC OR	**280**
A10020	111103	PIN, POLE TOP, 1" HEAD, 18" LONG	**140**
A10021	109288	BRACKET "L" TYPE FOR MTGING AR	**280**
A10022	109369	BRACKET,VERTICAL,POST INSLTR 18"	**103**
A10023	109371	BRACKET,SNGL POST INSLTR	**93**
A10024	108891	STRAIN CLAMP, 600AAC, STRGHT L	**462**
A10026	109220	INSLTR, POLY, DE, DS46, CLVS-TNG	**462**
A10027	110658	BOLT,EYE,OVAL,5/8"X14" W/1 SQ NU	**28**
A10028	111244	SIDE TIE "F" NECK 600AAC CNDCTR	**210**
A10029	108657	CLAMP,STRRP #2-1/0 AAAC, ACSR	**107**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
A10030	109272	BRACKET,DOWN LEAD 18" LENGTH	**489**
A10032	111238	GRIP, GUY, 3/8"	**280**
A10034	110691	BOLT,STUD,3/4"X5&13/16' ' TO 6"	**140**
A10037	243040	GRIP, ALUMINIZED, FOR 600 MCM SLACK SPANS	**280**
A10038	111090	GUARD, GUY 8' LENGTH, PLASTIC	**210**
A20001-2	111100	MOULDING,PVC, 8'-10'X1"I.D. W/5/	**91**
A20008	111075	POLE EYE PLATE/GUY HOOK COMBINAT	**70**
A20009	112956	FUSE,LIMITING,CURRENT, 12K,BACK-U	**158**
A20010	109267	BRACKET,FIBERGLASS,CU TOUT/ARREST	**N/A**
A20023	134191	TAPE,INSULATING,3/4"X0. 085X66'	**1,260**
A20025	290603	ARRESTER,SURGE,27KV,DI ST,RISER P	**99**
A20026	133817	COVER,CONNECTOR,MAS TIC,4X4X1/8 P	**2,450**
A20030	110919	Helix Eye, ASSMBLY,TRIPLEYE GUYI	**34**
A30004	108671	CLAMP,SPRT TWIST SEC	**124**
A30005	112512	FUSE TUBE,KEARNEY,15KV,100A	**49**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
A30008	109292	RACK,HVY DTY,TRANSFMR,H2POLE 1	**3**
A30011	108890	STRAIN CLAMP,4/0-336AAC,STRGHT	**179**
A30016	109315	PLATE, ADAPTER, TRANSFORMER, TYP	**32**
A30017	290602	ARRESTER,SURGE,DIST,RP,10KV	**20**
A30018	242893	RACK, MEDIUM DUTY CLUSTER	**N/A**
A30027	109356	RACK,SEC 7 PT	**28**
A30028	108886	CLAMP, # 2 DE SHOE	**224**
A30033	111243	TIE,TOP LINE INSULATOR 600MCM	**112**
A40026	112475	CUTOUT, COASTAL, 15KV, 110KV BIL	**N/A**
A40028	108715	SPLICE,AUTO 4/0 AAAC,ACSR	**656**
A40037	110647	BOLT,EYE,OVAL,5/8"X12", W/1 SQ.NU	**28**
A50004	108293	CONNECTOR,TERMINAL,COMP,TAP,2STR	**280**
A50012	110894	HEAD,5/8"X10",C135.1,W/1	**147**
A50019	111246	TIE,TOP LINE INSULATOR #4/0AAA	**84**
A50026	110571	WASHER,CURVED,HVY,4" X4"X3/16"-3/	**56**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
A50027	108641	CONNECTOR,TERMINAL,COMP,PARAL TA	**567**
A50028	111107	PIN-STEEL 3/4"X 6 1/2" SHANK	**500**
A50029	111127	TIE,TOP FOR F NECK INSLTR&#2AA	**27**
A60/A70	225273	24" VERTICAL FIBERGLASS BRACKET	**N/A**
A60025	108308	CNCTR,COMP PRLL TAP,1/0-1/0	**560**
A60026	111097	LINK,FIGURE 8,7/8"X1&1/8"E,4&1/2	**14**
A60027	287239	BOLT,MACHINE, 5/8" X 20", COASTAL	**N/A**
A60028	287242	BOLT, DA, 3/4" X 20", COASTAL	**N/A**
A60029	287240	BOLT, DA, 3/4" X 18", COASTAL	**N/A**
A60030	242816	WASHER,SPRING,ZINC TREATED, 13/16"	**N/A**
A60031	242814	NUT,EYE,ZINC TREATED, 5/8"	**N/A**
A60032	243148	BOLT, EYE, 5/8" X 14", ZINC COATED	**N/A**
A60033	243147	BOLT, EYE, 5/8" X 12', ZINC COATED	**N/A**
A60034	243792	BOLT, D. A., 5/8" X 32", ZINC-TREAT	**N/A**
A60035	243145	BOLT, DA, 5/8" X 24", ZINC-TREATED	**N/A**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
A60036	242819	BOLT, MACHINE,ZINC-TREATED, 5/8" X 14"	**N/A**
A60037	242818	BOLT,MACHINE,ZINC-TREATED, 5/8" X 12"	**N/A**
A60038	202465	BRACKET,FIBERGLASS,INSULATOR,POST,14"	**N/A**
J37015E	108295	TAP,COMPRESSION,NO 2 COPPER - NO	**280**
J37017A	108514	CNCTR,COMP PRLL TAP,4/0-2,4,6SOL	**560**
J37017E	108294	CONNECTOR,TERMINAL,COMP,6-4STR,C	**238**
J37019A	108660	CLAMP,HL 6*1/0 CU	**126**
J37019H	108296	TAP,COMPRESSION FOR #2 CU-#8-#	**280**
J37021A	110897	HEAD,5/8"X16",C135.1 W/1	**288**
J37021E	109373	ADAPTER, MNTNG FOR CHNL STL CRS	**84**
J37023A	200139	LUG, COPPER PAD LUG FOR 4/0 Al.	**28**
J37023E	110807	SCREW,LAG,SQ-HEAD,1/2"X4"	**175**
J37025A	111229	GRIP,DE 1/0 AAC TWST SRVC DRP	**546**
J37027A	108612	ADAPTER/600 MCM ALUMINUM	**126**
J37029A	110577	WASHER,FLAT,2&1/4"X2&1/4"X3/16"-	**280**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J37029E	108640	SPLICE,TENSION,COMP,AL,600AAC	**1,050**
J37029H	108761	CONNECTORS - #8-2/0 SGL, CU, UNI	**40**
J37031A	108522	CONNECTOR,COMP,PARAL TAP,4/0STR	**560**
J37033A	108762	CONNECTORS - 3/0-500 SGL, CU, UN	**19**
J37033E	110576	WASHER,ROUND 1&3/8"OD-1/2"	**280**
J37035A	108628	SPLICE,COMPRESSION,JUMPER,600-60	**210**
J37035E	200409	WASHER, FLAT, 1/2", STAINLESS	**84**
J37037H	108675	CONNECTOR,TERMINAL,GROUND ROD,1/	**196**
J37039E	113064	FUSE LINK, 12KV, 10A, TYPE T	**104**
J37041H	113062	FUSE LINK, 12KV, 6A,TYPE T	**78**
J37043A	112957	FUSE- 25K BACK UP CURRENT LIMI	**73**
J37043E	113014	FUSE LINK, 35KV ,6A, TYPE K	**55**
J37045A	108768	CONNECTORS- 3/0-500 DBL, TIN, UN	**16**
J37047A	108756	CNCTR,PRLL 1000MCM CU	**18**
J37049A	108755	CONNECTOR,TERMINAL,TIN PLATED FO	**116**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J37049E	113072	FUSE LINK, 12KV, 65A, TYPE T	**76**
J37049H	108695	CNCTR,PRLL 400*500-10*500 CU	**7**
J37057E	113012	FUSE LINK,35KV,3A,TYPE K	**55**
J37061A	113071	FUSE LINK, 12KV, 50A, TYPE T	**78**
J37061E	108798	CONNECTORS-1000 DBL, CU, UNIV CA	**15**
J37065A	110898	HEAD,5/8"X18",C135.1 W/1	**124**
J37069E	113066	FUSE LINK, 12KV, 15A, TYPE T	**67**
J37071E	112949	FUSE LINK,35KV,50A,TYPE T	**77**
J37075E	112955	FUSE LINK,35KV,25A,TYPE K	**77**
J37075H	108763	CONNECTORS - 3/0-500 DBL, CU, UN	**13**
J37077H	110714	WASHER,BELLEVILLE,SS,1/2"BOLT	**252**
J37079A	111089	FORK,DE	**288**
J37079H	109088	CNCTR,INSLTD CMPRSN 4/0-4/0	**449**
J37081E	112948	FUSE LINK,35KV,40A,TYPE "T"	**73**
J37083A	109138	CNCTR,INSLTD CMPRSN 2-4	**280**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J37085A	109184	INSULATOR,SPOOL,BROWN PORCELAIN,	**32**
J37085E	112494	CAP, KEARNEY, 15KV & 35KV, 100A	**42**
J37087E	112950	FUSE LINK,35KV,65A,TYPE T	**73**
J40020A	110578	WASHER,FLAT, 4"X4"X3/16"-3/4"	**73**
J40022A	111235	GRIP,DE 500 CU PI	**34**
J40024A	112466	FUSE TUBE,STANDARD, 15KV,110KV B	**25**
J40024E	108767	CONNECTORS- 3/0-500 SGL, TIN, UN	**10**
J40024K	108316	TERM,CMPRSN 2 AL-CU	**56**
J40026A	113067	FUSE LINK, 12KV, 20A TYPE T	**78**
J40030K	108627	SPLICE,JUMPER,COMP,AL, 336 AAC-4/	**16**
J40034A	111126	GRIP,DEAD-END,FORMED FOR 336.4	**21**
J40034K	109386	HD,BRONZE,1/2"X2-1/2"W/	**74**
J40034M	112888	FUSE,REFILL -150E, SLOW FOR 35KV	**12**
J40036H	108613	SPLICE,COMPRESSION,NO 4,ALUM	**158**
J40042A	109142	CNCTR,INSLTD CMPRSN 1/0-4	**280**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J40046A	111226	GRIP,DE 4 AAC TWST SRVC DRP	**322**
J40046M	108506	TAP,COMPRESSION 4-6 Crimpitt	**112**
J40054A	112467	LINK BREAK FUSE, 35KV, 100 A	**25**
J40056A	108705	CONNECTOR,SOLDERLESS,2 #4 STRAND	**294**
J40064E	108676	CLAMP,AUTO DE 4 CU	**48**
J40070A	111234	GRIP,DE 4/0 CU PI	**38**
J40070E	111231	GRIP,DE 336 AAC	**62**
J40074E	112959	FUSE LINK,35KV,10A,TYPE K	**62**
J40074H	109147	CNCTR,INSLTD CMPRSN 1/0-1/0	**280**
J40076H	112989	25KV BACK UP CURRENT LIMITING	**75**
J40078E	113015	FUSE LINK,35KV,15A,TYPE K	**52**
J40080A	113061	FUSE LINK,12KV,3A,TYPE T	**150**
J40082A	134160	SECONDARY SPREADER FOR 3/C TWI	**105**
J40086A	108716	SPLICE,TENSION,AUTOMATIC 1/0-1/0	**487**
J40086K	112896	FUSE,REFILL 35KV 20E,FOR PWR F	**10**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J40088A	110581	BOLT,D-A,5/8"X22",C135.1 W/4 SQ.	**33**
J40088H	108646	SPLICE,TENSION,COMP,AL,2 ACSR,AA	**350**
J41017E	108881	AUTO SPLICE #2-#4 RANGE TAKING	**245**
J41019K	108702	CNCTR,T,PRLL,END,TAP,500*1000	**5**
J41023A	110927	CLEVIS,THIMBLE,5/8"P,2& 1/4"TMD,1	**29**
J41023E	108696	PARALLEL CONN,MAX 800R&T,MIN 4	**20**
J41025A	113068	FUSE LINK, 12KV, 25A, TYPE T	**90**
J41027A	113069	FUSE LINK, 12KV, 30A, TYPE T	**90**
J41029A	137263	STAPLES,WIRE,GALVANIZED,1-1/2"	**560**
J41031E	110583	WASHER,ROUND,FLAT,BRONZE,1/2"BOL	**112**
J41037H	108687	CLAMP, STRAIN SHOE, AUTO DE 4/0	**26**
J41039A	109037	4/0-1/0 CONNECTOR-COMPRESSION-5/	**56**
J41039K	110643	BOLT,HEX-HD,1/2"X2&1/4",A307 W/1	**56**
J41045A	113070	FUSE LINK, 12KV, 40A, TYPE T	**90**
J41045E	108289	CONNECTOR,TERMINAL,COMP,TAP,4-10	**280**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J41047A	109141	CNCTR,INSLTD CMPRSN 2-2	**249**
J41049A	112954	FUSE LINK,35KV,20A,TYPE K	**72**
J41049E	108706	CONNECTOR,SOLDERLESS,2#2 STR CU	**420**
J41059E	113063	FUSE LINK, 12KV, 8A, TYPE T	**103**
J41061E	108626	SPLICE,JMPR CMPRSN 336-336 AAC	**62**
J41063A	109136	CNCTR,INSLTD CMPRSN 4-4	**279**
J41069E	113073	FUSE LINK, 12KV, 80A, TYPE T	**90**
J41073A	109143	CNCTR,INSLTD CMPRSN 1/0-2	**280**
J41077E	108757	CLAMP,ANGL SSPNSN CLVS	**4**
J41079K	108719	SPLICE,AUTO 4 SOL CU	**11**
J41081A	113074	FUSE LINK, 12KV, 100A, TYPE T	**90**
J41087A	112952	FUSE LINK,35KV,100A, TYPE "T"	**56**
J44016E	112958	FUSE LINK,35KV,30A,TYPE K	**73**
J44018A	108713	SPLICE,AUTO 2 AAAC,ACSR	**175**
J44020E	108669	CLAMP,MSSNGR 127,154 ACSR,AW	**76**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J44032K	268690	CONNECTOR,WEJTAP,SB, 795 ACSR & 600 AAC	**14**
J44036A	110574	BOLT,D-A,5/8"X20",C135.1 W/4 SQ	**37**
J44038A	110290	BOLT,D-A,5/8"X 18",C135.1 W/4 SQ	**56**
J44042A	110620	BOLT,D-A,3/4"X30",C135.1 W/4 SQ.	**35**
J44044E	111094	HOOK,SRV GALVANIZED STL W/GIML	**308**
J44054A	110636	BOLT,EYE,OVAL,5/8"X10" W.1 SQ NU	**28**
J44054E	108709	CONNECTOR,SOLDERLES S,2#4/0 STRAN	**546**
J44056A	108658	STIRRUP,AL 4/0 ACSR,4/0AAC,HOT	**45**
J44070H	109107	CNCTR,INSLTD CMPRSN 4-6	**238**
J44072A	111225	GRIP,DE 4 AAAC	**406**
J44072H	108508	CONNECTOR,COMP,PARA L TAP	**560**
J44078A	112947	FUSE LINK,35KV,30A,TYPE T	**128**
J44080A	110612	BOLT,D-A,3/4"X26",C135.1 W/4 SQ.	**36**
J44082E	287234	BOLT,MACHINE, 5/8" X 18", COASTAL	**N/A**
J44086A	111228	GRIP,DE 1/0 ACSR,AAAC	**113**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J44088H	268115	CONNECTORS, SB, WEDGETAP, MED 600-600	**210**
J45019E	109033	CNCTR,INSLTD CMPRSN 4-10	**56**
J45021A	109409	NUT,EYE,5/8",C135.5,.13.5K	**173**
J45027A	110586	WASHER,SPRING,3/8"	**53**
J45039M	268687	600-336 & 4/0 (replaces #231074 & 231075)	**26**
J45047E	108661	HOT LINE CLAMP, #6-400 TO #6-4	**14**
J45049E	108648	SPLICE,TENSION,COMP,AL,4/0 ACSR,	**59**
J45057A	112951	FUSE LINK,35KV,80A,TYPE T	**77**
J45057E	113065	FUSE LINK, 12KV, 12A, TYPE T	**146**
J45059A	108797	CONNECTORS-1000 DBL, TIN PLATE,	**9**
J45061E	268691	CONNECTOR,WEJTAP,SB, 4/0 RUN & TAP	**14**
J45063A	110669	BOLT,EYE,OVAL,5/8"X16" W/1 SQ NU	**28**
J45083E	108766	CONNECTORS - #8-2/0 DBL, TIN, UN	**17**
J48016A	108663	CNCTR,STRRP HL 6,4,2 CU	**19**
J48018A	108315	CONNECTOR,COMP,4 STR,LUG,TERMINA	**42**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J48020M	108647	SPLICE,TENSION,COMP,AL,1/0 ACSR,	**280**
J48026A	164007	BRACKET,FIBERGLASS-SINGLE PHASE,30"	**N/A**
J48038K	108707	CONNECTOR,SOLDERLESS,2#1/0 STRAN	**420**
J48044M	112889	FUSE,REFILL 35KV 200E,FOR PWR	**11**
J48056A	110591	BOLT,D-A,5/8"X24",C135.1 W/4 SQ	**124**
J48064A	108639	SPLICE,TENSION,COMP,AL,336AAC	**105**
J48072M	112895	FUSE,REFILL 35KV 3K,FOR PWR FUSE	**9**
J48074A	111239	GRIP,WIRE,GUY,1/2" EHS	**28**
J49017M	109075	CNCTR,INSLTD CMPRSN 4-8	**56**
J49021H	108704	CONNECTOR,SOLDERLESS, 2 #6 SOLID	**560**
J49025H	108718	SPLICE,AUTO 4 SOL CU	**11**
J49033M	111233	GRIP, DE 1/0 CU PI	**38**
J49035A	290599	ARRESTER,SURGE,10KV,DIST,HD,COASTAL	**N/A**
J49039M	108786	SPLICE,AUTO 600MCM AAC	**280**
J49049H	108614	SPLICE-COMPRESSION-AL-NO 2	**210**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J49059H	287254	BOLT, DA, 3/4" X 26", COASTAL	**N/A**
J49061A	109189	INSULATOR,HOUSE, KNOB	**266**
J49069M	262481	BOLT,STUD,3/4"X3&3/8" W/1HX NT&2S,WSHR	**N/A**
J49087E	111071	COUPLING,FOR 1/2" CU THREADLESS	**77**
J52052K	285393	#4, C-F NECK (Can use SAP# 111225 in EOP)	**N/A**
J52054K	285395	1/0, C-F NECK (Can use SAP# 1112285 in EOP)	**N/A**
J52056K	285397	336.4, C-F NECK (Can use SAP# 111231 in EOP)	**N/A**
J52062A	287255	BOLT,MACHINE, 3/4" X 14", COASTAL	**N/A**
J52064A	287256	BOLT,MACHINE, 3/4" X 18", COASTAL	**N/A**
J52068H	111216	DEAD END GRIP, #4 CU STR	**112**
J52068K	111212	DEAD END GRIP, #6 CU SOL	**112**
J52070H	158410	ALUMINUM DEAD-END FORK	**N/A**
J52070K	201303	DEADEND GRIP FOR #4 COPPER, F NECK TYPE	**112**
J52074K	242815	WASHER, ZINC TREATED, 2" X 2"	**N/A**
J52076K	242817	WASHER,CURVE,ZINC-TREATED, 3" X 3"	**N/A**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J52078K	243037	GRIP, GUY, 3/8", ZINC-ALUMINUM	N/A
J52080H	243039	GRIP,ALUMINIZED,FOR #2 AAAC SLACK SPANS	336
J52082D	268327	BOLT,MACHINE, 5/8" X 10", COASTAL	N/A
J52082H	243146	BOLT, MACHINE, 5/8" X 16", ZINC TREATED	N/A
J52086D	287253	BOLT, DA, 3/4" X 24", COASTAL	N/A
J52086K	243041	GRIP,ALUMINIZED,FOR 4/0 AAAC SLACK SPANS	84
J52088D	287243	BOLT, DA, 3/4" X 22", COASTAL	N/A
J55021E1	200411	WASHER, SPLIT-LOCK,SS,1/2"BOLT	56
J55029F4	113016	FUSE LINK,35KV,12A,TYPE K	63
J55041E2	112464	CAP, CUTOUT,15KV	56
J55049A3	108317	LUG,COMP,1/0 AL-CU,9/16"HOLE	42
J55049C4	112465	CAP,FUSE, CUTOUT CAP ,FUSE TUBE	56
J55049E1	286053	FUSE LINK, 35KV, 40A, TYPE K	N/A
J56046D4	113075	FUSE LINK,12KV,140A,TYPE T	67
J56058F3	108678	CLAMP,AUTO DE 2 CU	29

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
J56070F1	108667	CLAMP,DE SERV 6 CU	**76**
M15501	108645	SPLICE,TENSION,COMP,AL,4 ACSR,AA	**280**
M17521	250048	INSLTR, SR, POST, 51-4F, F-NECK, 200KV	**N/A**
M18007 4	262896	CUTOUT, LINKBREAK, 15KV, 110KV B	**350**
M18015 2	290600	ARRESTER,SURGE,DIST,HD,10KV	**412**
M18023 2	290604	ARRESTER,SURGE,DIST,HD,27KV	**84**
M18027 4	112432	CUTOUT, LINKBREAK, 35KV, 150KV B	**66**
W10 009 2	111109	ANCHOR,SCREW MULTI HELIX, 7'	**34**
W10015A	109347	BRACKET,SM.T-ARM,FIBERGLASS (32-100)	**N/A**
W20 002	109255	INSULATOR, GUY STRAIN, 15000LB	**252**
W50 001	111095	ANCHOR,SCREW 10" DIA.	**42**
W50 013A	262263	CROSSARM, FIBERGLASS, 8' SD BRACELESS	**N/A**
W70 015	259821	INSULATOR, GUY, 21000 LB	**N/A**
Y99289B	111069	ROD,CU CLAD GRND, 1/2 "X 8',THRE	**111**
YARD FENCE	109275	BRACKET,VERTCL 24",PIN OR POS	**210**

UPDATED STORM KIT CONTENTS

Storage Bin	Mtl #	Mtl Desc	Mainland Kit Qty
YARD FENCE	111111	ROD,EXTNSN 1&1/2"SQX5'	28

WORKPAPERS
TO
DIRECT TESTIMONY
OF
DEREK HASBROUCK

Workpapers to the Direct Testimony of Derek HasBrouck are voluminous and will be provided in electronic format.

STATE OF NEW HAMPSHIRE §
§
COUNTY OF ROCKINGHAM §

AFFIDAVIT OF DEREK HASBROUCK

BEFORE ME, the undersigned authority, on this day personally appeared Derek HasBrouck, who having been placed under oath by me did depose as follows:

1. "My name is Derek HasBrouck and my current position is Partner in the Energy and Utilities Practice at PA Consulting Group, Inc.

2. "I am of sound mind and capable of making this affidavit. The facts stated herein are true and correct based on my personal knowledge."

3. "I have prepared the foregoing direct testimony, and the information contained in this document is true and correct to the best of my knowledge."

Further affiant sayeth not.

Derek HasBrouck

SUBSCRIBED AND SWORN TO BEFORE ME by the said Derek HasBrouck on this 24th day of April 2025.

Notary Public, State of NH

My commission expires: 12.21.27

Cathleen Mittelsteadt
Notary Public, State of New Hampshire
My Commission Expires 12/21/2027

DIRECT TESTIMONY

OF

THOMAS L. KEEFE

CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC

APPLICATION OF CENTERPOINT ENERGY HOUSTON ELECTRIC, LLC FOR DETERMINATION OF SYSTEM RESTORATION COSTS

DIRECT TESTIMONY OF THOMAS L. KEEFE

TABLE OF CONTENTS

EXHIBIT LIST

I. INTRODUCTION

Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Thomas L. Keefe. My Houston office is located at 1111 Bagby Street, Houston, Texas 77002.

Q2. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am an audit and assurance partner at Deloitte & Touche LLP ("D&T"), which is a firm of independent public accountants.

Q3. WHY ARE YOU PROVIDING TESTIMONY IN THIS DOCKET?

A. I am providing fact-based direct testimony concerning the assertion-based examination procedures performed by D&T regarding the CenterPoint Energy Houston Electric, LLC ("CenterPoint Houston" or the "Company") Summary of Storm Costs Report in accordance with Texas Administrative Code, Title 16–Economic Regulation, Part 2–Public Utility Commission of Texas, Chapter 22–Procedural Rules, Subchapter L–Evidence and Exhibits in Contested Cases, Rule §22.225–Written Testimony and Accompanying Exhibits, (a) (1).

Q4. PLEASE PROVIDE YOUR BACKGROUND AND EXPERIENCE IN THE PUBLIC UTILITY INDUSTRY.

A. I have spent 34 years as an auditor with D&T, the last 22 years as a partner. For nearly that entire time, I have participated in or led the financial statement audits of a number of D&T's energy and resources engagements, which include regulated utility entities, including entities such as WEC Energy Group, NiSource Inc., Columbia Pipeline Group, Entergy Corporation, and Berkshire Hathaway Energy. I currently serve as the audit partner on the financial statement audit of the

Company, and I am the National Sector Leader for Power, Utility, and Renewables at D&T.

Q5. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE PUBLIC UTILITY COMMISSION OF TEXAS ("COMMISSION")?

A. Yes. I have filed testimony with the Commission in Docket No. 57271.

Q6. ARE YOU A CERTIFIED PUBLIC ACCOUNTANT?

A. Yes. I am a certified public accountant licensed in several states including Texas.

Q7. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I hold a Bachelor of Business Administration in Accounting from the University of Notre Dame, which I received in 1990.

II. PURPOSE OF TESTIMONY

Q8. WHAT SERVICE WAS D&T ENGAGED TO PERFORM?

A. CenterPoint Houston engaged D&T to perform an assertion-based examination engagement in accordance with Statements on Standards for Attestation Engagements ("SSAEs" or "attestation standards") No. 21 established by the American Institute of Certified Public Accountants ("AICPA") on the Summary of Storm Costs Report for the Company herein after referred to as an "examination engagement".

Q9. WHAT IS THE PURPOSE OF D&T'S EXAMINATION ENGAGEMENT?

A. The purpose of D&T's examination engagement was to express an opinion about whether management's assertion that $1,167,212,959 of system restoration costs (the "System Restoration Costs") were incurred by the Company during the period from July 8, 2024, through March 31, 2025, (the "Eligible Period") in connection

with Hurricane Beryl that caused extensive damage in the Houston area in July 2024, Hurricane Francine in September 2024, and Winter Storm Enzo in January 2025, and the System Restoration Costs meet the System Restoration Costs Criteria described in Note 1 of the Summary of Storm Costs Report (collectively, "Management's Assertion") is fairly stated, in all material respects.

Q10. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of this testimony is to:

1. explain the purpose of an examination engagement;
2. describe the Professional Standards that govern CPAs in the performance of Attestation-Based Examinations;
3. provide a general description of the scope of the procedures performed to support our Report; and
4. provide a general summary of the results of our procedures.

Q11. PLEASE DESCRIBE THE SUMMARY OF STORM COSTS REPORT.

A. CenterPoint Houston management has prepared and is responsible for the Summary of Storm Costs Report. The Summary of Storm Costs Report states the System Restoration Costs incurred from July 8, 2024, through March 31, 2025, by CenterPoint Houston are a result of Hurricane Beryl, Hurricane Francine, and Winter Storm Enzo. Because CenterPoint Energy Service Company, LLC ("Service Company") provides centralized support services to CenterPoint Houston, Service Company managed and coordinated the preparation of the Summary of Storm Costs Report for the Company.

The Summary of Storm Costs Report is a summary report that includes both data and narrative information to describe the Company's efforts and expenses incurred to restore its storm-damaged transmission and distribution facilities to operating condition after Hurricane Beryl, in preparation for Hurricane Francine, and in preparation for and during Winter Storm Enzo. CenterPoint Houston's management asserts that $1,167,212,959 of System Restoration Costs were incurred by the Company during the period from July 8, 2024, through March 31, 2025, in connection with Hurricane Beryl, Hurricane Francine, and Winter Storm Enzo.

Q12. WHAT WAS THE SCOPE OF D&T'S EXAMINATION ENGAGEMENT PROCEDURES?

A. The overall purpose of D&T's procedures was to express an opinion in a written report about whether Management's Assertion is fairly stated, in all material respects.

Our examination was conducted in accordance with attestation standards established by the AICPA. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether Management's Assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about Management's Assertion. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of Management's Assertion, whether due to fraud or error.

III. EXPLANATION OF AN ATTESTATION-BASED EXAMINATION

Q13. WHAT IS AN ATTESTATION-BASED EXAMINATION?

A. In an Attestation-Based Examination, the persons conducting the engagement obtain reasonable assurance by obtaining sufficient appropriate evidence about the measurement or evaluation of subject matter against criteria in order to be able to draw reasonable conclusions on which to base the opinion about whether the subject matter is in accordance with (or based on) the criteria or the assertion is fairly stated, in all material respects.

In this instance, the written assertion by CenterPoint Houston is that the $1,167,212,959 of System Restoration Costs were incurred by the Company during the period from July 8, 2024, through March 31, 2025, in connection with the preparation and restoration efforts related to Hurricane Beryl, Hurricane Francine, and Winter Storm Enzo.

In simplified terms, the persons conducting an Attestation-Based Examination seek to obtain reasonable assurance regarding the relevant subject matter, in this case Management's Assertion. This is accomplished by obtaining sufficient appropriate evidence about the relevant subject matter to draw a conclusion on which to base an opinion about whether Management's Assertion is fairly stated, in all material respects.

The AICPA established the attestation standards which provide requirements and application guidance for performing and reporting on examination engagements. In all services provided under the attestation standards, practitioners are responsible for having the appropriate competence and capabilities