

1 described in more detail in the Distribution Capital Additions section of my
2 testimony, and the DMS and OMS component of the AMS project.⁵ That more
3 granular and robust data is modeled in simulations to forecast where
4 sectionalization can be most effective. Moreover, all of the new distribution
5 devices that are installed as part of DA sectionalization projects have new,
6 modern controls and equipment that are connected to a communications network
7 for enhanced visibility and remote control. Those projects also utilize multiple
8 ALT devices and configurations that should improve the effectiveness of
9 sectionalization – i.e., fewer customers affected when outages do occur. Since
10 2019, ETI has installed 45 new reclosers as part of ALT schemes, resulting in
11 8,125 avoided customer interruptions over the 2020 through 2021 time period.

12 The existing ALTs also require annual inspections and maintenance to
13 ensure they are functioning as designed. One critical maintenance activity is
14 verifying that the battery is in good working condition and replacing it if
15 warranted.

16 The actual spending for the Sectionalization category for 2017 through
17 2021 (capital and O&M) is shown in Exhibit MLT-2. The Company has
18 significantly increased spending on the Sectionalization program between 2017
19 and 2020, and in 2021 the Sectionalization work was largely incorporated into the

⁵ DMS and OMS are part of a software system that integrates real-time networked field devices and AMI data with a geospatial information system (“GIS”). This system provides more efficient and intelligent energy grid operations and improves situational awareness for operators. Networked field devices include: automated feeder switches, reclosers, capacitors, and voltage regulators. This technology has the ability to manage and shift load, identify faults, and improve response time, thereby shortening the overall duration of outages.

1 FLIP program.

2

3 Q41. PLEASE DESCRIBE THE FEEDER LEVEL INVESTMENT PROGRAM
4 (FLIP) THAT YOU MENTIONED EARLIER.

5 A. FLIP is a multi-year initiative for proactive investments intended to make long-
6 term improvements to reliability performance, as measured by SAIFI and SAIDI,
7 through infrastructure replacement, reconfiguration, and adding communicating
8 devices. Importantly, FLIP analyzes the potential for investments on the entire
9 feeder and the associated reliability improvements that may be achieved by
10 proactively replacing or reconfiguring aging infrastructure and adding
11 communicating devices, as identified through an eight-step stage gate process.
12 This type of investment is expected to prevent outages before they occur as well
13 as reduce the number and duration of outages that do occur relative to the entire
14 feeder in contrast to the traditional, strategic reliability projects that are largely
15 targeted at preventing outages from reoccurring on specific devices and line
16 segments.

17 ETI's FLIP activities included eight feeders in 2021 and will include nine
18 feeders in 2022. The actual spending for the FLIP category (capital and O&M) is
19 shown in Exhibit MLT-2.

1

C. Reliability Spending Trend

2

Q42. WHAT HAS BEEN THE TREND IN ETI'S ROUTINE DISTRIBUTION RELIABILITY SPENDING?

3

4

A. Figure 10 shows ETI's routine distribution reliability spending, excluding vegetation management, from 2017 through 2021. As shown in Figure 10, routine spending on reliability has increased substantially from 2017 to 2021.

5

6

7

**Routine Reliability Spending 2017-2021
(Capital and O&M)**

8

2017	2018	2019	2020	2021
\$16,280,484	\$28,556,934	\$31,698,745	\$64,877,597	\$91,729,959

9

Figure 10

10

D. Vegetation Management

11

Q43. PLEASE DESCRIBE ETI'S DISTRIBUTION LINE VEGETATION MANAGEMENT.

12

13

A. ETI's distribution line vegetation management consists primarily of three components: (1) a cycle-based proactive element; (2) a reactive, customer-driven component; and (3) a hazard tree component.

14

15

16

17

Q44. HAS THE COMPANY MADE IMPROVEMENTS TO VEGETATION MANAGEMENT?

18

19

A. Yes. In 2020, ETI implemented an artificial intelligence model ("Cycle Trim Model") to optimize its cycle trim plan for the year. The new Cycle Trim Model utilizes artificial intelligence to predict the best time to trim any particular feeder by projecting vegetation growth based on data provided to the model. The data

20

21

22

1 provided to the model includes location, historical outage data, species growth
2 study, species composition, historical trim data, clearance at trim, and historical
3 weather data (temperature and precipitation). Utilizing the data provided, the
4 Cycle Trim Model leverages the information to predict future vegetation growth
5 and then creates a recommended trim cycle by month and year. Once the results
6 are received, ETI performs visual inspections to validate the Cycle Trim Model's
7 recommended trim plan. The results of the visual inspections (agree or disagree
8 with recommendation) are fed back into the Cycle Trim Model, which then
9 "learns" from the feedback and makes improvements to its trim cycle
10 recommendations in the future.

11

12 Q45. WHAT IS THE AVERAGE TRIM CYCLE?

13 A. Different feeders have different trimming requirements because certain species of
14 vegetation grow more quickly than others, soil types and rain patterns differ from
15 one area to another, tree densities along a feeder vary, and other variations exist
16 from feeder to feeder. Because of these differences, the cycle time between
17 trimmings is based on the needs of the individual circuit. With that caveat, the
18 average target cycle time is approximately 4.5 years. For years 2012 through
19 2021, the Company trimmed approximately 21,100 distribution line miles in
20 Texas, an average of approximately 2,100 line miles per year.

1 Q46. WHAT IS THE REACTIVE COMPONENT OF THE COMPANY'S
2 VEGETATION MANAGEMENT?

3 A. ETI incurs a certain amount of reactive, unplanned, trimming costs each year,
4 which are primarily driven by customer-initiated requests and are incurred
5 throughout the year on all circuits, not just those that may be in the current cycle
6 trim plan.

7

8 Q47. PLEASE EXPLAIN THE HAZARD TREE COMPONENT.

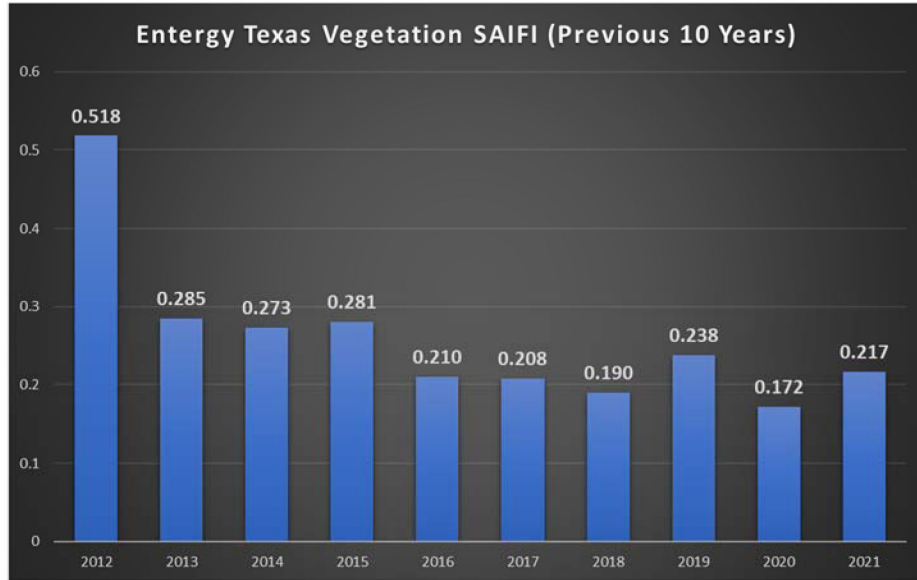
9 A. ETI's hazard tree initiative targets trees outside of the Company's ROW, which
10 have been identified as being structurally unsound and that pose a risk of striking
11 the Company's distribution lines if they were to fall. They are removed in
12 coordination with, and by permission of, the owners of the property on which the
13 trees are located.

14

15 Q48. PLEASE SUMMARIZE THE EFFECTIVENESS OF THE COMPANY'S
16 VEGETATION MANAGEMENT PROGRAM.

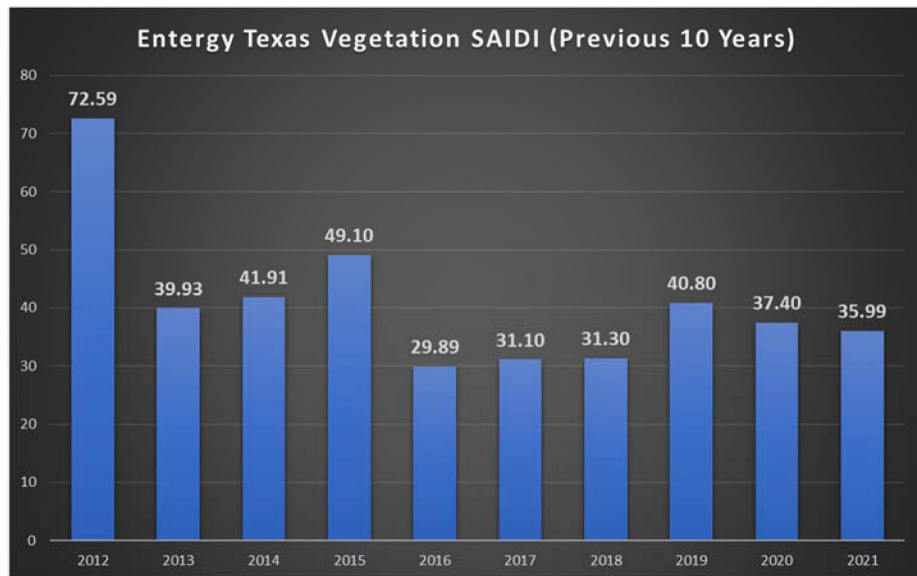
17 A. The effectiveness of the Company's vegetation management program is most
18 clearly demonstrated using the industry-standard reliability indices SAIFI and
19 SAIDI, calculated for customer interruptions caused by vegetation contact from
20 overhanging limbs, tree failure from outside the ROW, and tree growth into
21 conductors. The Company's distribution line vegetation-caused SAIFI over the
22 calendar years 2012 to 2021 is shown in Figure 11 below. As demonstrated in
23 Figure 11, the Company's average vegetation SAIFI generally trended down

1 through 2018 and then has remained around 0.2, with a slight uptick in 2019 and
2 2021 due to an increase in inclement weather.



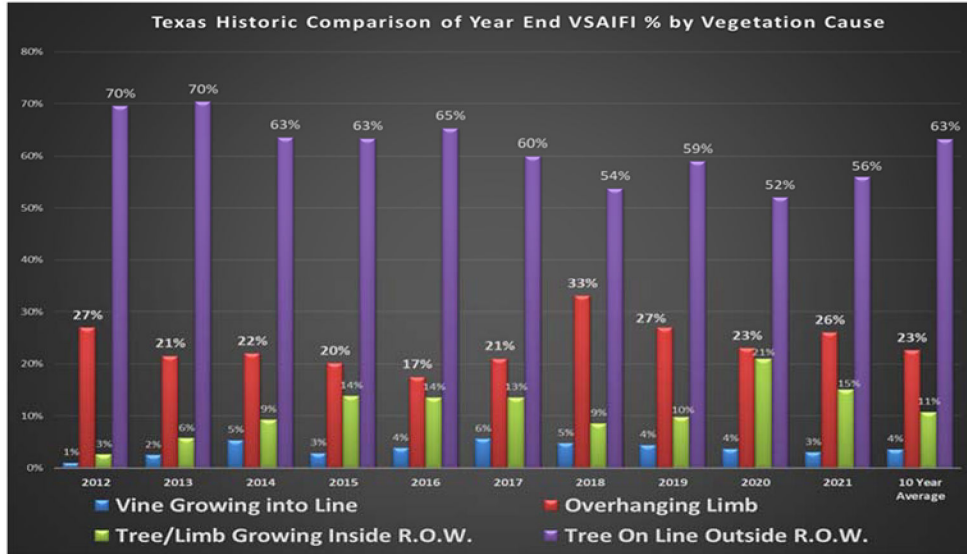
3 **Figure 11**

4 As shown in Figure 12, below, ETI's average vegetation SAIDI has also trended
5 down over the last decade, again with a slight uptick in 2019 due to increased
6 inclement weather and an increase in damages from outside of the ROW trees.



7 **Figure 12**

1 The largest driver of vegetation-caused outages is from tree contact from outside
2 the ROW and overhanging limbs outside of trimming specifications, which are
3 responsible for 86% of vegetation-caused outages over the last 10 years, as shown
4 in Figure 13, below.



5 **Figure 13**

6 Q49. WHAT IS ETI DOING TO ADDRESS VEGETATION GROWING OUTSIDE
7 THE ROW?

8 A. ETI routinely conducts danger tree patrols on circuits that have a historically
9 significant number of vegetation-caused outages. The patrols identify trees
10 outside of the ROW that pose a contact risk (i.e., “danger trees”). Danger trees
11 that are identified as a result of that effort are scheduled to be removed. In
12 addition, ETI has increased patrols of additional circuits identified by vegetation
13 management personnel in coordination with the Networks where large outside the
14 ROW outages have occurred. ETI also retains a contract forester in the East
15 Region, who is performing danger tree patrols in that area where forestation is

1 dense. Finally, danger tree tickets are created with each trim cycle, and crews are
2 identifying and removing trees on those circuits as cycle-based trimming
3 continues.

4

5

E. Storm Preparation and Management

6

1. Overview

7

Q50. PLEASE ADDRESS THE COMPANY'S PREPARATION AND INCIDENT
8 RESPONSE PLANS FOR THE DISTRIBUTION SYSTEM FOR SEVERE
9 WEATHER.

10

A. First, ETI prepares for major threats by designing and maintaining its system to
11 reduce the impact of severe weather events, and it maintains seasonal preparation
12 for summer and winter readiness procedures that are conducted to maintain the
13 optimal state of the distribution equipment during those seasons. Second, ETI
14 maintains and practices emergency and incident response guidelines and
15 operational strategies to address environmental and operational threats. Third,
16 ETI executes its comprehensive preparedness and response plan to ensure timely
17 and efficient restoration following an event.

18

19

20

21

Entergy is the only utility in the nation to have won EEI emergency
awards every year they have been offered since 1998, including in 2021, totaling
42 awards overall. The awards honor companies for exemplary efforts to restore
electric power interrupted by extreme weather conditions or other natural events.

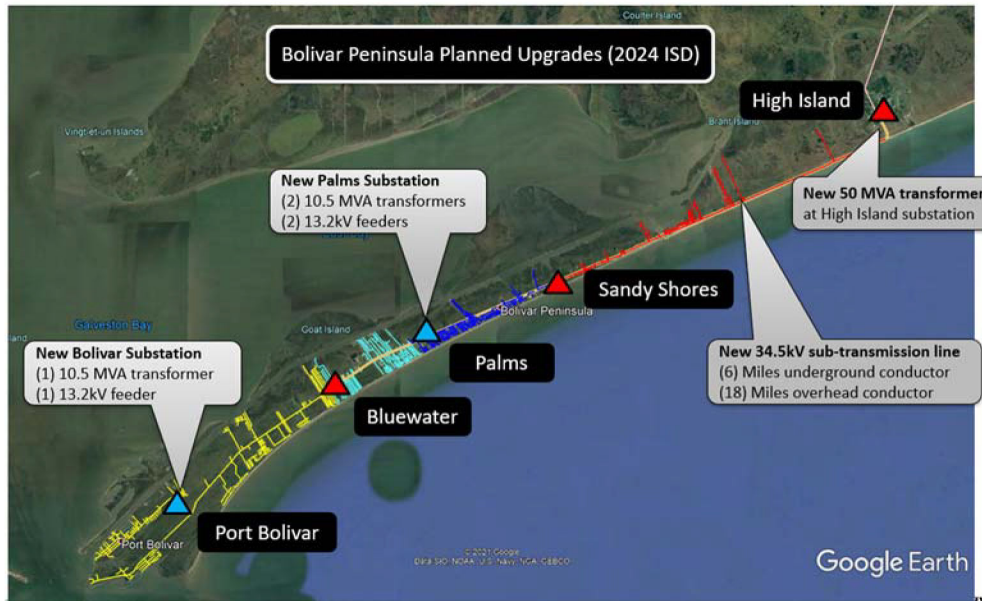
1 Q51. PLEASE EXPLAIN HOW ETI DESIGNS AND MAINTAINS ITS
2 DISTRIBUTION SYSTEM TO REDUCE THE IMPACT OF SEVERE
3 WEATHER EVENTS.

4 A. ETI engages in numerous resiliency, sometimes referred to as storm hardening,
5 efforts. For example, in 2021, ETI began an effort to enhance distribution design
6 guidelines with an additional focus on hardening distribution structures to be
7 more resilient during adverse weather conditions (e.g., larger diameter poles and
8 enhanced framing). The design guideline changes are still being finalized but
9 generally include more robust pole design guidelines to incorporate extreme wind
10 loading beyond NESC requirements. Other examples of storm hardening efforts
11 include:

- 12 • Full excavation of a statistically significant sample of distribution poles
13 and treatment or replacement of poles lacking satisfactory structural
14 integrity with new poles that comply with current Company standards.
- 15 • Performing targeted reliability work (e.g., replacing insulators; installing
16 new wood or composite cross arms; and improving the facilities' BIL,
17 which enhances distribution facilities' ability to withstand lightning, by
18 installing lightning mitigation devices) on feeder lines that serve critical
19 customers, large numbers of customers, or that historically have been
20 more vulnerable to lightning-related outages.
- 21 • Grid sectionalization and automation (e.g., installing additional reclosers
22 and fault indicators).
- 23 • Reconfiguring circuits in a manner that eliminates or reduces portions of
24 the overhead infrastructure, which optimizes the circuit path and reduces
25 exposure to storm damage.

26 An example of ETI's focus on resiliency is the planning that occurred in
27 2021 for undergrounding a portion of a new 35kV source to feed customers at the
28 Bolivar Peninsula. This will result in two sources feeding the Bolivar Peninsular,

1 which will provide redundancy during adverse weather conditions and increased
2 reliability for customers. See Figure 14 below.



3 **Figure 14**

4 Q52. PLEASE DESCRIBE THE INCIDENT RESPONSE PLANS.

5 A. The Entergy Operating Companies (“EOCs”),⁶ including ETI, have industry-
6 recognized incident response plans for when a catastrophic event occurs. These
7 comprehensive plans include a detailed incident management organizational
8 structure; personnel assignments; timelines; checklists; evacuation plans;
9 communication plans; and resource and logistics plans, including mutual
10 assistance, damage assessment, and operational restoration plans. The EOCs have
11 implemented these plans on many occasions both within the Entergy⁷ system and

⁶ The five Entergy Operating Companies are EAL; Entergy Louisiana, LLC (“ELL”); Entergy Mississippi, LLC (“EML”); Entergy New Orleans, LLC (“ENO”); and ETI.

⁷ For convenience, I use the term “Entergy” to refer individually and collectively to Entergy Corporation and its affiliates, including but not limited to ESL and the EOCs.

1 on other utility systems for which the EOCs assist in restoration. To ensure the
2 Company is prepared to implement the plan effectively when required, it conducts
3 annual storm drills to test the plans and prepare personnel for a response. While
4 the Company has an overall incident response plan and organizational structure,
5 each Entergy Business Unit also has additional and more specific response plans
6 utilized to respond safety and as efficiently as possible. ETI filed its Emergency
7 Operations Plan with the Commission in Project No. 53385 pursuant to 16 TAC
8 § 25.53 – Electric Service Emergency Operations Plans.

9
10 Q53. PLEASE DESCRIBE THE STORM DRILLS.

11 A. The EOCs, as a group, conduct annual drills to test their emergency procedures
12 and responses. The Incident Response department develops and then conducts
13 drills tailored specifically to the characteristics of the Entergy system and the
14 EOCs' service territories. From these drills, along with real events, Entergy
15 assesses its performance and adjusts its outage response plans accordingly. The
16 purpose of these drills is to test each EOC's ability to:

- 17 • provide effective advance warning of a pending natural disaster;
- 18 • act quickly and decisively to safely restore power under different scenarios
19 in the most effective manner;
- 20 • act decisively to establish control of vital communications systems;
- 21 • present credible and timely communications to all customers; federal,
22 state, and local officials, public safety agencies, and emergency and
23 disaster preparedness agencies; hospitals; private relief organizations; and
24 print, radio, and TV news outlets;
- 25 • be responsive to customer and public expectations;

- 1 • continually improve the integration of all parts of the emergency response
2 plan; and
- 3 • ensure that restoration plans and equipment are in good working order and
4 are up to date.

5

6 **2. Hurricanes Laura and Delta Example of Incident Response Plan Execution**
7 **and Storm Restoration**

8 Q54. PLEASE SUMMARIZE THE IMPACT OF HURRICANES LAURA AND
9 DELTA IN 2020 AND THE CHALLENGES ASSOCIATED WITH
10 RESTORING POWER.

11 A. Hurricane Laura was a Category 4 hurricane that made landfall near peak
12 intensity on August 27, 2020 at Cameron, Louisiana. It was the strongest
13 hurricane on record to make landfall in Louisiana and caused massive damage
14 across southwestern Louisiana and southeastern Texas. Six weeks after Hurricane
15 Laura, Hurricane Delta made landfall on October 9, 2020 as a Category 2
16 hurricane near Creole, Louisiana (just 12 miles east of Cameron, Louisiana), also
17 causing significant damage across southwestern Louisiana and southeastern
18 Texas.

19 Outages and restoration efforts following Hurricane Laura were
20 predominantly confined to the distribution networks in the ETI East Region boxed
21 in the dashed black below in Figure 15. Ultimately all restoration efforts were
22 consolidated to the networks serving Jefferson, Orange, and Hardin Counties as
23 shown boxed in red below. There are approximately 227,000 customers in this
24 area, and 53% had outages in the wake of Hurricane Laura.

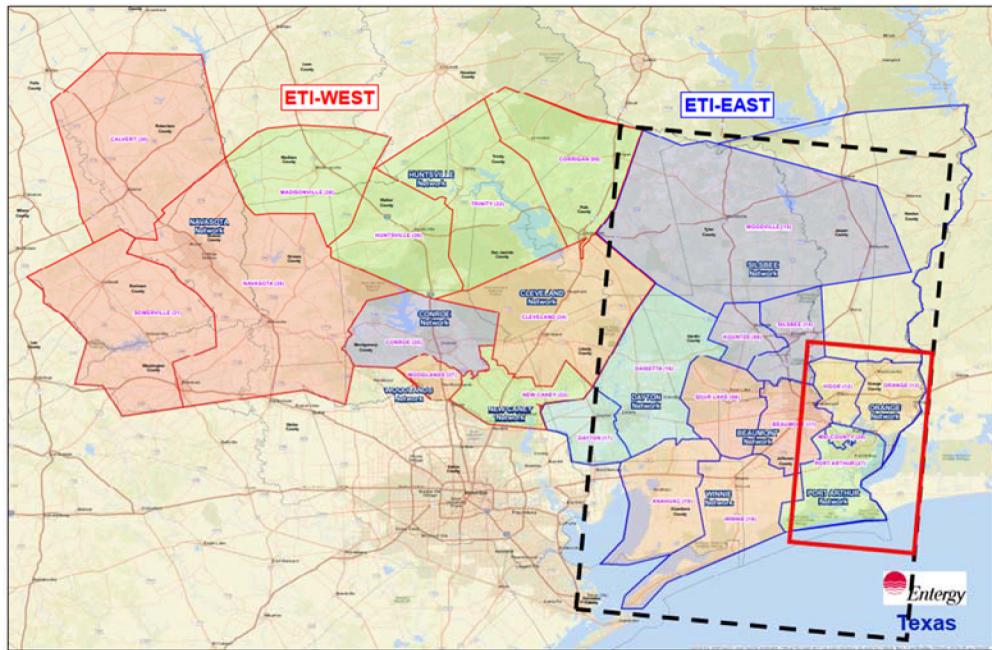


Figure 15

1
2
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6

Outages and restoration efforts following Hurricane Delta were predominantly confined to the ETI East Region Networks serving Jefferson, Orange, and Hardin Counties, as shown in the highlighted area in the red box in Figure 16 below. There are approximately 181,000 customers in this area, and 55% had outages in the wake of Hurricane Delta.

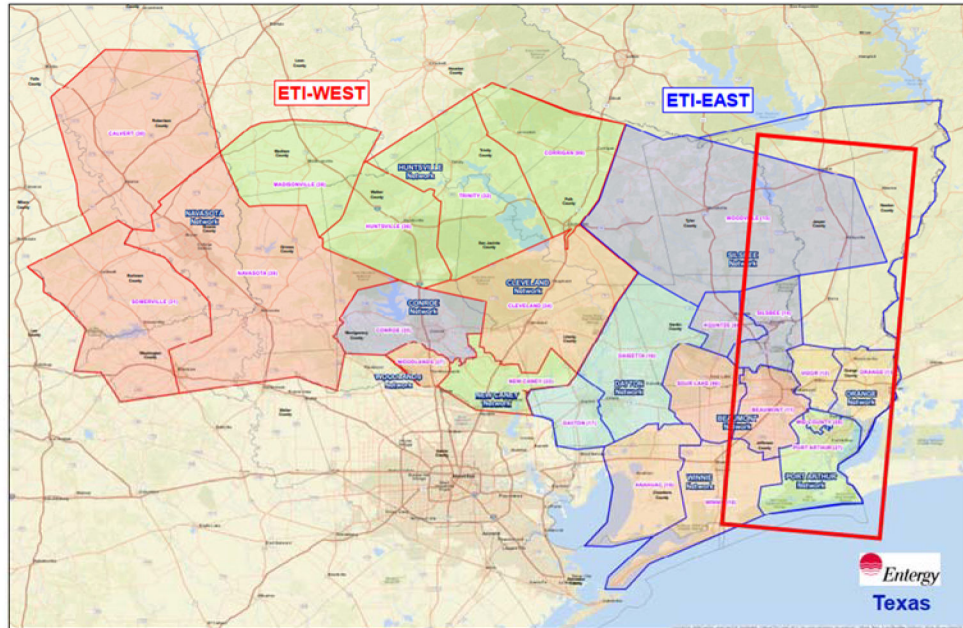


Figure 16

1

2 Q55. PLEASE SUMMARIZE THE DISTRIBUTION SYSTEM DAMAGES
3 FOLLOWING THE HURRICANES.

4 A. Together, these storms severely damaged ETI's distribution infrastructure,
5 including over 2,400 poles, 1,590 transformers, and 2,000 spans of conductor.
6 The magnitude of the storms required ETI to utilize a large number of resources
7 to restore service in a timely manner.

8

9 Q56. WHAT WERE SOME OF THE CHALLENGES ASSOCIATED WITH
10 RESTORATION?

11 A. During the active hurricane season of 2020, the frequency and severity of storms
12 across the region and ETI's service territory meant that demand was high for
13 certain limited resources. The demands for mutual-aid utility resources and third-
14 party contractors were very high due to concurrent restorations and the needs of

1 other Gulf Coast utilities preparing for and responding to these two hurricanes, as
2 well as other hurricanes that occurred during the very busy 2020 hurricane season.
3 The high demand for available resources required ETI to acquire help from ten
4 different states – Texas, Florida, Alabama, Virginia, North Carolina, Tennessee,
5 Missouri, Kansas, Oklahoma, and Georgia. For the Hurricane Laura restoration,
6 ETI brought in over 6,000 personnel from mutual-aid utilities and third-party
7 contractors to assist in the distribution service restoration. For the Hurricane
8 Delta restoration, ETI brought in over 1,600 personnel from mutual-aid utilities
9 and third-party contractors to assist in the distribution service restoration. Given
10 the damage to vegetation and the Company’s transmission and distribution
11 facilities, ETI had to significantly supplement its existing workforce to clear
12 debris, access damaged facilities, and repair those facilities so that service could
13 be restored. Due to the continuing demand for those types of contractors by other
14 utilities, ETI had to draw on mutual-aid and contractor resources from more
15 distant locations than it had in the past.

16 Following each storm, many roads were closed or impassable due to high
17 water or debris. As with any major hurricane, large amounts of scattered debris,
18 either natural (primarily vegetation) or manmade, were present. The dense
19 vegetation in ETI’s service territory contributed to the significant damage
20 incurred and also created significant obstacles to access damaged distribution
21 facilities. Additionally, the topology of ETI’s distribution system, which includes
22 a large percentage of rear-lot and alley construction that requires special
23 equipment to access, further complicated the restoration process.

1 Communications were also impacted due to landline, radio, and cell tower
2 damage, which presented yet another obstacle to system restoration.

3 Additionally, ETI conducted these hurricane restorations while having to
4 address the challenges posed by conducting restoration efforts amidst the
5 COVID-19 pandemic and related protocols. For example, additional safety
6 protocols had to be enacted to mitigate the spread of the virus among workers.
7 The protocols limited lodging to one person per room in hotels and mandated
8 spatial requirements for crews sleeping in bunk trailers. Extra cleaning and
9 disinfecting procedures were implemented for rooms, showers, and meeting areas,
10 and routine sanitization was performed for all areas.

11 Finally, the materials and resources that would normally have been
12 stockpiled and available were limited, primarily as a result of Hurricane Laura,
13 but also due to the overall effect of the record 2020 hurricane season and
14 COVID-19 pandemic effects on the suppliers and capacity of manufacturers.
15 Catastrophic damage to ETI and neighboring utility infrastructure exponentially
16 increased demand for the material used for storm restoration efforts. Fuel
17 supplies were impacted by the storms in the Gulf region, immediately affecting
18 fuel costs and delivery charges. With Hurricanes Laura and Delta impacting not
19 only ETI but other utilities in Texas, material costs were also affected by the basic
20 principle of supply and demand. Demand for materials had already been stressed
21 due to damage incurred from earlier storms. The widespread damage from
22 Hurricanes Laura and Delta and material requirements for restoration at a time
23 when there was an already-stressed market only exacerbated the situation. ETI

1 leveraged existing supplier agreements when possible but had to turn to alternate
2 suppliers in order to obtain some essential supplies.

3

4 Q57. PLEASE EXPLAIN HOW THE INCIDENT RESPONSE PLAN WAS
5 IMPLEMENTED.

6 A. Well before each storm system entered the Gulf of Mexico, ETI was fully
7 engaged in preparations for landfall. The preparations that were undertaken prior
8 to Hurricane Laura were the same as those undertaken prior to Hurricane Delta.
9 Entergy utilized a contract weather vendor to stay advised of developing weather
10 situations. The Company is also very tuned into the local Houston and Beaumont
11 television broadcasts to anticipate path, landfall and intensity. As both Hurricanes
12 Laura and Delta entered the Gulf, ETI placed all of its employees and base-load
13 contractors on alert and cancelled vacations. ETI conducted frequent conference
14 calls with the State Command Center and key leadership in Texas, participated on
15 Entergy System conference calls, and participated on conference calls with the
16 State of Texas's State Operations Center ("TX SOC"), which is part of the
17 Governor's Division of Emergency Management. ETI reviewed the Storm Plans
18 and made preparations with its mutual-assistance utilities. As the service area
19 became increasingly threatened by the projected storm path, ETI secured staging
20 areas, obtained fuel and supplies, ramped up logistical support, pre-staged crews,
21 prepared scouts (including scouting apparatus such as helicopters and drones),
22 implemented evacuation plans for personnel and equipment, and augmented front-
23 line management teams.

1 ETI also relied on the “Gateway Process,” the purpose of which is to
2 establish centers to receive incoming crews, verify contractor manpower and
3 equipment, and administer safety orientations to incoming crews. The Gateway
4 centers provided incoming personnel with the information necessary to expedite
5 their assignment to the various work sites. In addition, these Gateways
6 documented the personnel and equipment being received and provide that
7 documentation to individual work areas and to Entergy accounting for timely
8 invoice review and processing.

9 ETI had two regions that were divided into a total of 12 Networks, each
10 responsible for a geographic area. During restoration, the State Command Center,
11 in communication with the network supervisors, assesses restoration progress and
12 the ability to effectively and safely manage the work force several times a day.
13 These assessments were made on an ongoing, dynamic basis throughout the event
14 and are utilized to make adjustments to the pre-event estimates of material and
15 resource requirements.

16 ETI pre-staged crews at strategic locations in anticipation of each storm’s
17 impact, then ramped up resources to a peak, followed by the re-allocation and
18 release of crews as progress was made. As crews completed work at one location,
19 they were shifted to another location based on need and skill set. As the
20 restoration progressed and workers were shifted among networks, the State
21 Command Center, with input from the network supervisors, made determinations
22 regarding the number of crews that could effectively and safely work in an area.
23 When it was determined that the effective number had been reached, ETI began

1 releasing excess resources and decommissioning the staging sites supporting
2 those resources. As a staging site was decommissioned, the number of
3 contractors that the remaining staging sites could support was assessed, and ETI
4 reassigned the remaining crews to other staging sites. ETI closely monitored
5 crew needs to ensure that crews were utilized in an efficient manner, that it did
6 not have more crews than needed, and that staging sites and logistical resources
7 were consolidated when it became possible to do so.

8

9 Q58. DESPITE THE CHALLENGES ETI ENCOUNTERED WITH RESPECT TO
10 THE RESTORATION PROCESS, HOW DID ETI PERFORM WITH RESPECT
11 TO RESTORING SERVICE TO ITS CUSTOMERS?

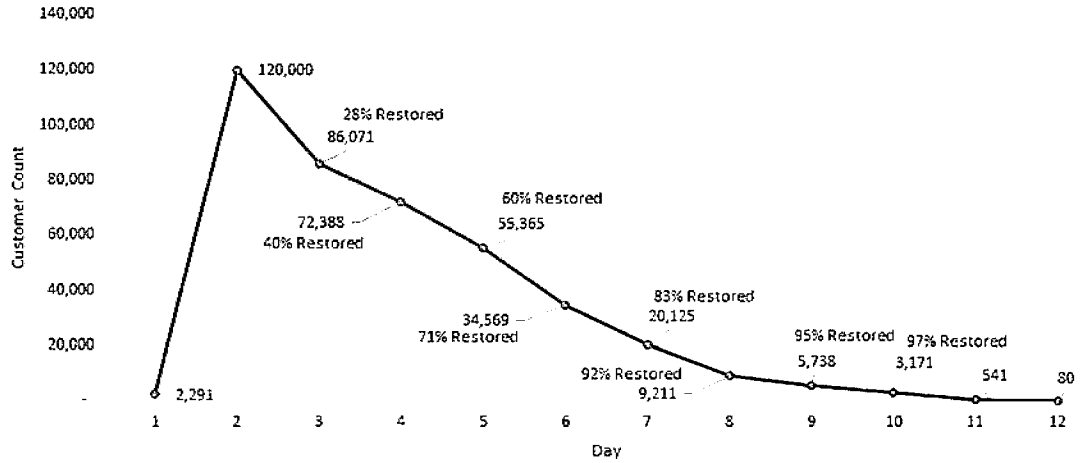
12 A. By day ten of the Hurricane Laura restoration, 97% of ETI customers had been
13 restored. By the end of day twelve, almost all of the remaining customers that
14 could take power had been restored. Figure 17 below shows the day-by-day
15 number of customers under outage and the percentage of customers restored.⁸

⁸ The outage numbers are exclusive of customers affected by the load-shedding event directed by MISO on August 27, 2020.

1

Figure 17

Hurricane Laura Customer Restoration
 8/26/2020 - 9/6/2020



2

For Hurricane Delta, detailed in Figure 18 below, by day five of the

3

Hurricane Delta restoration, 95% of ETI customers had been restored. By the end

4

of day eight, almost all of the remaining customers that could safely take power

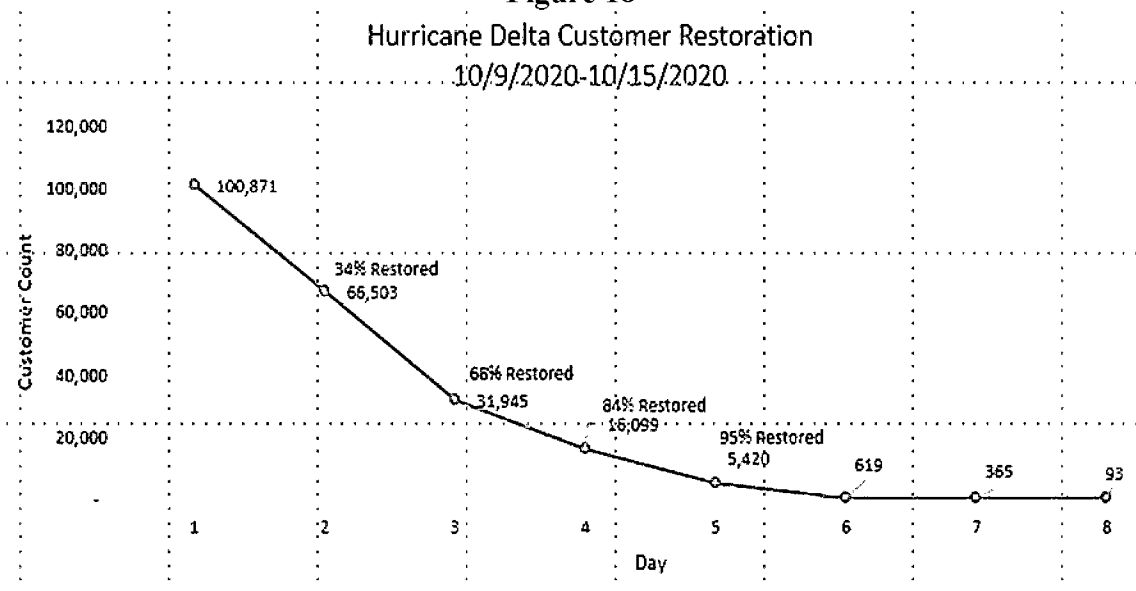
5

had been restored.

6

Figure 18

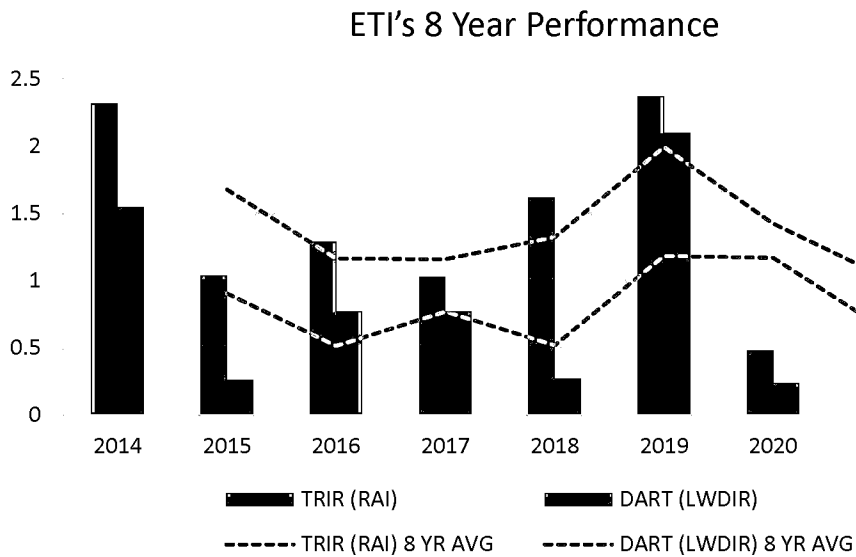
Hurricane Delta Customer Restoration
 10/9/2020 - 10/15/2020



IV. SAFETY

1
2 Q59. HOW IS THE COMPANY PERFORMING IN THE AREA OF SAFETY?

3 A. The Company continues to perform well in the area of safety. ETI's eight-year
4 (2014 through 2021) average Total Recordable Incident Rate ("TRIR") is at 1.47,
5 and the Days Away Restricted or Transfer ("DART") is 0.88, as shown in Figure
6 19. The three-year average TRIR and DART for the period 2019 through 2021
7 has decreased by 44% and 54%, respectively, when compared to the five-year
8 period before 2019.



9 **Figure 19**

10 Q60. HOW DOES ENTERGY COMPARE IN THE AREA OF SAFETY TO OTHER
11 ELECTRIC UTILITIES?

12 A. Entergy continues its history of performing well among other electric utilities.
13 Entergy is a member of the Southeastern Electric Exchange ("SEE"). Twenty-
14 five electric utility companies in the Southeast and Eastern portions of the United

1 States make up the SEE. On an annual basis, SEE prepares a ranking of
2 companies based upon several measures, including RAI, Day Away, DART, and
3 Serious Injury Incident Rate (“SIR”). The following Table 1 shows how Entergy
4 compares with the other companies.

5 **Table 1: Southeast Electric Exchange Safety Performance Year End Report**
6 **Entergy Total Company Rank**

Year	TRIR (RAI)		DART (LWDIR)	
	Entergy Rank	# of Utilities Responding	Entergy Rank	# of Utilities Responding
2017	4	18	4	18
2018	4	18	4	18
2019	5	17	5	17
2020	5	17	3	17
2021	5	16	4	16

7 **V. DISTRIBUTION CAPITAL ADDITIONS**

8 **A. Time Period for Distribution Capital Additions**

9 Q61. AS PART OF THIS RATE CASE, IS ETI ASKING TO INCLUDE
10 DISTRIBUTION CAPITAL ADDITIONS IN ITS RATE BASE?

11 A. Yes.

12

13 Q62. WHAT IS THE TIME PERIOD FOR THESE DISTRIBUTION CAPITAL
14 ADDITIONS?

15 A. ETI’s request for distribution capital additions seeks to add to rate base the
16 distribution facilities closed to plant in service during the period starting on
17 January 1, 2018 and ending on December 31, 2021. The starting date for this

1 period is the day after the end of the Test Year in ETI's most recently completed
2 base rate case, Docket No. 48371, and the ending date is the end of the Test Year
3 in this case.

4

5 Q63. WHAT IS THE DOLLAR AMOUNT OF THE DISTRIBUTION CAPITAL
6 ADDITIONS CLOSED THROUGH THE TEST YEAR?

7 A. The total dollar amount of distribution capital additions closed to plant from
8 January 1, 2018, through December 31, 2021 is \$932,790,981. This dollar
9 amount covers approximately 4,374 Distribution Line projects totaling
10 \$834,085,876, approximately 48 General Plant projects totaling \$5,129,292, and
11 90 Intangible projects totaling \$93,575,813. These projects are detailed in
12 Exhibit MLT-1.

13

14 **B. Specific Distribution Capital Additions**

15 Q64. WHAT IS ETI'S OVERALL COST MANAGEMENT PHILOSOPHY FOR
16 CONSTRUCTING, OPERATING, AND MAINTAINING ITS DISTRIBUTION
17 SYSTEM?

18 A. ETI's overall philosophy for managing costs is to provide customers with the
19 highest level of service, safety, and reliability without compromising operational
20 efficiency. My direct testimony demonstrates ETI's prudent use of funds and its
21 commitment to this fundamental principle.

1 Q65. PLEASE DESCRIBE THE PROCESS ETI UTILIZES TO UNDERTAKE
2 CAPITAL EXPENDITURES.

3 A. The planning and design departments in the Distribution Operations Organization
4 identify new capital projects based on customer requests, system growth
5 requirements, system improvements, new customers, system-wide applications,
6 and upgrades. ETI designs and routes the projects through the appropriate
7 approval levels consistent with Entergy's Authorization Policy. The majority of
8 these capital projects are assigned to ETI/ESL personnel or contractors for
9 construction. ETI selects contractors by evaluated bids, which include quality of
10 work, safety, performance, storm response, and costs. Both during construction
11 and upon completion, ETI/ESL personnel audit the jobs for quality assurance and
12 accuracy of invoice processing.

13

14 Q66. PLEASE DESCRIBE THE MAJOR CATEGORIES OF DISTRIBUTION
15 CAPITAL ADDITIONS CLOSED TO PLANT IN SERVICE FROM
16 JANUARY 1, 2021, THROUGH THE END OF THE TEST YEAR.

17 A. I am supporting three groups of distribution-related capital additions. The first
18 group includes Distribution Line capital additions. The second group includes
19 General Plant additions driven by distribution business needs. The third group is
20 Intangible capital projects.

- 1 Q67. PLEASE DESCRIBE THE INFORMATION IN EXHIBIT MLT-1, WHICH
 2 PROVIDES THE DETAILS ABOUT THE DOLLARS CLOSED TO PLANT IN
 3 SERVICE FOR DISTRIBUTION FACILITIES AND THE ASSOCIATED
 4 AFFILIATE COMPONENT.
- 5 A. Exhibit MLT-1 provides the following information:

Column A	Witness Name
Column B	Witness Class
Column C	Project Code
Column D	Project Code Description
Column E	Asset class
Column F	In-service date
Column G	Asset location description
Column H	State location
Column I	Business Unit (“BU”)
Column J	Non-Affiliate Charges Excluding Capital Suspense and Reimbursements
Column K	Reimbursements
Column L	Represents capital suspense overhead costs associated with administrators, engineers and supervisors to the capital projects for which they provide services. Each function charges its capital suspense to a “Capital Suspense” project, which is then allocated out to the appropriate capital projects. Capital Suspense costs and the subsequent allocation are separated by BU and function combination to more accurately match such costs on the actual projects worked on for each function within a BU.
Column M	Represents the portion of capital suspense overhead costs (in Column L) from an affiliate.
Column N	Represents the portion of capital suspense overhead costs (in Column L) that are charged to the project by ETI employees.
Column O	Represents charges incurred by the ESL service company and allocated out to the appropriate BUs based on the ESL billing method assigned to the project plus loaned resource charges incurred at one BU and charged to another BU for services rendered on behalf of that BU.
Column P	Represents the total affiliate portion of the charges included in Column Q, and is the total of Columns M and O.
Column Q	Represents the total amount of capital additions closed to plant in service.

1 Q68. WHAT TYPES OF DISTRIBUTION LINE CAPITAL PROJECTS ARE YOU
2 SUPPORTING?

3 A. The Company divides Distribution Line capital projects into two main categories:
4 Revenue projects and Non-revenue projects. For convenience, Figure 19 below
5 provides a summary of the ETI Distribution Line projects broken out between
6 Revenue and Non-revenue projects. In addition, many of the Distribution Line
7 capital additions are captured in what are known as “blanket” projects, which are
8 projects established to account for numerous small projects. These blanket
9 projects range from the installation of a service line and the establishment of
10 service to individual customers to reliability and infrastructure improvements.
11 Rather than creating a separate project for each such installation, it is common
12 practice in the utility industry to combine these small jobs into a single project or
13 work order to minimize administrative costs. This does not mean the individual
14 small jobs are not accounted for, but rather that hundreds of like jobs are
15 combined into one blanket project for budgeting and reporting purposes.

1
2
3

**Figure 19: ETI Distribution Line Dollars
Closed to Plant in Service
January 1, 2018 – December 31, 2021**

Category	Type	Closed to Plant (\$)
Revenue	Blanket Design	\$17,071,256.42
	Specific Design	\$80,872,786.86
	Non-Design	\$86,129,038.84
	Street & Private Area Lighting	\$11,931,507.45
Non-Revenue	Failure	\$201,542,679.56
	Blanket Mandated	\$4,541,486.25
	Specific Mandated	\$14,164,525.14
	Blanket System Improvements	\$60,353,155.41
	Specific System Improvements	\$88,706,723.00
	Storm Damage	\$180,886,711.87
	Advanced Metering System (AMS)	\$133,538,225.22
	Distribution Automation (DA)	\$23,507,639.98
	Enterprise Asset Management System (EAM)	\$29,545,245.52
	Total Distribution Line Projects	\$932,790,981.52

4 Q69. WHAT IS A “REVENUE” PROJECT?

5 A. ETI undertakes Revenue projects to connect new customers to the system or to
6 serve increased load. ETI’s obligation to serve under franchise and service
7 territory agreements drive these projects. Specifically, Revenue projects include:

- 8
- projects to serve new customers;

9

 - projects to serve load additions for an existing customer;

10

 - projects that are fully covered under facilities charges;

11

 - projects to install/remove metering; and

12

 - projects to install street lighting or private area lighting.

13 ETI classifies revenue projects into one of four categories: blanket design
14 projects; specific design projects; non-design projects; or street and private area
15 lighting projects. Design projects are those Revenue projects requiring

1 construction in addition to a meter and service connection. Non-design projects
2 are those Revenue projects requiring only a meter and/or service connection.
3 Street and private area lighting projects are those Revenue projects that establish
4 street lighting or private area lighting.

5

6 Q70. WHAT IS A “NON-REVENUE” PROJECT?

7 A. ETI undertakes Non-revenue projects to improve reliability, including grid
8 modernization efforts, responding to government-mandated requirements,
9 improving infrastructure, replacing failed plant, or rearranging standing facilities
10 to better serve existing customer load.

11

12 Q71. WHAT ARE THE TYPES OF NON-REVENUE PROJECTS INCLUDED IN
13 YOUR CAPITAL EXPENDITURES?

14 A. ETI classifies Non-revenue projects into the following types:

15 • **“Failures”** are projects to replace critical equipment that has failed and
16 must be replaced on an emergency basis, including service restoration,
17 often during weather events. Some examples of these types of projects
18 are:

19 ○ repair or replace a pole damaged by a weather event or a vehicle
20 accident;

21 ○ repair of streetlights and private area lights;

22 ○ repair or replace failed cable or conductor, both overhead and
23 underground; and

24 ○ replace failed transformers, reclosers, regulators, switches,
25 arrestors, insulators, and other distribution equipment.

26 • **“Mandated”** are projects to relocate ETI’s existing facilities for state or

- 1 city governments or for other contractual agreements. Some of these
2 projects may be partially or fully reimbursed. **“Blanket mandated”**
3 projects are smaller projects that have been combined for accounting and
4 reporting purposes, while **“Specific mandated”** projects are of sufficient
5 cost and complexity to warrant accounting and reporting on an individual
6 basis. Some examples of these types of projects are:
- 7 ○ highway widening projects that require the relocation of
8 distribution facilities;
 - 9 ○ relocation of city utilities, canal levees, or drainage facilities;
 - 10 ○ upgrades or replacement of joint-use facilities;
 - 11 ○ compliance with mandated avian regulations; and
 - 12 ○ customer requested facility relocation/removal.
- 13 • **“System Improvements”** are projects that maintain the integrity and
14 reliability of the overall distribution system. These projects include
15 projects to plan for load growth, to plan for contingencies, to maximize
16 circuit availability, and to minimize the number of customer interruptions.
17 **“Blanket system improvement”** projects are smaller projects that have
18 been combined for accounting and reporting purposes. **“Specific system
19 improvement”** projects are of sufficient cost and complexity to warrant
20 accounting and reporting on an individual basis. Some examples of these
21 types of projects are:
- 22 ○ replacement of conductor that is overloaded or causing low
23 voltage;
 - 24 ○ replacement of transformers and other line equipment that no
25 longer meet the requirements of the load; and
 - 26 ○ circuit work to improve reliability performance, such as installing
27 lightning arresters, installing animal guards, and increasing the
28 basic insulation level.
- 29 • **“Storm Damage”** projects are those that capture the capital costs of
30 replacing, repairing, and restoring facilities damaged as the result of a
31 weather event.
- 32 • **AMS** projects are for the Company’s deployment of an Advanced
33 Metering System, which is described in more detail by Company witness
34 Phillips.

- 1 • **Distribution Automation** (“DA”) projects are for installing “smart”
2 distribution grid devices equipped with electronic controls that enable the
3 devices to communicate with utility software and perform real-time
4 sensing and reconfiguration of the distribution system.

- 5 • **Enterprise Asset Management** (“EAM”) projects are for installation of
6 an integrated system to manage the asset, maintenance, renewal, and
7 replacement records of all distribution, transmission, and transportation
8 fleet assets.

9

10 Q72. FIGURE 19: CONTAINS A LINE SHOWING THE TOTAL DOLLARS FOR
11 BLANKET DESIGN REVENUE PROJECTS. PLEASE EXPLAIN HOW
12 THESE FUNDS WERE SPENT.

13 A. Projects C6PP749285, C6PP749280, and C6MD700032, found on
14 Exhibit MLT-1, capture costs associated with Distribution Line blanket projects
15 that are classified as Revenue and required design work. The total addition to
16 plant in service for these Revenue blanket projects is \$17,071,256.42. These
17 blanket projects cover line extensions to serve new customers, upgrades of
18 distribution facilities to serve increased customer load at their facilities,
19 replacement facilities necessary to serve a new customer or an increase in service
20 requirements due to added load by the customer, and designs required to serve
21 Revenue customers adequately.

22

23 Q73. FIGURE 19: SHOWS THE TOTAL DOLLARS FOR SPECIFIC DESIGN
24 REVENUE PROJECTS. PLEASE EXPLAIN HOW THESE FUNDS WERE
25 SPENT.

26 A. There are 210 projects on Exhibit MLT-1 that capture costs associated with larger

1 Distribution Line projects classified as Revenue and required design work. These
2 projects are of sufficient cost and complexity to warrant accounting and reporting
3 on an individual basis. The total addition to plant in service for these projects is
4 \$80,872,786.86. These projects cover line extensions to serve new customers,
5 upgrades of distribution facilities to serve increased customer load at their
6 facilities, replacement facilities necessary to serve a new customer or an increase
7 in service requirements due to added load by customers, and designs required to
8 correctly serve Revenue customers.

9

10 Q74. FIGURE 19: ALSO CONTAINS A LINE SHOWING THE TOTAL DOLLARS
11 FOR NON-DESIGN REVENUE PROJECTS. PLEASE EXPLAIN HOW
12 THESE FUNDS WERE SPENT.

13 A. Project C6PP749030, found on Exhibit MLT-1, capture costs associated with
14 Distribution Line blanket projects classified as Revenue that did not require
15 design work. The total additions to plant in service for this blanket project are
16 \$86,129,038.84. This category of Revenue blanket project(s) covers simple or
17 non-complex installation of service and transformers. The project(s) are
18 classified as non-design because the installation was simple and could be done by
19 service personnel.

1 Q75. FIGURE 19: SHOWS THE TOTAL DOLLARS FOR STREET AND PRIVATE
2 AREA LIGHTING REVENUE PROJECTS. PLEASE EXPLAIN HOW THESE
3 FUNDS WERE SPENT.

4 A. Projects C6PP749665, C6PP749655, C6PP749660, and C6PP749650 found on
5 Exhibit MLT-1, capture costs associated with Distribution Line blanket projects
6 classified as Revenue and that are for street and private area lighting. The total
7 additions to plant in service for these blanket projects are \$11,931,507.45.

8

9 Q76. CONTINUING WITH FIGURE 19: , THE NEXT LINE SHOWS THE TOTAL
10 DOLLARS FOR FAILURE NON-REVENUE PROJECTS. PLEASE EXPLAIN
11 HOW THESE FUNDS WERE SPENT.

12 A. There are a number of projects included on Exhibit MLT-1 that are failure Non-
13 Revenue projects. These projects total \$201,542,679.56 of capital additions to be
14 added to rate base for this category. The term failure refers to the need to repair
15 or replace existing facilities. The work charged to these failure projects was
16 performed to restore service, eliminate the cause of an outage (and therefore
17 prevent future outages), eliminate a public safety hazard, maintain lights, or
18 resolve power quality problems.

19

20 Q77. RETURNING TO FIGURE 19: , THE NEXT LINE SHOWS THE TOTAL
21 DOLLARS FOR BLANKET MANDATED NON-REVENUE PROJECTS.
22 PLEASE EXPLAIN HOW THESE FUNDS WERE SPENT.

23 A. Projects C6PP749210, C6PP749200, and C6DB777592, found on

1 Exhibit MLT-1, capture costs associated with blanket mandated Non-revenue
2 projects. The total additions to plant in service for this blanket project are
3 \$4,541,486.25. These projects capture the cost of relocating existing facilities to
4 meet the requirements of city and state governments, as well as other contractual
5 agreements, such as road widening projects.

6

7 Q78. THE NEXT LINE ON FIGURE 19: SHOWS THE TOTAL DOLLARS FOR
8 SPECIFIC MANDATED NON-REVENUE PROJECTS. PLEASE EXPLAIN
9 HOW THESE FUNDS WERE SPENT.

10 A. There are a number of specific projects included on Exhibit MLT-1 that are
11 mandated Non-revenue projects. These projects are of sufficient cost and
12 complexity to warrant accounting and reporting on an individual basis. The total
13 additions to plant in service for this type of project are \$14,164,525.14. These
14 projects capture the costs of relocating existing facilities to meet the requirements
15 of city and state governments, as well as other contractual agreements, such as
16 road widening projects.

17

18 Q79. THE NEXT LINE ON FIGURE 19: SHOWS THE TOTAL DOLLARS FOR
19 BLANKET SYSTEM IMPROVEMENT NON-REVENUE PROJECTS.
20 PLEASE EXPLAIN HOW THESE FUNDS WERE SPENT.

21 A. There are numerous projects included on Exhibit MLT-1 that are blanket system
22 improvement projects. The total capital additions for these projects are
23 \$60,353,155.41. These are projects undertaken to improve reliability of the

1 distribution system, and they include projects to plan for load growth, plan for
2 contingencies, maximize circuit availability, minimize the number of customer
3 interruptions, and ensure the integrity of infrastructure.

4

5 Q80. THE NEXT LINE ON FIGURE 19: SHOWS THE TOTAL DOLLARS FOR
6 SPECIFIC SYSTEM IMPROVEMENT NON-REVENUE PROJECTS. PLEASE
7 EXPLAIN HOW THESE FUNDS WERE SPENT.

8 A. There are a number of specific projects included on Exhibit MLT-1 that are
9 system improvement projects. These projects are of sufficient cost and
10 complexity to warrant accounting and reporting on an individual basis. The total
11 capital additions for these projects are \$88,706,723.00. These are projects
12 undertaken to improve reliability of the distribution system, and they include
13 projects to plan for load growth, plan for contingencies, maximize circuit
14 availability, minimize the number of customer interruptions, and ensure the
15 integrity of the infrastructure.

16

17 Q81. PLEASE EXPLAIN HOW CAPITAL ADDITIONS FOR SYSTEM
18 IMPROVEMENT AND FAILURE REPLACEMENT HAVE IMPROVED
19 SERVICE.

20 A. As discussed below in my testimony on the Distribution Operations Class of
21 affiliate services, reliability program management consists of the following major
22 services: Load and Contingency Planning; Reliability and Infrastructure
23 Management; Distribution Construction; Distribution Standards; and Engineering

1 Services. Each of these services identifies and supports capital projects to
2 improve reliability, including repairs to existing facilities. These types of projects
3 were significant contributors to the Company's service quality improvement
4 efforts I discussed earlier in my direct testimony.

5

6 Q82. THE NEXT LINE ON FIGURE 19: SHOWS THE TOTAL DOLLARS FOR
7 STORM DAMAGE NON-REVENUE PROJECTS. PLEASE EXPLAIN HOW
8 THESE FUNDS WERE SPENT.

9 A. There are 99 projects in Exhibit MLT-1 that capture the capital costs of replacing,
10 repairing, and restoring facilities damaged during severe weather events. The
11 accounting process is to capture storm charges through the use of storm job orders
12 ("SJOs") for each severe weather event. SJOs are established for each legal entity
13 (e.g., ETI), each state (e.g., Texas), and each function (e.g., Distribution). When a
14 storm occurs, all costs are captured in the appropriate SJO. Each month, charges
15 to the SJOs are reviewed and segregated into capital and O&M components. ETI
16 charges the O&M costs against the appropriate loss reserve account, which I
17 discuss later in this testimony. The capital costs are charged to the storm damage
18 projects for the appropriate legal entity and state. The total additions to plant in
19 service for this blanket project are \$180,886,711.87.

20

21 Q83. THE NEXT LINE ON FIGURE 19: SHOWS THE TOTAL DOLLARS FOR
22 AMS. PLEASE EXPLAIN WHAT AMS IS.

23 A. The Commission approved ETI's plan to deploy an AMS in its service area in

1 Docket No. 47416. As explained by Company witness Phillips, the Company
2 completed mass deployment of the AMS in 2021 consistent with the deployment
3 plan, and the AMS deployment is now in the final phase of optimizing the
4 communications network. Company witness Allison P. Lofton addresses how the
5 AMS capital costs are treated for ratemaking purposes.

6

7 Q84. THE NEXT LINE ON FIGURE 19: SHOWS THE TOTAL DOLLARS FOR DA.
8 PLEASE EXPLAIN WHAT DA IS.

9 A. DA includes “smart” distribution grid devices, including reclosers, regulators, and
10 capacitors, that are equipped with electronic controls that enable the devices to
11 communicate with utility software and perform real-time sensing and
12 reconfiguration of the distribution system. For example, DA-enabled devices,
13 together with the DMS and OMS deployed in conjunction with the AMS project,
14 are being utilized to enable “self-healing networks,” which monitor the
15 distribution system for any outage conditions and automatically reconfigure the
16 path of power to isolate the outage to a minimum number of customers and
17 restore power to all unaffected customers in the surrounding area. Additional
18 examples of DA components include breakers, fault current indicators, and motor-
19 operated switches that are monitored and controlled via the DMS/OMS interface.

20

21 Q85. THE NEXT LINE ON FIGURE 19: SHOWS THE TOTAL DOLLARS FOR
22 EAM. PLEASE EXPLAIN WHAT EAM IS.

23 A. The EAM project consists of the EAM system, a Workforce Management System

1 (“WFMS”), verification, collection and correction of the current asset records, the
2 GIS, field mobility devices and an Intelligent Electronic Device Management
3 System (“IEDMS”). EAM is designed to improve work planning, scheduling, and
4 execution with improved technology in prioritizing outstanding work as well as
5 providing a further line of sight on pending work resource optimization. In
6 addition, the project includes a system to more efficiently manage the workforce
7 and work management process, including the deployment of field mobility
8 devices and an enhanced GIS.

9 More specifically, the WFMS will allow the field leadership additional
10 visibility into crew changes due to unplanned work and make recommendations
11 on alternative resources or schedule availability. As such, the EAM project is
12 expected to not only drive increased productivity with internal resources but
13 streamline the ability to share information with customers, therefore improving
14 their overall experience. For example, the new WFMS includes an advanced
15 scheduling engine that allows for dynamic scheduling and optimization for any
16 change in circumstance such as unplanned outages or emergency issue.
17 Therefore, when crew changes occur due to unplanned work, the WFMS will
18 make recommendations on alternative resources or schedule availability using
19 data in the system. The WFMS is also connected with the customer care systems
20 and back-office systems used by contact center representatives, which provides
21 them with more timely information on the status of customer work such as when a
22 crew has been dispatched, when the crew is in route, and when the work has been
23 completed.

1 Q86. PLEASE DESCRIBE GENERAL PLANT PROJECTS AND THE
2 PREDOMINANT TYPES OF THOSE PROJECTS.

3 A. Exhibit MLT-1 shows the approximately 48 General Plant projects that I sponsor.
4 These General Plant projects, totaling \$5,129,292, are related to information
5 technology (“IT”) hardware and software acquisitions and upgrades; maintenance
6 and upgrades to Distribution non-electric facilities; and specialized tools and
7 equipment purchases. The IT systems are required to effectively and efficiently
8 manage the operations, maintenance, and construction of the ETI distribution
9 system. The maintenance and upgrade of Distribution service center facilities, as
10 well as the purchase of specialized tools and equipment, is necessary to the core
11 function and safety of Distribution Operations. I have classified the projects in
12 this group into two categories: (1) IT Hardware and Software Upgrades; and
13 (2) Facilities, Tools and Equipment.

14

15 Q87. PLEASE BRIEFLY DESCRIBE THE CATEGORY OF IT HARDWARE AND
16 SOFTWARE UPGRADES.

17 A. This category includes IT projects necessary to operate, maintain, and upgrade the
18 IT system. This includes computer purchases for ETI employees and computer
19 hardware and software purchases to support field use of work management
20 system and in-the-field design for customer services.

1 Q88. WHAT PROJECTS RELATED TO IT HARDWARE AND SOFTWARE
2 UPGRADES DO YOU SPONSOR?

3 A. Projects C1PPTDOHWZ, C6PPAMHHT1, C1PPTSIHWZ, and C1PPTHEHWZ,
4 found on Exhibit MLT-1, capture costs associated with IT Hardware and Software
5 Upgrades projects. The total additions to plant in service for this category of
6 projects are \$2,667,536, or 52% of the total ETI Distribution General Plant
7 projects. These projects cover investments in the software, software licenses, IT
8 hardware, associated vendor costs and internal Entergy labor for the meter
9 management software, headend system, MDMS (meter data management system),
10 enterprise service bus, legacy systems integration, and the IT portions of
11 DMS/OMS and the AMS part of the EAM system.

12

13 Q89. PLEASE BRIEFLY DESCRIBE THE CATEGORY OF FACILITIES, TOOLS,
14 AND EQUIPMENT.

15 A. The “Facilities” portion of this category allows for the maintenance of
16 Distribution service centers and material inventory facilities. The “Tools and
17 Equipment” portion includes the purchase of specialized tools and equipment for
18 the benefit of safety, work techniques, and specialized jobs within Distribution.
19 These tools are not purchased through the storeroom. The primary benefit of this
20 category is the ability to perform tasks in a safe and efficient manner.

1 Q90. WHAT PROJECTS RELATED TO FACILITIES, TOOLS, AND EQUIPMENT
2 DO YOU SPONSOR?

3 A. There are 27 projects found on Exhibit MLT-1 that capture costs associated with
4 Facilities, Tools, and Equipment projects. The total additions to plant in service
5 for this category of projects are \$2,116,288, or 41% of the total ETI Distribution
6 General Plant projects. These are projects to maintain and upgrade Distribution
7 service center facilities and to purchase specialized tools or equipment for the
8 benefit of safety, work techniques, and specialized jobs within Distribution.

9
10 Q91. WHAT TYPES OF INTANGIBLE PROJECTS ARE YOU SPONSORING?

11 A. There are 90 Intangible projects, including C1PPTDOSWZ and C1PPAMSWR1,
12 found in Exhibit MLT-1. C1PPTDOSWZ covers investments in the software,
13 software licenses, IT hardware, associated vendor costs and internal Entergy labor
14 for the meter management software, headend system, MDMS (meter data
15 management system), enterprise service bus, legacy systems integration, and the
16 IT portions of DMS/OMS and the AMS part of the EAM system.
17 C1PPAMSWR1 covers costs related to the EAM, specifically building the
18 Electric Distribution & Outage Response software release.

19
20 Q92. WHAT IS A MULTI-STATE PROJECT?

21 A. Multi-State projects are typically projects that are large in scope, development,
22 implementation, and material costs and benefit all EOCs. An overall project cost
23 can be significantly reduced when the project development, material purchase,

1 and field implementation is worked as an “Entergy Project” and each EOC is only
2 charged its portion of the cost.

3

4 Q93. ARE THERE ANY ETI MULTI-STATE COSTS IN EXHIBIT MLT-1?

5 A. Yes, six projects, including C1PPTDOHWZ, C1PPTSIHWZ, and
6 C1PPTHEHWZ, are assigned to “Multi-State.” The portions included in
7 Exhibit MLT-1 are only the amounts charged to ETI. I discussed these three
8 Projects earlier regarding General Plant IT Hardware and Software Upgrade
9 projects. The total additions to plant in service for these projects are \$2,145,062.

10

11 C. **Distribution Capital Addition Costs Were Reasonable, Necessary, and**
12 **Prudently Incurred**

13 Q94. WERE THE OVERALL ETI AND AFFILIATE CAPITAL COSTS FOR
14 DISTRIBUTION REASONABLE?

15 A. Yes. The capital costs were necessary to enable ETI to continue providing
16 reliable electric service to its customers. The costs were reasonable because ETI
17 has planned for and executed its capital projects in an effective manner with
18 appropriate budget controls.

19

20 Q95. WAS THE CAPITAL INVESTMENT ASSOCIATED WITH THESE
21 DISTRIBUTION PROJECTS PRUDENT?

22 A. Yes. These investment decisions meet what I understand to be the Commission’s
23 prudence standard. The exercise of that judgment and the choosing of one of that

1 selected range of options that a reasonable utility manager would exercise in the
2 same or similar circumstances given the information and alternatives available at
3 the point in time such judgment is exercised, or option is chosen. ETI's capital
4 investment philosophy, planning, and budgeting efforts, including cost controls,
5 are sound and effective, and these distribution capital additions are used and
6 useful and reasonable and necessary for the safe and reliable operation of the ETI
7 system and the provision of service to the public.

8

9 Q96. IS IT REASONABLE TO INCLUDE THE COSTS IDENTIFIED ON EXHIBIT
10 MLT-1 IN ETI'S RATE BASE IN THIS DOCKET?

11 A. Yes. It is reasonable to include these capital costs, as adjusted, in rate base
12 because these projects are in service, used and useful, prudent, and necessary in
13 providing continuous, reliable, safe, adequate, and reasonable electric service to
14 its customers. ETI commits to continuous improvement in service. These capital
15 expenditures are reasonable and necessary in meeting that commitment.

16

17 Q97. EXHIBIT MLT-1 INCLUDES AFFILIATE COSTS. ARE THOSE AFFILIATE
18 COSTS REASONABLE AND NECESSARY TO CONSTRUCT THE
19 DISTRIBUTION FACILITIES?

20 A. Yes. The affiliate costs for ETI in Exhibit MLT-1 total \$138,816,603, or
21 approximately 15%, of the requested capital additions of \$932,790,981. These
22 affiliate charges are generally for oversight and support costs, such as engineering
23 standards and drafting, that are necessary to design, build, operate, and maintain

1 the distribution system for ETI. The affiliate costs in Exhibit MLT-1 are
2 necessary as well for the oversight and support of the General Plant capital
3 projects driven by distribution needs.

4 The costs of the support services provided by ETI's affiliates are the same
5 for all EOCs. As discussed below in my testimony concerning the allocation and
6 billing methods for affiliate O&M costs, the ETI affiliate costs are made up of
7 services that are charged to one or more project codes. As Mr. Dumas explains in
8 his direct testimony, only one billing method is assigned to each project code.
9 Any organization performing work associated with a project code will bill its
10 work to that code, but regardless of the organization that does the work, the
11 billing method for all work done on that project code remains the same. The
12 billing method for the project code is based on cost causation. This practice of
13 assigning and using one billing method for each project code based upon cost
14 causation assures that the price billed to ETI for the service provided is no higher
15 than the price charged to other affiliates for the same or similar services and
16 represents the actual costs of the service.

17 Therefore, ETI is not charged a higher or lower rate than any other
18 company. The manner in which the affiliate services are provided creates
19 economies of scale by utilizing centralized organizations to provide services that
20 are commonly needed by the affiliates. These centralized organizations support
21 ETI's field operations in its efforts to provide safe, reliable, economic distribution
22 service to all of its customers. If these services were not provided by the
23 centralized organizations, they would have to be provided by duplicate

1 organizations in each of the EOCs.

2

3 Q98. DOES YOUR DISCUSSION BELOW REGARDING REASONABLE
4 OVERSIGHT AND SUPPORT RELATED TO AFFILIATE COSTS APPLY TO
5 THE CAPITAL ADDITIONS CLOSED THROUGH THE TEST YEAR?

6 A. Yes. That same discussion also applies to these oversight and support costs for
7 the entire period of January 1, 2018, through December 31, 2021.

8

9 Q99. WHAT IS THE DIFFERENCE BETWEEN THE AFFILIATE CHARGES YOU
10 DISCUSS BELOW AND THE AFFILIATE CHARGES YOU DISCUSS IN
11 THIS SUBSECTION?

12 A. The affiliate charges discussed below include only O&M affiliate costs during the
13 Test Year. The affiliate charges in this subsection refer to capital charges closed
14 to Distribution plant in service from January 2018 through December 2021.

15

16 Q100. WERE THE OVERALL ETI AND AFFILIATE DISTRIBUTION CAPITAL
17 ADDITION COSTS FOR THE PERIOD JANUARY 2018 THROUGH
18 DECEMBER 2021 REASONABLE AND NECESSARY?

19 A. Yes. As shown by the Federal Energy Regulatory Commission (“FERC”) Form 1
20 capital expenditure data presented in Figure 20 and Figure 21 below, ETI’s capital
21 investments for the years 2017 through 2020 were either near or above the mean,
22 which is consistent with the increased reliability work and grid modernization
23 projects discussed above. Investing in those projects was reasonable in light of

1 ETI's focus on improving reliability. Furthermore, the expenditures for all of the
2 capital projects identified in Exhibit MLT-1 were necessary to enable ETI to
3 provide continuous, reliable service to its customers.

4

5 Q101. HOW DOES ETI'S CAPITAL SPENDING COMPARE TO SIMILARLY
6 SITUATED UTILITIES?

7 A. The Company analyzed capital construction costs from the FERC Form 1 data for
8 a 20-utility panel. The comparison in Exhibit MLT-3A shows distribution capital
9 costs in dollars per customer.

10

11 Q102. HOW WERE THE 20 UTILITIES SELECTED FOR THESE COMPARISONS?

12 A. The utilities selected for these comparisons are similar investor-owned utilities in
13 the Central and Southeastern United States. The Company has consistently used
14 these 20 utilities in the past for benchmarking and comparison. The 20 utilities
15 have similar geographic areas. Benchmarking data for the 20 utilities is for the
16 period of 2017 through 2020.⁹

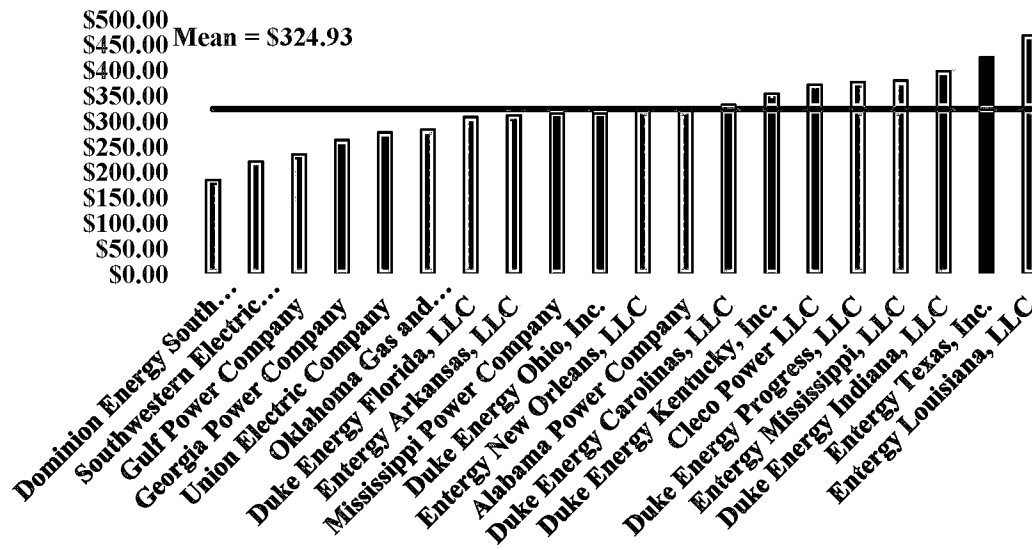
17

18 Q103. WHAT ARE THE RESULTS OF THE ANALYSIS?

19 A. Figure 20 below illustrates that for the period of 2017 through 2020, ETI's capital
20 spending was higher relative to the comparison group. ETI's average capital
21 costs were \$427.44/customer, 27% higher than the panel mean of

⁹ At the time my testimony was prepared, complete data for 2021 for all of the utilities in the panel was not available.

1 \$324.93/customer. As noted earlier, ETI’s investments in reliability and grid
2 modernization is likely driving its position relative to the other utilities in the
3 panel.



4 **Figure 20:**
5 **2017–2020 Distribution Capital Additions per Customer**

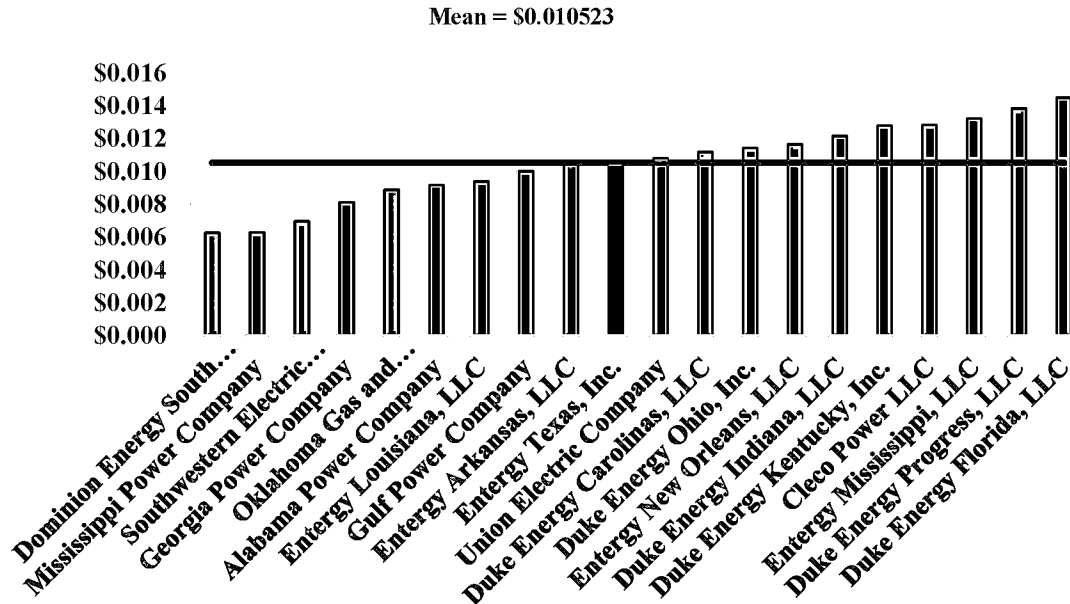
6 Q104. ARE THERE ANY OTHER COMPARISONS SHOWING THESE COSTS ARE
7 REASONABLE AND NECESSARY?

8 A. Yes. Once again using the capital costs from the FERC Form 1 data for the same
9 20-utility panel, I made a comparison of capital costs per kWh. This comparison
10 places ETI below the mean in capital costs. Exhibit MLT-3B provides this
11 analysis.

13 Q105. WHAT ARE THE RESULTS OF THE ANALYSIS?

14 A. Figure 21 below illustrates that, for the period of 2017 through 2020, ETI’s
15 capital spending compares favorably to the comparison group. ETI’s average

1 capital costs were \$0.010522/kWh, within less than 1% of the 20 utility mean of
2 \$0.010523/kWh.



3 **Figure 21:**
4 2017–2020 Distribution Capital Additions per kWh

5 **D. Distribution Cost Recovery Factor**

6 Q106. ARE YOU FAMILIAR WITH THE COMMISSION’S RULE RELATING TO
7 DCRF RECONCILIATION?

8 A. Yes, 16 TAC § 25.243(f) provides:

9 The commission shall reconcile investments recovered through a
10 DCRF in the electric utility’s next comprehensive base-rate
11 proceeding to the extent such reconciliation did not already occur
12 in a DCRF proceeding . . . The reconciliation shall be limited to
13 the issues of the extent to which the investments complied with
14 PURA, including § 36.053 and § 36.058, and this section and were
15 prudent, reasonable, and necessary. To the extent that the
16 commission determines that the investments did not comply with
17 PURA and this section or were not prudent, reasonable, and
18 necessary, the electric utility shall refund all revenues related to the
19 investments that it improperly recovered through rates, and shall
20 also pay its customers carrying charges on these revenues.

1 Q107. IS THE COMPANY CURRENTLY RECOVERING REVENUES RELATED
2 TO DISTRIBUTION CAPITAL THROUGH A DCRF?

3 A. Yes. In Docket Nos. 49392, 50714, 51416, and 52457, the Commission approved
4 and amended ETI's DCRF, which allows the Company to recover revenues
5 related to capital additions made since January 1, 2018 (the day after the end of
6 the Test Year in ETI's last rate case).

7

8 Q108. ARE THOSE CAPITAL ADDITIONS NOW INCLUDED IN EXHIBIT MLT-1?

9 A. Yes. The DCRF-related capital additions are also included with the remainder of
10 capital additions closed to plant through the end of the Test Year shown in
11 Exhibit MLT-1, which I discuss above.

12

13 Q109. IS THE COMPANY SEEKING TO RECONCILE THE DCRF INVESTMENTS
14 IN THIS CASE?

15 A. Yes. My testimony demonstrates that all of the Company's distribution-related
16 capital additions since the end of the Test Year in the last base rate case
17 (including those additions reflected in the DCRF) were prudent, reasonable, and
18 necessary. Accordingly, pursuant to 16 TAC § 25.243, the Company requests that
19 the Commission determine the investments recovered through the DCRF are
20 reconciled.

1 Q110. WILL THE AMOUNTS CURRENTLY RECOVERED THROUGH THE DCRF
2 NOW BE REFLECTED IN BASE RATES?

3 A. Yes, and the DCRF will then be set to zero, as Ms. Lofton discusses in her
4 testimony.

5

6 **E. Future Capital Projects**

7 Q111. CAN YOU PLEASE DESCRIBE ETI'S PLANS FOR FUTURE
8 DISTRIBUTION INVESTMENT?

9 A. To continue facilitating customer growth and enhancing the strength and
10 reliability of its distribution system, ETI plans to continue significant, proactive
11 investment. The Company's planned distribution capital investment in 2022–
12 2024 totals approximately \$1 billion and is primarily comprised of projects in the
13 following categories, which are described above: revenue, reliability,
14 infrastructure, storm hardening, and failure. Revenue encompasses the largest
15 investment allocation in future years because ETI's service territory includes
16 some of the fastest growing areas in the nation. To meet the growth and connect
17 new customers to the system and serve increased load, ETI makes strategic
18 investments in Revenue projects. Infrastructure and planned projects encompass
19 the next significant investment, with those investments focusing on improving
20 reliability, for example, by improving infrastructure or rearranging standing
21 facilities to better serve existing customer load. Another significant area of
22 investment is reliability and storm hardening. A recent example of ETI's
23 commitment to these strategic reliability improvements occurred in 2021 on the

1 Bolivar Peninsula, discussed in detail earlier. The result of capital investment in
2 this portion of the distribution system is the ability to provide redundancy during
3 adverse weather conditions and increased reliability for customers.

4
5 **VI. STORM RESERVE**

6 Q112. EARLIER YOU MENTIONED THAT THE COSTS OF REPLACING,
7 REPAIRING, AND RESTORING FACILITIES THAT ARE DAMAGED
8 DURING SEVERE WEATHER EVENTS ARE CHARGED TO SJOS, WHICH
9 COSTS ARE THEN SEGREGATED INTO CAPITAL AND O&M
10 COMPONENTS ON A MONTHLY BASIS. PLEASE ELABORATE ON
11 THAT PROCESS WITH REGARD TO THE O&M COSTS ASSOCIATED
12 WITH STORM DAMAGES.

13 A. As explained in greater detail by Company witness Gregory Wilson, for property
14 damage from weather events that result in combined capital and O&M restoration
15 costs in excess of \$50,000, the O&M costs are charged to the Company's self-
16 insurance, i.e., "storm" reserve. Mr. Wilson also discusses ETI's storm reserve
17 balance. My Exhibit MLT-4A details the storm reserve charges and other
18 accounting activity that occurred from January 2018 through December 2021.

1 Q113. ARE ALL OF THE RESTORATION CHARGES ON EXHIBIT MLT-4A DUE
2 TO FACILITY DAMAGE RESULTING FROM WEATHER EVENTS IN
3 WHICH THE O&M AND CAPITAL RESTORATION COSTS EXCEEDED
4 \$50,000?

5 A. Yes. The charges to the storm reserve that I sponsor in Exhibit MLT-4A are a
6 result of restoring facilities damaged by weather events. By “weather events,” I
7 mean major storms (i.e., named storms), thunderstorms and windstorms (which
8 can range from severe to minor and may include lightning, hail, and tornados), ice
9 storms, heat advisories, and wildfires. The term could include other forms of
10 natural disasters or terrorist attacks, but the list I mentioned is typical for ETI’s
11 service territory. Again, it is the total amount of damage caused by the weather
12 event that determines whether O&M restoration costs are charged to the storm
13 reserve as opposed to routine O&M.

14

15 Q114. PLEASE DESCRIBE THE DATA SHOWN IN EXHIBIT MLT-4A.

16 A. I can best answer this question by way of example. After a severe weather event
17 occurs, or when a severe storm is forecast with expected costs that will exceed
18 \$50,000, a project is created in which to record costs associated with repairing
19 damage caused by the weather event. For this example, I selected Project
20 C7PPSJ7406, which captures charges related to a severe storm that began on
21 September 19, 2019. In Exhibit MLT-4B, all of the charges (and credits)
22 recorded to the storm reserve under this project have been grouped together for
23 discussion purposes. This grouping was accomplished by sorting

1 Exhibit MLT-4A by the “project” column.

2

3 Q115. PLEASE DESCRIBE THE SEPTEMBER 19, 2019 STORM AND THE
4 DAMAGES THAT IT CAUSED.

5 A. On September 19, 2019, an upper-level disturbance combined with daytime
6 heating and very high moisture levels produced, high winds, rain, major flooding
7 and severe thunderstorms. This severe weather impacted both the East and West
8 Regions. ETI recorded an outage peak of 38,381 customer interruptions. Trees
9 and other vegetation that fell or blew into the distribution facilities by winds
10 caused a majority of the outages. The storm destroyed approximately 23
11 distribution poles and over 66 transformers, and approximately 36 spans of wires
12 required replacement.

13

14 Q116. PLEASE DESCRIBE HOW THE ELECTRIC FACILITIES WERE RESTORED.

15 A. ETI implemented its incident response plan in response to this severe weather
16 event and the resulting power outages. Accordingly, ETI implemented its Storm
17 Incident Command organization and activated its Command Center. Restoration
18 efforts began once it was safe to do so. Those efforts included assessment of
19 damages, deployment of line and vegetation workers, and communication of
20 restoration progress to customers. The work force included, in addition to
21 Command Center staff, approximately 500 company and contractor line workers,
22 and approximately 130 contract vegetation workers. The Company restored
23 service to those customers who could take power by end of day on September 22,

1 2019. Remaining customers were restored as the flood waters receded over the
2 next four days.

3

4 Q117. WHAT WERE THE CHARGES TO THE STORM RESERVE ASSOCIATED
5 WITH THE SEPTEMBER 19, 2019 STORM RESTORATION?

6 A. Exhibit MLT-4B shows the charges to ETI's storm reserve for the September 19,
7 2019 storm (as recorded through the end of the Test Year). For illustrative
8 purposes, those charges have been grouped into the following categories shown in
9 Table 2 below.

Table 2

Resource Description	Total
Contract Work	\$4,798,434
Employee Payroll And Benefits	\$1,145,432
Storm Labor Allocation	\$(3,786,629)
Materials & Supplies	\$283,230
Transportation Clearing	\$311,217
Employee Expenses	\$379,024
Other	\$30,853
Service Company Recipient	\$11,170
Office and General Expenses	\$5,548
Equipment Rentals	\$2,097
Grand Total	\$3,180,377

10 Q118. PLEASE DESCRIBE THE CATEGORIES SHOWN IN THE TABLE ABOVE.

11 A. The categories are summarized as follows:

- 12 • Contract Work includes the invoices for the contract workers who are
13 hired to assist in the restoration. The costs are primarily for vegetation

- 1 and line crews.
- 2 • Employee Payroll and Benefits includes the wages, benefits, and loaders
3 associated with ETI and other Entergy employees who participate in the
4 restoration efforts.
- 5 • Storm Labor Allocation is the amount of storm restoration costs that are
6 transferred to capital.
- 7 • Materials and Supplies include equipment such as wires, poles, and meters
8 that are required for the restoration efforts.
- 9 • Transportation Clearing captures fuel and related vehicle expenses.
- 10 • Employee Expenses primarily captures meals and lodging for Entergy
11 employees and contractors.
- 12 • Other captures costs primarily related to property claims caused by the
13 storm (e.g., damage caused to a customer's house from a pole blown onto
14 it during the storm).
- 15 • Service Company Recipient pertains to costs common throughout ESL, as
16 I also address below in my affiliate cost discussion.
- 17 • Office and General Expenses include costs associated with the purchase or
18 repair and maintenance of office and general services equipment.
19 Examples include general services equipment such as glue line machines,
20 binding machines, paper cutters, color presses, labeling machines, scales,
21 inserters, postage machines, as well as office equipment, including
22 typewriters, calculators, office furniture, and copiers. Office and General
23 Expenses also include supplies and other small office equipment
24 purchased from outside vendors, including computer supplies, stationery,
25 pens, pencils, staples, drafting supplies, subscriptions, printing, and
26 photocopying.
- 27 • Equipment Rentals includes costs associated with renting/leasing
28 equipment, facilities, including the costs of renting/leasing copiers,
29 distribution facilities, office equipment, pole attachments, tools,
30 transmission lines, coal handling equipment, storage facilities, and
31 company-owned and leased vehicles.

1 Q119. DO THE CHARGES ON EXHIBIT MLT-4A INCLUDE FINANCIALLY-
2 BASED INCENTIVE COMPENSATION?

3 A. No. While there are line items on Exhibit MLT-4A that include the term
4 “Incentive Compensation,” ETI made pro forma adjustments to remove
5 financially-based incentive compensation costs.

6

7 Q120. DOES EXHIBIT MLT-4A INCLUDE COSTS THAT WERE RECOVERED
8 THROUGH SECURITIZATION?

9 A. The storm charges that have been recovered through securitization are included in
10 the adjustments shown in the rows with red text at the end of Exhibit MLT-4A,
11 which are rows 8676 through 8730.

12

13 Q121. WERE THE COSTS INCURRED TO RESTORE ETI’S FACILITIES
14 FOLLOWING THIS STORM REASONABLE AND NECESSARY?

15 A. Yes, the costs incurred were necessary to restore power following the damage
16 caused by this storm. The reasonableness of the costs is supported by a number of
17 factors.

18 First, ETI carries out its storm restoration activities in the same efficient
19 and cost-effective manner as it does in performing routine construction and
20 maintenance activities. Accordingly, the benchmarking and reliability statistics I
21 discussed earlier are equally applicable to ETI’s storm restoration activities.

22 Second, as discussed earlier, ETI maintains and adheres to its industry-
23 recognized, award-winning comprehensive storm plan, and it conducts annual

1 storm drills to ensure knowledge of and compliance with its storm plan.

2 Third, ETI's distribution maintenance and asset improvement process,
3 service quality and continuous improvement programs, and vegetation
4 management practices help to minimize the amount of damages incurred as a
5 result of severe weather events, which speeds restoration and reduces costs.

6 Fourth, ETI designs its procurement policies and procedures to streamline
7 the acquisition of materials and services using strategic supply networks in order
8 to achieve the lowest reasonable cost. Standardization of supply chain activities
9 makes possible a smoother day-to-day operation as well as a rapid response to
10 major storms or emergencies.

11 Fifth, ETI maintains pre-negotiated contracts with its major line,
12 vegetation, and logistics contactors that specify rates, hours, and scope of work
13 for severe weather restoration efforts.

14 Sixth, ETI maintains a rigid supervision process to ensure that contractors
15 are checked in and monitored by ETI or other Entergy employees during the
16 restoration efforts.

17 Seventh, for major storms like the September 2019 event, ETI
18 implemented a local process, similar to the Entergy Contractor Invoice Processing
19 Team ("CIPT") utilized during major reconstruction efforts, in which invoices are
20 reviewed against documentation provided by company personnel who supervised
21 the services to verify the work performed, hours recorded, and equipment
22 deployed. The process also includes review of invoices against contract terms to
23 ensure compliance.

1 Q122. WERE ALL THE COSTS THAT WERE CHARGED TO THE STORM
2 RESERVE DURING THE PERIOD OF JANUARY 2018 THROUGH
3 DECEMBER 2021, AS SHOWN ON EXHIBIT MLT-4A, REASONABLE AND
4 NECESSARY?

5 A. Yes. The same process and factors that support the reasonableness of the costs
6 that I described above generally apply to all of the projects shown on
7 Exhibit MLT-4A. I say generally because the entire process I described in the
8 example above, including implementation of the incident response plan, may not
9 be necessary in response to relatively minor storms. On the other hand, the
10 response to a major storm, like a hurricane, is even more detailed and would
11 encompass larger numbers of personnel, equipment, and additional processes like
12 pre-staging of crews and materials as well as implementation of the Entergy
13 CIPT.

14

15 **VII. TEST YEAR COSTS**

16 **A. ETI Distribution Organization Costs**

17 Q123. PLEASE GENERALLY DESCRIBE THE TYPES OF DISTRIBUTION-
18 RELATED SERVICES ETI PROVIDES FOR ITSELF AND THE TYPES OF
19 SERVICES IT RECEIVES FROM AFFILIATES.

20 A. As I mentioned earlier, both ETI employees and ESL employees provide services
21 necessary to operate and maintain the ETI distribution system. Typically, ETI
22 directly incurs costs in maintaining and operating the distribution system at the
23 field level. In contrast, management and any other services that can be shared by

1 more than one EOC, such as ETI, are generally provided by an affiliate, such as
2 ESL, and then costs are allocated to ETI based upon its share of the service
3 provided. For example, field personnel, who are responsible for line
4 maintenance, are ETI employees and, thus, the costs for the services these
5 personnel provide are not affiliate costs. In contrast, Human Resources and other
6 ESL corporate support services, such as Legal, support ETI's employees and
7 services and, thus, the costs for these ESL services are affiliate costs.

8 In addition to ESL, the other EOCs may also provide services to ETI,
9 particularly in response to area-wide emergencies and outages in ETI's service
10 territory.

11

12 Q124. ARE THE COSTS FOR ETI'S DISTRIBUTION OPERATIONS YOU
13 SUPPORT IN YOUR TESTIMONY REASONABLE AND NECESSARY?

14 A. Yes. The total O&M costs for the ETI distribution system incurred during the
15 Test Year were both reasonable and necessary. The costs were necessary to
16 operate and maintain ETI's distribution system in a continuous, reliable, safe,
17 adequate, efficient, and reasonable manner. The distribution management team
18 and the support organizations control these costs and provide these services
19 effectively and economically.

20

21 Q125. PLEASE LIST AND BRIEFLY DESCRIBE THE TYPES OF COSTS THAT
22 MAKE UP THE BULK OF ETI'S DISTRIBUTION-RELATED COSTS.

23 A. Payroll, Vegetation Contract, Construction Contract, and Materials and Supplies

1 are the types of costs that make up the bulk of the distribution related costs, as
2 described below:

- 3 • Payroll – Costs pertaining to the compensation of Entergy employees,
4 both affiliate and non-affiliate. Payroll costs include base pay, overtime
5 pay, incentive compensation, employee benefits, and associated payroll
6 taxes.
- 7 • Vegetation Contract – Costs associated with the contracted services of
8 companies specializing in vegetation management. Vegetation contract
9 costs include contract costs for cycle trimming, as well as specific
10 trimming, herbicide treatments, tree growth regulator applications, and
11 clearing inside the ROWs.
- 12 • Construction Contract – Costs associated with the contracted services of
13 companies specializing in the construction of both overhead and
14 underground electric distribution facilities. Construction contract costs
15 include contract costs for installing new facilities, maintenance of existing
16 facilities, upgrades to facilities to serve additional load, and the repair and
17 removal of damaged facilities.
- 18 • Materials and Supplies – Costs associated with the procurement and
19 inventory of materials necessary for the construction and maintenance of
20 both overhead and underground electric distribution facilities. Materials
21 and supplies costs include costs for poles, wire, transformers, and other
22 large distribution equipment, as well as minor materials, safety-related
23 equipment, and consumable supplies.

24

25 Q126. ARE ETI'S DISTRIBUTION-RELATED O&M EXPENSES ONE-TIME
26 EXPENSES OR RECURRING ITEMS?

27 A. The distribution-related O&M expenses requested for recovery are recurring
28 items throughout the Test Year and subsequent years. The historic Test Year
29 data, as adjusted, is representative of the costs ETI will continue to incur in the
30 future to serve its customers.

1 Q127. IS THE COMPANY PROPOSING ANY KNOWN AND MEASURABLE
2 ADJUSTMENTS TO DISTRIBUTION-RELATED O&M TEST YEAR DATA?

3 A. Yes. For instance, during the Test Year, ETI began negotiating a new contract for
4 vegetation management and line maintenance. The Company and its vendor
5 executed the new contract after the Test Year but before the filing of this case. As
6 Ms. Lofton testifies, this adjustment increases the Company's Test Year expense
7 by approximately \$5.1 million. The terms and conditions of this agreement are
8 finalized and executed in writing — thus, these costs are known and measurable.

9

10 Q128. PLEASE EXPLAIN THE REASON FOR THE INCREASE IN VEGETATION
11 MANAGEMENT EXPENSE.

12 A. For several years, ETI's vegetation management vendor only minimally increased
13 its rates for this service. However, the vendor recently had to raise rates primarily
14 for two reasons: (1) a significant increase in labor costs resulting from a recent
15 decline in the vegetation management workforce; and (2) the rising price of diesel
16 fuel. In considering whether to accept the increase, ETI sought and considered
17 bids from other vendors. The rates of ETI's current vendor, despite the increase,
18 are significantly less costly on a per-mile basis than the rates proposed in those
19 other bids.

20

21 Q129. ARE ETI'S DISTRIBUTION-RELATED O&M EXPENSES NECESSARY TO
22 PROVIDE CONTINUOUS, RELIABLE SERVICE TO ITS CUSTOMERS?

23 A. Yes. These O&M expenses, as described in my direct testimony, are

1 representative of the costs incurred for personnel and programs necessary to
2 provide safe and reliable service to ETI's customers. ETI could not provide
3 electric service to its customers without incurring these types of costs to operate
4 and maintain its distribution system.

5

6 Q130. WHAT DO YOU DO TO ENSURE THESE O&M COSTS ARE
7 REASONABLE?

8 A. In order to ensure that ETI is keeping costs reasonable, the Company has a staff of
9 highly qualified engineers, accountants, and management that oversee projects
10 and budgets through their life cycles. As explained in this testimony, cost
11 controls are in place to help our staff of experienced, highly trained, and
12 competent managers oversee and seek out opportunities for cost reductions or
13 reallocations.

14

15 Q131. IS THERE ANY OBJECTIVE EVIDENCE TO SUPPORT YOUR OPINION
16 THAT, OVERALL, THE COSTS FOR DISTRIBUTION OPERATIONS ARE
17 REASONABLE?

18 A. Yes. The costs are reasonable based upon a review of recent distribution non-fuel
19 O&M expense benchmarking metrics for the same 20 similarly situated utilities I
20 previously discussed. Similar to the analysis performed regarding distribution
21 capital investment, these figures were obtained from FERC Form 1 data for the

1 four years of 2017 through 2020,¹⁰ and I present this information in
2 Exhibits MLT-5A and MLT-5B.

3

4 Q132. HOW DOES THIS DATA SHOW THAT ETI'S NON-AFFILIATE AND
5 AFFILIATE DISTRIBUTION COSTS ARE REASONABLE AND
6 NECESSARY?

7 A. These metrics are of one source of information that utility managers use to assess
8 the economic and operational efficiency of various activities. These costs cover
9 total distribution O&M expenses, excluding fuel. For ETI, the numbers include
10 both non-affiliate and affiliate costs. The analyses compared these costs based on
11 customers served and total kWh sales for each utility, and then ranked the
12 companies. This comparison shows ETI's costs to be reasonable because ETI is
13 below the mean in O&M costs, and that the Company is effectively managing its
14 O&M costs on both a per-customer and per-kWh basis.

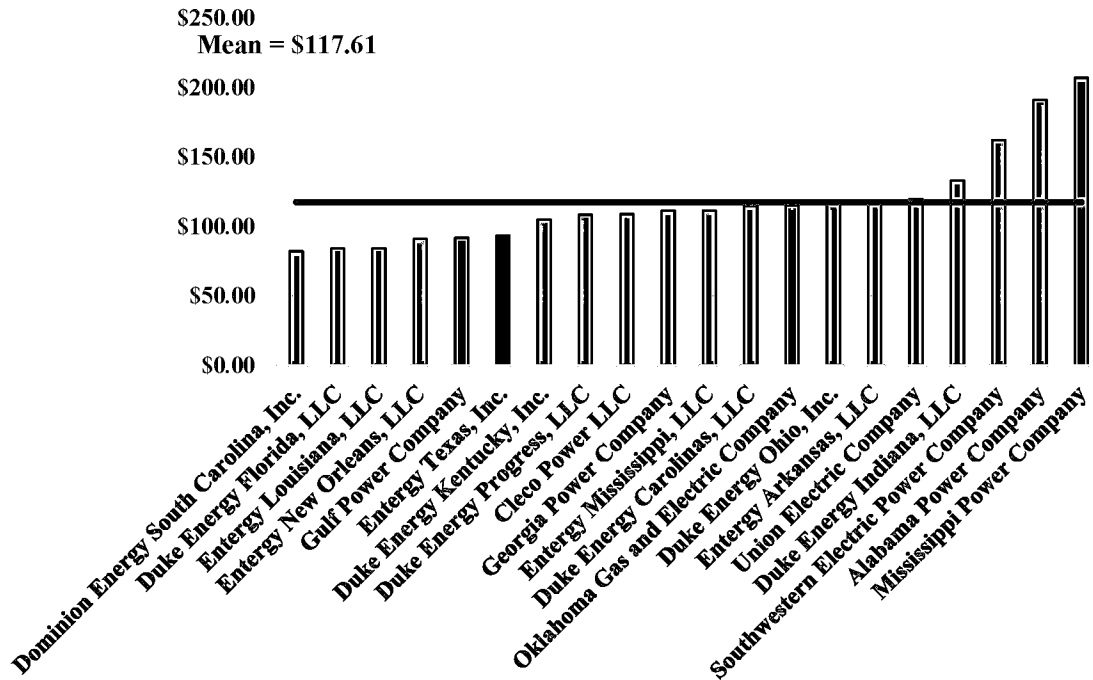
15

16 Q133. WHAT DO THE RANKINGS SHOW?

17 A. Figure 22 below shows the FERC Form 1 data from Exhibit MLT-5A for the 20
18 utilities on the variable of dollars of O&M distribution expenses per customer for
19 the 2017 through 2020 period. This comparison shows that ETI's average
20 distribution O&M cost was \$93.34/customer, which is 23% below the mean of
21 \$117.61/customer. Because ETI was below the mean of these 20 utilities, this

¹⁰ As noted earlier, complete data for the entire 20-utility panel was not available when my testimony was prepared.

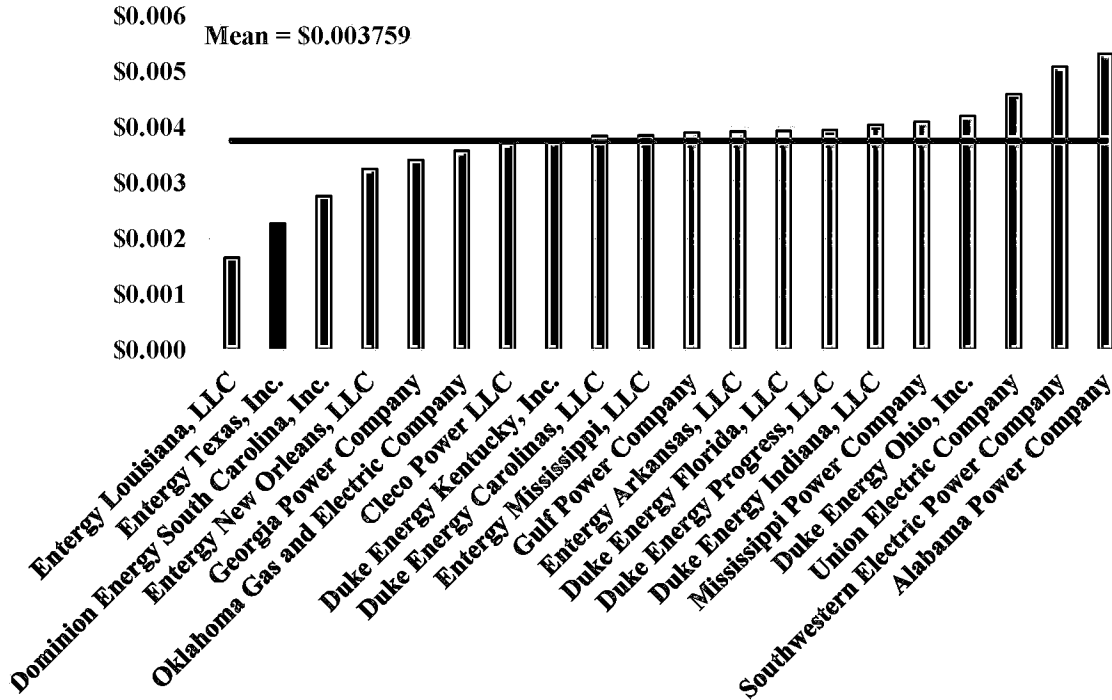
1 metric supports the conclusion that ETI's distribution O&M costs are reasonable.



2 **Figure 22:**
3 **2017–2020 Distribution O&M Expense (per Customer)**

4 Q134. HOW DID ETI COMPARE ON A COST-PER-KWH BASIS?

5 A. Figure 23 below shows the FERC Form 1 data and charts the 20 utilities in
6 Exhibit MLT-5B, including ETI, on the variable of dollars per kWh of O&M
7 distribution expenses from 2017 through 2020. This comparison demonstrates
8 that ETI's distribution O&M costs for the four-year period averaged
9 0.002276/kWh. This is 49.1% below the mean of \$0.003759/kWh and ranks ETI
10 second lowest among the 20 utilities.



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Figure 23:
2017-2020 Distribution O&M Expenses (per kWh)

B. Budget Processes and Controls

Q135. PLEASE DESCRIBE THE BUDGETING PROCESS FOR ETI.

A. Each functional area within ETI has responsibility to budget and control costs for a specific set of work processes. In preparation for the budgeting process, each department reviews the historic activity levels for its work processes. The operating budget and the non-reliability capital budget for each department are then developed based on expected spending levels, changing customer requirements, projected economic growth factors, on-going efficiency improvements, and the current workload for these processes. The maintenance budget and the reliability capital budget are developed in conjunction with the Load and Contingency Planning functions performed by the Distribution Asset

1 Planning group and the Reliability and Infrastructure functions performed by the
2 Distribution Asset Management group using five-year reliability modeling
3 strategies in place for ETI.

4 Both capital and O&M budgets for ETI use a combination of six
5 dimensions to categorize costs: Business Unit, Department, Resource, Project,
6 Activity, and Physical Location. Budgets within each Business Unit or legal
7 entity (such as ETI) are initially developed for each organizational department
8 using the “Department” dimension. Costs are budgeted based on the type of cost,
9 such as employee salaries, materials and supplies, and office expenses, using the
10 Resource dimension. Depending on the type of work, the Project dimension will
11 identify specific work, such as projects to serve new customers, projects to
12 improve reliability, and projects to repair damaged facilities. Activity is a
13 dimension that can be used to identify specific activities such as acquiring ROW,
14 designing facilities, and performing electric meter services. Finally, the Physical
15 Location dimension allows budgeting based on the functional geographical area.

16 The Group President of Utility Operations, Vice President of Finance
17 Business Partners, Operating Company Finance Director, Director of Corporate
18 Planning, Vice President of Customer Service Texas, Vice President of Customer
19 Operations Support, Director of Engineering and Field Support, Director of
20 Utility Finance Business Partners, and the Utility Finance Business Partner
21 Analyst conduct various management reviews to reach concurrence on the O&M
22 and capital spending plans. This includes changes needed to ensure the
23 appropriateness of the approach and the reasonableness of the proposed budgets.

1 The President and CEO of ETI, Mr. Eli Viamontes, conducts the final review and
2 approves O&M and capital spending plans.

3

4 Q136. PLEASE DESCRIBE HOW ETI MONITORS DISTRIBUTION COSTS.

5 A. ETI has a staff of qualified, experienced professionals who are involved in the
6 initial budgeting process and are responsible for adherence and/or variances
7 throughout the budget life cycle. ETI uses a number of controls to monitor and
8 review the costs associated with distribution activities. Each organizational
9 department monitors the variance between actual spending and budgeted amounts
10 on a monthly basis. Each business unit must explain spending variances and to
11 provide estimates of year-end spending levels. A financial analyst assigned to
12 ETI assists the departments by providing reports, research, analysis, and training
13 in the use of reporting systems. Management teams hold regular meetings to
14 review the spending levels of each business unit, as well as to review aggregate
15 spending at the regional, operational, and jurisdictional levels. The
16 Vice President of Financial Business Partners receives and reviews budget
17 variance explanations and estimates of year-end spending levels.

18

19 Q137. PLEASE DISCUSS HOW ETI USES BUDGET REPORTS TO MONITOR
20 SPENDING.

21 A. The Cost Reporting and Analysis financial reporting system allows for a variety
22 of periodic and ad hoc budget variance reports. These reports are available to
23 ETI's management team to ensure that costs for ETI are reasonable and follow the

1 budget plan. Budget variance reports are available at any time to each department
2 within ETI using one or more of the cost dimensions discussed above. Budget
3 variance and cost reports reflect all expenditures posted to each dimension at the
4 time the report is generated. ETI uses these reports to prepare the monthly
5 variance explanations as well as to analyze cost trends and projections. Because
6 these reports are readily available, managers can frequently review spending and
7 make timely decisions to keep costs reasonable.

8
9 Q138. HOW DOES ETI MEASURE COMPLIANCE WITH THE SPENDING PLANS?

10 A. Each year, financial and performance targets for ETI are developed using a five-
11 year planning horizon. These financial and performance targets are then
12 translated into current year spending targets for both O&M and capital
13 expenditures across the functional groups such as Transmission, Power
14 Generation, and Distribution. Key financial and performance targets for ETI
15 include O&M and capital spending plans—however, the focus is not only on cost-
16 control targets as ETI must also consider the essential goal of outstanding
17 reliability and customer service. Therefore, the Company monitors and reviews
18 financial and performance results together to ensure that each department uses
19 available financial resources to improve reliability and customer service. This
20 leads to a high level of reliability, good customer service, below-average costs to
21 the customer, and award-winning response to catastrophic weather events.

1 Q139. SEPARATE FROM THE BUDGETING PROCESS, DOES ETI UNDERTAKE
2 OTHER MEASURES OR INITIATIVES TO CONTROL ITS COSTS OR
3 IMPROVE ITS SERVICES?

4 A. Yes. We have multiple levels of competent management and their staffs that
5 continuously search for and implement day-to-day improvements in both
6 controlling costs and improving the quality of service. The EOCs utilize a
7 comprehensive structure of authorization limits for their various levels of
8 management to ensure controls for spending are in place.

9

10 **C. ETI O&M Costs**

11 Q140. TURNING TO ETI O&M EXPENSES SPECIFICALLY—EXCLUSIVE OF
12 AFFILIATE CHARGES—WHERE ARE THESE EXPENSES REFLECTED IN
13 THE RFP?

14 A. ETI's own O&M expenses are reflected in the overall cost of service included in
15 Schedule A of ETI's rate filing package.

16

17 Q141. PLEASE DESCRIBE THE ACTIVITIES COVERED BY THESE EXPENSES.

18 A. These activities relate primarily to local maintenance and construction of the ETI
19 distribution system, as well as review and approval of projects identified by ESL
20 planning engineers. As with capital additions, Test Year ETI O&M costs (not
21 including affiliate costs) associated with Distribution Operations are largely
22 composed of direct-labor, materials, and contractors.

1 Q142. WERE THE ETI TEST YEAR O&M EXPENSES REASONABLE?

2 A. Yes. The budget, processes, oversight controls, and benchmarking discussed in
3 this testimony ensure that ETI O&M expenses were reasonable.

4

5 **D. Affiliate O&M Costs**

6 Q143. WHAT ARE THE TWO CLASSES OF AFFILIATE CHARGES THAT YOU
7 SPONSOR?

8 A. I sponsor affiliate costs for the Distribution Operations Class and the T&D
9 Support Class.

10

11 Q144. WHY ARE YOU THE SPONSOR FOR THESE TWO CLASSES?

12 A. They support the daily operations that I oversee.

13

14 Q145. PLEASE DESCRIBE THE ALPHA EXHIBITS THAT SUPPORT THE
15 INFORMATION INCLUDED IN THESE TWO CLASSES OF AFFILIATE
16 COSTS.

17 A. Exhibit MLT-A shows the information broken down by the departments
18 comprising the two affiliate classes. Exhibit MLT-B shows the same information
19 broken down by project code and the billing method for each project code.
20 Exhibit MLT-C shows the information by class, department, billing method, and
21 project code. Exhibit MLT-D summarizes the pro forma adjustments to Test Year
22 data by class and adjustment. Mr. Dumas discusses these affiliate exhibits in
23 detail in his direct testimony.

1 **1. Affiliate Services for the Distribution Operations and T&D Support Classes**

2 Q146. WHAT IS THE PURPOSE OF THE SERVICES PERFORMED WITHIN
3 THESE TWO AFFILIATE CLASSES?

4 A. The purpose of these services is to leverage the economies of scale by utilizing
5 centralized organizations that provide similar services to the affiliates. These
6 centralized organizations support ETI's field operations in its efforts to provide
7 safe, reliable, and economic distribution service to all of its customers.

8

9 Q147. ARE THESE SERVICES NECESSARY?

10 A. Yes. The Distribution Operations Class services and the T&D Support Class
11 services are critical to enabling ETI to provide the overall electric service
12 requirements to meet its customers' needs. If centralized organizations did not
13 provide these services, duplicative organizations within each EOC would have to
14 do so.

15

16 **a. Description of Distribution Operations Class**

17 Q148. PLEASE LIST THE MAJOR SERVICES WITHIN THE DISTRIBUTION
18 OPERATIONS CLASS.

19 A. The major services are:

- 20 • Load and Contingency Planning;
- 21 • Reliability and Infrastructure Management;
- 22 • Audit & Compliance;
- 23 • ROW Management;

- 1 • Damage Prevention;
- 2 • Utility Safety;
- 3 • Agency Coordination;
- 4 • Data Maintenance;
- 5 • Safety & Skills Training;
- 6 • Engineering and Material Standards; and
- 7 • Meter Reading

8

9 Q149. PLEASE DESCRIBE EACH OF THESE SERVICES.

10 A. The Distribution Operations Class includes the following services:

- 11 • **Load and Contingency Planning** analyzes ETI's distribution system to
12 determine the system's capability to operate reliably and makes plans to
13 ensure reliable operations. It provides infrastructure planning (which
14 includes conceptual engineering and economic analysis), capital project
15 analysis, project approval, and budgeting to enhance the reliability of the
16 distribution system. To maintain and enhance system reliability for ETI's
17 customers, Load and Contingency Planning carries out the following types
18 of activities:
 - 19 ○ load forecasting;
 - 20 ○ five-year distribution planning;
 - 21 ○ contingency restoration projects;
 - 22 ○ load-related projects;
 - 23 ○ system integrity planning and preparedness; and
 - 24 ○ capital expenditure planning.
- 25 • **Reliability and Infrastructure Management** is necessary to maximize
26 distribution circuit availability, minimize the number of interruptions,
27 reduce the number of circuit segments experiencing multiple outages, and
28 ensure the integrity of the infrastructure. More specifically, Reliability
29 and Infrastructure Management is responsible for designing, coordinating,
30 and overseeing the following types of activities:

- 1 ○ distribution guidelines and reliability standards;
- 2 ○ reliability program strategies;
- 3 ○ reliability performance planning;
- 4 ○ pole inspection program;
- 5 ○ targeted circuits inspection;
- 6 ○ underground cable program;
- 7 ○ equipment inspection;
- 8 ○ equipment maintenance program;
- 9 ○ lightning mitigation; and
- 10 ○ animal mitigation.

- 11 • **Audit & Compliance** provides central management, program
12 development, and the administration of the EOCs' (including ETI's)
13 internal audit and correction process associated with adherence to internal
14 engineering standards and accounting practices.

- 15 • **ROW Management** provides central management and the administration
16 of the EOCs' (including ETI's) ROW management and associated
17 contracts for ROW management and permitting services. Among other
18 activities, ROW Management is responsible for:
 - 19 ○ the acquisition of new ROW;
 - 20 ○ modifications to existing agreements;
 - 21 ○ administration of ROW contracts; and
 - 22 ○ obtaining railroad, highway, and other permits.

- 23 • **Damage Prevention** provides central management and the administration
24 of the EOCs' (including ETI's) underground locate processes,
25 coordination with non-Entergy utilities and the central call phone, and
26 administering the contract with underground facility locators.

- 27 • **Utility Safety** provides support and coordination of the EOCs' (including
28 ETI's) safety programs, processes, and initiatives, and coordinates the
29 Utility Safety Program with other Business Units within Entergy to ensure
30 consistency.

- 1 • **Agency Coordination** manages the interaction between the Company and
2 partners in regard to joint-use facilities. Among other activities, Agency
3 Coordination is responsible for:
- 4 ○ cyclical verification of attachment points;
- 5 ○ billing;
- 6 ○ coordination of relocation of facilities and repairs; and
- 7 ○ administration of inspection contracts.
- 8 • **Data Maintenance** manages the electronic repositories of data that drive
9 maps, maintenance, restoration, and system operations.
- 10 • **Safety & Skills Training** creates a safe work environment, reduces the
11 human suffering and expenses caused by accidents, and eliminates fines
12 for non-compliance with safety regulations. Specifically, the organization
13 provides the following services: (1) reviews OSHA and DOT-RSPA
14 regulations to ensure all applicable regulations have been addressed;
15 (2) provides public safety demonstrations; (3) provides support in
16 emergency situations in accordance with established emergency
17 restoration plans; (4) complies with all reporting requirements, as
18 specified by law; (5) develops, implements, and conducts all safety
19 training for the Transmission and Customer Service Organizations; and
20 (6) facilitates safety procedures within work groups.
- 21 • **Engineering and Material Standards** develops and manages distribution
22 standards, including specifications for line design and construction,
23 materials, tools and equipment, and service policies.
- 24 • **Meter Reading** has historically included managing the reading system
25 operations and the contract meter reader contract administration process.
26 As described below, the meter reading scope is diminishing with the
27 deployment of AMS.

28

29 Q150. PLEASE DESCRIBE THE METER READING BUSINESS FUNCTION AS IT
30 EXISTED PRIOR TO AND DURING THE AMS DEPLOYMENT.

31 A. Prior to and during the AMS deployment in ETI's service territory, which
32 included a portion of the Test Year, a third-party contractor performed the

1 monthly meter reading of each customer's meter. An ETI meter-reading
2 supervisor administered those contracted services on a daily basis, and ETI
3 incurred these costs directly. With respect to affiliate services, ESL provides
4 centralized services, including: managing the meter reading system (residential,
5 commercial, and industrial meter reading operation needs); managing the overall
6 meter reading contract administration process (i.e., establishing and monitoring
7 contractual service levels and requirements, and the competitive bidding process);
8 managing the processes associated with the validation of acquired meter reading
9 data; and leading various process optimization efforts to minimize reading errors,
10 customer complaints, cycle time, and meter reading costs. This centralized
11 function is headquartered in Hammond, Louisiana and ensures that these services
12 are not duplicated within ETI.

13

14 Q151. WERE THE SERVICES PROVIDED FOR MANAGEMENT AND
15 OVERSIGHT OF THE METER READING FUNCTION NECESSARY FOR
16 ETI'S OPERATIONS?

17 A. Yes, for two primary reasons. First, the Meter Reading Operations ("MRO")
18 function (i.e., the acquisition and validation of meter data) requires management
19 and supervision that can be most effectively managed by a centralized group of
20 knowledgeable and experienced personnel. Second, the centralized approach
21 achieves economies of scale and consistency in operational processes via software
22 and hardware to effectively obtain and transfer meter-reading data to and from the
23 customer information system.

1 Q152. DID THE SERVICES PROVIDED BY THE METER READING BUSINESS
2 FUNCTION DUPLICATE SERVICES PROVIDED BY OTHER CLASSES OF
3 SERVICES OR BY DEPARTMENTS WITHIN ETI?

4 A. No. Although both ESL and ETI employees were involved in Meter Reading
5 Operations, the employees did not perform the same activities. The cost for these
6 ESL activities was captured in various project codes that were available only to
7 ESL employees. ETI employees did not charge to these projects and did not
8 duplicate any of the activities performed by ESL employees.

9

10 Q153. HOW HAS THE DEPLOYMENT OF AMS AFFECTED THE METER
11 READING BUSINESS FUNCTION?

12 A. Mass deployment of the AMS solution completed in 2021; however, ongoing
13 manual meter reading activities continue on a limited basis as full maturation of
14 the technology is achieved. Mass deployment accounted for the exchange of
15 almost all of the existing meter population, exceptions including inaccessible
16 metering points and opt-out customers. Additionally, manual meter reading will
17 continue as necessary to confirm the accuracy of the over-the-air reads.

18

19 **b. Description of T&D Support Class**

20 Q154. PLEASE LIST THE MAJOR SERVICES WITHIN THE T&D SUPPORT
21 CLASS.

22 A. The major services are Environmental Management and Fleet Management.

1 Q155. PLEASE DESCRIBE EACH OF THESE SERVICES.

2 A. Environmental Management provides the following services for ETI:

- 3 • develops and maintains system-wide processes for monitoring and
4 interpreting federal and environmental laws and regulations;
- 5 • identifies new or modified regulatory requirements and develops cost-
6 effective plans for achieving compliance while minimizing operational
7 impacts and costs;
- 8 • develops and maintains compliance strategies, programs, and guidance
9 documents that can be used throughout the Transmission and Customer
10 Service Organizations;
- 11 • standardizes, to the extent practical, the compliance plans and procedures
12 to allow for the efficient utilization of staff on a system-wide basis when
13 required;
- 14 • promotes operational compliance through formal and informal compliance
15 assessment and training activities; and
- 16 • minimizes liabilities associated with operations by careful oversight of
17 regulated activities, materials, and waste.

18 Fleet Management provides the following services for ETI:

- 19 • manages the acquisition, repair, and maintenance of the fleet of hydraulic
20 units, light-duty vehicles, and specialty equipment;
- 21 • develops a standardized set of vehicles that are available to each EOC,
22 thus reducing overall costs;
- 23 • manages the fuel card program for all the vehicles in each EOC, and
24 manages the acquisition of fuel for some EOC vehicles;
- 25 • identifies new or modified Department of Transportation (“DOT”)
26 regulations, and develops cost-effective plans for achieving compliance
27 while minimizing operational impacts and costs;
- 28 • maintains records for all commercial drivers to ensure compliance with all
29 DOT regulations; and
- 30 • manages vehicle licensing, inspections, and titles for each EOC.

2. Overview of Costs

Q156. WHAT IS THE TOTAL ETI ADJUSTED AMOUNT DURING THE TEST YEAR FOR THE DISTRIBUTION OPERATIONS AND T&D SUPPORT CLASSES?

A. The Total ETI Adjusted amount for the Distribution Operations Class is \$2,905,706. The Total ETI Adjusted amount for the T&D Support Class is \$311,778. Table 3 below shows the direct-billed and allocated portions of the Total ETI Adjusted amounts for the Distribution Operations Class and the T&D Support Class.

**Table 3:
Total ETI Adjusted Amount for the Distribution Operations
and T&D Support Classes¹¹**

Class	Total Billings	Total ETI Adjusted		
		Amount	% Direct Billed	% Allocated
Distribution Operations	\$217,446,027	\$2,905,706	27%	73%
T&D Support	\$5,126,916	\$311,778	34%	66%

Q157. WHAT ARE THE MAJOR COST COMPONENTS OF THE CHARGES FOR THE DISTRIBUTION OPERATIONS CLASS?

A. The major components of those costs are as follows:

¹¹ **Total Billings** are ESL's total billings to all Entergy companies for the Test Year, plus all other affiliate charges that originated from any Entergy company. This is the amount from Column C of Exhibits MLT-A, MLT-B, and MLT-C. **Total ETI Adjusted Amount** is ETI's cost of service amount after pro forma adjustments and exclusions. **% Direct Billed** is the percentage of the Total ETI Adjusted Amount that was billed directly to ETI for the Test Year. **% Allocated** is the percentage of the Total ETI Adjusted Amount that was allocated to ETI for the Test Year.

**Table 4:
Distribution Operations Class Cost Components**

Cost Component	Cost	% of Total
Payroll and Employee Costs	\$1,758,324	61%
Service Company Recipient	258,263	9%
Office and Employee Expenses	\$142,873	5%
Outside Services	\$492,976	17%
Other	\$253,270	9%
Total	\$2,905,706	100%*

*Total may not sum due to rounding.

1 Q158. WHAT IS THE SIGNIFICANCE OF THESE COST CATEGORIES?

2 A. The costs shown in Table 4 comprise the Total ETI Adjusted amount for the
3 Distribution Operations Class. This breakout of costs provides an additional
4 “view” of the cost components. Other witnesses in this case may also provide
5 indirect support for these costs because they address the corporate structures and
6 practices that underlie these costs. For example, the table demonstrates that 61%
7 of the costs in the Distribution Operations Class are labor-related costs (“Payroll
8 and Employee Costs”). Jennifer Raeder discusses ESL’s overall compensation
9 structure and practices. The “Service Company Recipient” row of the table
10 pertains to costs common throughout ESL, such as information technology, rents,
11 and human resources. These costs are spread to all affiliate classes, as Mr. Dumas
12 explains. The “Office and Employee Expenses” category covers the costs of
13 maintaining workspaces, office supplies, and employee travel and business
14 expenses. Dawn Renton addresses workspaces and supplies in her testimony, and
15 Bobby Sperandeo addresses the employee travel and business expense processes.
16 “Outside Services” pertains to services provided by non-Entergy employees and
17 firms, such as outside consultants and vendors.

1 Q159. YOU HAVE DISCUSSED THE SUPPORT PROVIDED BY THE
2 DISTRIBUTION OPERATIONS CLASS. ARE THE COSTS OF THIS CLASS
3 REASONABLE?

4 A. Yes. The Distribution Operations Class of services is managed effectively and
5 performed efficiently using experienced, well-trained professionals. These
6 services have contributed to improving system operations and reliability in a cost-
7 effective manner by taking advantage of economies of scale, as I described earlier
8 in my direct testimony. I further address reasonableness of the affiliate costs
9 below.

10

11 Q160. WHAT ARE THE MAJOR COST COMPONENTS OF THE CHARGES FOR
12 THE T&D SUPPORT CLASS?

13 A. The major components of those costs are as follows:

14

15

**Table 5:
T&D Support Class Cost Components**

Cost Component	Cost (\$)	% of Total
Payroll and Employee Costs	\$85,174	27%
Office and Employee Expenses	\$109,943	35%
Service Company Recipient	\$14,292	5%
Outside Services	\$100,463	32%
Other	\$1,906	1%
Total	\$311,778	100%*

*Total may not sum due to rounding.

16 Q161. WHAT IS THE SIGNIFICANCE OF THESE COST CATEGORIES?

17 A. The costs shown in Table 5 comprise the Total ETI Adjusted amount for the T&D
18 Support Class. As noted above regarding the Distribution Operations Class, other
19 witnesses in this case may also provide indirect support for these costs because

1 they address the corporate structures and practices that underlie these costs. For
2 example, the table demonstrates that 27% of the costs in the T&D Support Class
3 are labor related costs (“Payroll and Employee Costs”). Again, Ms. Raeder
4 discusses ESL’s overall compensation structure and practices. The “Service
5 Company Recipient” row of the table pertains to costs common throughout ESL,
6 such as general information technology, rents, and human resources, as explained
7 by Mr. Dumas. The “Office and Employee Expenses” component includes the
8 costs of maintaining workspaces and office supplies, which are supported, in part,
9 by Ms. Renton, and employee business travel and expenses, which are supported,
10 in part, by Mr. Sperandeo.

11
12 **3. Reasonableness of Costs**

13 Q162. DO YOU HAVE OBJECTIVE EVIDENCE TO SUPPORT YOUR OPINION
14 THAT THE COSTS OF THE DISTRIBUTION OPERATIONS CLASS AND
15 THE T&D SUPPORT CLASS ARE REASONABLE?

16 A. Yes. A comparison of FERC Form 1 data shows that ETI’s distribution costs are
17 reasonable. While the Company does not file FERC Form 1 data strictly on the
18 basis of the Distribution Operations Class or the T&D Support Class, such costs
19 are included in the overall distribution costs included in ETI’s FERC Form 1
20 filings. As discussed above, Exhibits MLT-5A and MLT-5B show that ETI
21 compares favorably with similarly situated utilities in terms of its distribution
22 costs per kWh and distribution costs per customer.

1 Q163. ARE THE SERVICES PROVIDED BY THE DISTRIBUTION OPERATIONS
2 AND T&D SUPPORT CLASSES DUPLICATED BY OTHER DEPARTMENTS
3 WITHIN ETI?

4 A. No.

5

6 Q164. HOW DOES ETI PROVIDE INPUT AND DIRECTION FOR THE
7 DISTRIBUTION OPERATIONS CLASS AND THE T&D SUPPORT CLASS?

8 A. ETI management sets goals and direction for its operations, and the affiliate
9 provider assists with the implementation and execution of plans to accomplish
10 those goals. Examples of this relationship include providing economical
11 management of contracts, vegetation management, and load planning to meet the
12 safety, financial, operational, and reliability objectives of ETI. These practices
13 are standard within all EOCs.

14

15 a. **Budget Planning**

16 Q165. DOES THE DISTRIBUTION OPERATIONS ORGANIZATION HAVE IN
17 PLACE THE BUDGETING PROCESS TO CONTROL COSTS FOR THE
18 DISTRIBUTION OPERATIONS AND T&D SUPPORT CLASSES?

19 A. Yes. The budget process for controlling costs for the Distribution Operations and
20 T&D Support classes is the same as the budget process described earlier in my
21 testimony. The controls in place are competent managers and analysts who
22 oversee and monitor end-to-end budgeting and reporting processes throughout the
23 year. Any major variance in cost requirements is immediately addressed through

1 root cause analysis, project priority determination, evaluation of benefits, and
2 availability of funding, possibly from other areas.

3

4 Q166. IS COMPLIANCE WITH THE BUDGET FOR THESE CLASSES OF
5 SERVICE MONITORED?

6 A. Yes. Numerous reports describing budget variances and trends are available to
7 the management team on a continuous basis. The Cost Reporting and Analysis
8 financial reporting system allows for analysis by any combination of the cost
9 dimensions previously discussed, as well as by FERC and regulatory views.

10

11 Q167. ARE DISTRIBUTION OPERATIONS EMPLOYEES HELD ACCOUNTABLE
12 FOR DEVIATIONS FROM BUDGET FOR THIS CLASS OF SERVICES?

13 A. Yes. Distribution Operations management is held responsible for controlling
14 costs within their responsibility budget. Both the affiliate department and
15 Distribution Operations management address any significant variances during
16 monthly budget review sessions. The variances are analyzed, and strategies are
17 developed to bring these variances in line immediately or within the budget year.

18

19 **b. Cost Trends**

20 Q168. WHAT WERE THE TOTAL AFFILIATE O&M CHARGES TO ETI FOR THE
21 DISTRIBUTION OPERATIONS CLASS FOR THE PERIOD OF 2018
22 THROUGH THE TEST YEAR?

23 A. Table 6 shows the total affiliate O&M charges to ETI for the Distribution

1 Operations Class for calendar years 2018 through 2021 (end of year figures), as
2 well as the total affiliate O&M charges to ETI for the Test Year:

3 **Table 6:**
4 **Distribution Operations Class Affiliate Charges to ETI¹²**

Distribution Operations	2018	2019	2020	Test Year
	\$3,113,289	\$3,230,553	\$3,143,619	\$2,905,706

5 Q169. HOW DOES THIS TREND COMPARE TO THESE CHARGES IN THE TEST
6 YEAR?

7 A. The amount of affiliate charges in the Distribution Operations Class in the Test
8 Year was lower than the trend in recent years.

9
10 Q170. PLEASE EXPLAIN THIS CHANGE.

11 A. This was primarily due to the Meter Reading organization winding down in the
12 test year as a result of the AMS deployment.

13
14 Q171. WHAT WERE THE TOTAL AFFILIATE O&M CHARGES TO ETI FOR THE
15 T&D SUPPORT CLASS DURING THIS PERIOD?

16 A. Table 7 shows the total affiliate O&M charges to ETI for the T&D Support Class
17 for the calendar years 2018 through 2020 (end of year figures), as well as the Test
18 Year:

¹² These charges have been adjusted to remove Corporate Aviation costs, Nuclear and Gas department costs, and other non-ratemaking items.

1
2

**Table 7:
T&D Support Affiliate Charges to ETI¹³**

T&D Support	2018	2019	2020	Test Year
	\$367,987	\$271,595	\$254,753	\$311,778

3 Q172. HOW DOES THIS TREND COMPARE TO THESE CHARGES IN THE TEST
4 YEAR?

5 A. The amount of affiliate charges in the T&D Support Class in the Test Year was
6 higher than the trend in some recent years.

7

8 Q173. PLEASE EXPLAIN THIS CHANGE.

9 A. This was driven primarily by an increase in skills training.

10

11 **c. Billing Allocation Methodologies**

12 Q174. PLEASE EXPLAIN THE DIFFERENCE BETWEEN COSTS THAT ARE
13 DIRECTLY BILLED TO ETI AND COSTS THAT ARE ALLOCATED TO ETI.

14 A. Costs that originate in an affiliate company, but are applicable solely to ETI, are
15 considered to be “directly billed” to ETI. Costs that originate with an affiliate
16 company and are applicable to ETI and one or more other EOCs are shared across
17 the EOCs based on a billing method used to allocate the costs. Such costs are
18 considered to be “allocated” to ETI.

¹³ These charges have been adjusted to remove Corporate Aviation costs, Nuclear and Gas department costs, and other non-ratemaking items.

1 Q175. WHAT IS THE BASIS FOR ALLOCATING THE AFFILIATE COSTS TO ETI?

2 A. The ESL affiliate costs consist of services charged to one or more project codes
3 that are created for the purpose of allocating, or billing, the costs to Entergy-
4 affiliated companies. As Mr. Dumas explains in his direct testimony, only one
5 billing method is assigned to each project code. Any organization performing
6 work associated with a project code will charge its work to that project code. The
7 billing method for that project code remains the same, regardless of the
8 organization that does the work or the type of work performed.

9 The billing method for the project code is based on cost causation. This
10 practice of assigning and using one billing method for each project code based
11 upon cost causation assures that the price billed to ETI for the service provided
12 under the project code is no higher than the price charged to other affiliates for the
13 same or similar services and represents the actual cost of the service.

14 Mr. Dumas' direct testimony provides, among other things, a listing of
15 Entergy billing methods, project titles, and descriptions. As charges are incurred
16 in the two affiliate classes I sponsor, they are charged to the appropriate project
17 code, allocated based upon the applicable billing method, and then billed to each
18 affiliate, including ETI.

19

20 Q176. WHAT WERE THE PREDOMINANT BILLING METHODS USED FOR THE
21 TWO AFFILIATE CLASSES YOU SPONSOR?

22 A. The predominant billing methods used for the Distribution Operations Class were
23 CUSEOPCO, DIRECTTX, and CUSTEGOP, and the T&D Support Class

1 predominant billing methods were CUSEOPCO, and DIRECTTX. These three
2 billing methods account for 94% and 98%, respectively, of the affiliate charges to
3 ETI for each of the classes. I describe these billing methods in Exhibit MLT-6.

4

5 Q177. HAVE YOU REVIEWED THE REMAINING TOTAL ETI ADJUSTED COSTS
6 ASSOCIATED WITH EACH OF THESE TWO CLASSES?

7 A. Yes. I have reviewed the other project codes and different billing methods that
8 were used for the remaining costs for each class. The remaining billing methods
9 are set forth in Exhibit MLT-B.

10

11 Q178. HAVE YOU DETERMINED THAT THE APPROPRIATE PROJECT CODES
12 AND BILLING METHODS HAVE BEEN USED FOR THE REMAINING
13 COSTS?

14 A. Yes. The costs associated with the remaining billing methods are consistent with
15 and reflect the services captured in each respective project code.

16

17 Q179. HAVE YOU REACHED A CONCLUSION ABOUT THE MANNER ESL
18 BILLS ETI FOR THE CLASSES OF AFFILIATE SERVICES?

19 A. Yes. The unit cost to ETI as a result of the application of these billing methods is
20 no higher than the unit cost to other affiliates for the same or similar service and
21 represents the actual cost of the services.

1 **d. Meter Reading**

2 Q180. WITH RESPECT TO THE METER READING ACTIVITY THAT OCCURRED
3 DURING THE TEST YEAR, DO YOU HAVE ADDITIONAL EVIDENCE
4 THAT SUPPORTS YOUR OPINION THAT THE COST OF THE METER
5 READING BUSINESS FUNCTION IS REASONABLE?

6 A. Yes. First, to aggressively control meter reading cost drivers, competitive bidding
7 techniques were utilized. Second, the use of a single central support group
8 enabled ETI to reduce overall meter reading support staffing levels and allows the
9 use of a single meter reading system. Without this arrangement, ETI and the
10 other EOCs would have been required to have their own meter reading systems,
11 creating redundant systems and support groups that would require multiple
12 interfaces with the customer information system. Also, the single support group
13 fosters negotiating power because the third-party suppliers that supported ETI
14 also provided meter reading services to other EOCs.

15 Prior to AMS it was critical to retain viable third-party meter reading
16 suppliers and corresponding service level agreements in order to achieve the
17 optimum balance between cost and performance (e.g., reading accuracy, minimal
18 complaints/positive public acceptance). To reach this balance, ETI MRO
19 contracts were renegotiated in 2015. At that time, contracts were awarded to the
20 low bidder. These contracts went into effect in October 2015 and remained in
21 place until the AMS deployment began. Post-deployment, meter reading
22 contractors are compensated on a time and materials basis.

1

VIII. SCHEDULES MES

2

Q181. DO YOU SPONSOR ANY OF THE PROPOSED CHANGES TO THE
COMPANY'S MISCELLANEOUS ELECTRIC SERVICE ("MES") FEES?

3

4

A. Yes, I am responsible for and support portions of the calculations for the revised
Trip Fee, Connection Fees, Disconnect/Reconnect Fees, Temporary Metered
Service Connection Fees, Meter Test Fee, and certain components of the Non-
Standard Metering Service charges. Accordingly, I co-sponsor Schedule MES
and the Schedule MES workpaper included with Mr. Barrett's direct testimony
Exhibit SB-1.

5

6

7

8

9

10

11

IX. LIGHTING SCHEDULES

12

Q182. DO YOU SPONSOR ANY OF THE PROPOSED CHANGES TO LIGHTING
TARIFFS?

13

14

A. Yes. I co-sponsor the changes to the lighting tariffs described by Crystal K. Elbe.

15

16

X. CONCLUSION

17

Q183. DOES THIS CONCLUDE YOUR TESTIMONY?

18

A. Yes.

AFFIDAVIT OF MELANIE L. TAYLOR

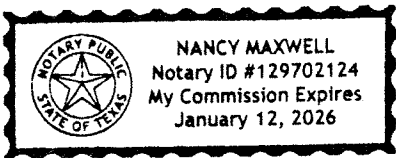
THE STATE OF TEXAS)
)
COUNTY OF JEFFERSON)

This day, Melanie Taylor the affiant, appeared in person before me, a notary public, who knows the affiant to be the person whose signature appears below. The affiant stated under oath:

My name is Melanie L. Taylor. I am of legal age and a resident of the State of Texas. The foregoing testimony and exhibits offered by me are true and correct, and the opinions stated therein are, to the best of my knowledge and belief, accurate, true and correct.

Melanie L. Taylor
Melanie L. Taylor

SUBSCRIBED AND SWORN TO BEFORE ME, notary public, on this the 14th day of June 2022.



Nancy Maxwell
Notary Public, State of Texas

My Commission expires:
1-12-26

See Native Excel file Taylor Direct_Exhibit MLT-1.

See Native Excel file Taylor Direct_Exhibit MLT-2.

**ETI Distribution FERC Form 1 Capital Additions Per Customer
(2017 – 2020)**

	Distribution capital additions per customer (\$/customer)				
	2020	2019	2018	2017	2017-2020 Average
Alabama Power Company	\$372.77	\$350.42	\$312.96	\$277.21	\$328.34
Cleco Power LLC	\$728.84	\$269.29	\$254.18	\$240.03	\$373.09
Dominion Energy South Carolina, Inc.	\$212.38	\$191.42	\$173.85	\$167.19	\$186.21
Duke Energy Carolinas, LLC	\$357.48	\$357.26	\$331.96	\$286.77	\$333.37
Duke Energy Florida, LLC	\$372.69	\$406.97	\$230.18	\$228.17	\$309.50
Duke Energy Indiana, LLC	\$426.10	\$483.08	\$357.38	\$332.39	\$399.74
Duke Energy Kentucky, Inc.	\$458.20	\$389.23	\$327.05	\$247.34	\$355.45
Duke Energy Ohio, Inc.	\$302.34	\$385.17	\$288.98	\$288.93	\$316.35
Duke Energy Progress, LLC	\$430.75	\$412.91	\$377.15	\$292.84	\$378.41
Entergy Arkansas, LLC	\$411.80	\$356.35	\$242.62	\$241.07	\$312.96
Entergy Louisiana, LLC	\$1,071.96	\$379.40	\$222.64	\$206.00	\$470.00
Entergy Mississippi, LLC	\$494.02	\$454.88	\$294.12	\$280.40	\$380.86
Entergy New Orleans, LLC	\$445.20	\$367.86	\$253.74	\$227.33	\$323.53
Entergy Texas, Inc.	\$827.77	\$429.06	\$220.05	\$232.91	\$427.45
Georgia Power Company	\$289.74	\$324.34	\$215.22	\$227.35	\$264.16
Gulf Power Company	\$209.47	\$305.74	\$292.65	\$138.13	\$236.50
Mississippi Power Company	\$438.21	\$397.33	\$215.55	\$213.91	\$316.25
Oklahoma Gas and Electric Company	\$432.38	\$288.47	\$199.26	\$220.59	\$285.17
Southwestern Electric Power Company	\$262.29	\$222.31	\$208.26	\$194.39	\$221.81
Union Electric Company	\$366.14	\$342.16	\$209.41	\$199.81	\$279.38

Sorted Low-to-High

Company Name	2017-2020 Average
Dominion Energy South Carolina, Inc.	\$186.21
Southwestern Electric Power Company	\$221.81
Gulf Power Company	\$236.50
Georgia Power Company	\$264.16
Union Electric Company	\$279.38
Oklahoma Gas and Electric Company	\$285.17
Duke Energy Florida, LLC	\$309.50
Entergy Arkansas, LLC	\$312.96
Mississippi Power Company	\$316.25
Duke Energy Ohio, Inc.	\$316.35
Entergy New Orleans, LLC	\$323.53
Alabama Power Company	\$328.34
Duke Energy Carolinas, LLC	\$333.37
Duke Energy Kentucky, Inc.	\$355.45
Cleco Power LLC	\$373.09
Duke Energy Progress, LLC	\$378.41
Entergy Mississippi, LLC	\$380.86
Duke Energy Indiana, LLC	\$399.74
Entergy Texas, Inc.	\$427.45
Entergy Louisiana, LLC	\$470.00
Mean =	\$324.93

**ETI Distribution FERC Form 1 Capital Additions Per kWh
(2017 – 2020)**

	Distribution capital additions per kWh (\$/kWh)				
	2020	2019	2018	2017	2017-2020 Average
Alabama Power Company	\$0.0111	\$0.0096	\$0.0083	\$0.0076	\$0.0092
Cleco Power LLC	\$0.0256	\$0.0094	\$0.0082	\$0.0082	\$0.0128
Dominion Energy South Carolina, Inc.	\$0.0076	\$0.0065	\$0.0056	\$0.0054	\$0.0063
Duke Energy Carolinas, LLC	\$0.0128	\$0.0119	\$0.0106	\$0.0095	\$0.0112
Duke Energy Florida, LLC	\$0.0177	\$0.0190	\$0.0106	\$0.0107	\$0.0145
Duke Energy Indiana, LLC	\$0.0138	\$0.0146	\$0.0104	\$0.0099	\$0.0122
Duke Energy Kentucky, Inc.	\$0.0174	\$0.0137	\$0.0113	\$0.0088	\$0.0128
Duke Energy Ohio, Inc.	\$0.0115	\$0.0138	\$0.0100	\$0.0104	\$0.0114
Duke Energy Progress, LLC	\$0.0165	\$0.0150	\$0.0133	\$0.0105	\$0.0138
Entergy Arkansas, LLC	\$0.0143	\$0.0116	\$0.0077	\$0.0082	\$0.0104
Entergy Louisiana, LLC	\$0.0218	\$0.0074	\$0.0043	\$0.0040	\$0.0094
Entergy Mississippi, LLC	\$0.0181	\$0.0155	\$0.0097	\$0.0097	\$0.0132
Entergy New Orleans, LLC	\$0.0169	\$0.0129	\$0.0087	\$0.0081	\$0.0117
Entergy Texas, Inc.	\$0.0208	\$0.0104	\$0.0052	\$0.0058	\$0.0105
Georgia Power Company	\$0.0094	\$0.0099	\$0.0064	\$0.0069	\$0.0081
Gulf Power Company	\$0.0092	\$0.0128	\$0.0122	\$0.0059	\$0.0100
Mississippi Power Company	\$0.0091	\$0.0078	\$0.0041	\$0.0042	\$0.0063
Oklahoma Gas and Electric Company	\$0.0138	\$0.0087	\$0.0060	\$0.0070	\$0.0089
Southwestern Electric Power Company	\$0.0088	\$0.0068	\$0.0062	\$0.0061	\$0.0070
Union Electric Company	\$0.0148	\$0.0131	\$0.0076	\$0.0077	\$0.0108

Sorted Low-to-High

Company Name	2017-2020 Average
Dominion Energy South Carolina, Inc.	\$0.0063
Mississippi Power Company	\$0.0063
Southwestern Electric Power Company	\$0.0070
Georgia Power Company	\$0.0081
Oklahoma Gas and Electric Company	\$0.0089
Alabama Power Company	\$0.0092
Entergy Louisiana, LLC	\$0.0094
Gulf Power Company	\$0.0100
Entergy Arkansas, LLC	\$0.0104
Entergy Texas, Inc.	\$0.0105
Union Electric Company	\$0.0108
Duke Energy Carolinas, LLC	\$0.0112
Duke Energy Ohio, Inc.	\$0.0114
Entergy New Orleans, LLC	\$0.0117
Duke Energy Indiana, LLC	\$0.0122
Duke Energy Kentucky, Inc.	\$0.0128
Cleco Power LLC	\$0.0128
Entergy Mississippi, LLC	\$0.0132
Duke Energy Progress, LLC	\$0.0138
Duke Energy Florida, LLC	\$0.0145
Mean =	\$0.0105

See Native Excel file Taylor Direct_Exhibit MLT-4A.

See Native Excel file Taylor Direct_Exhibit MLT-4B.

**ETI Distribution FERC Form 1 O&M Expense Per Customer
(2017 – 2020)**

	Distribution O&M expense per customer (\$/customer)				
	2020	2019	2018	2017	2017-2020 Average
Alabama Power Company	\$182.87	\$247.61	\$172.65	\$162.22	\$191.34
Cleco Power LLC	\$106.54	\$111.31	\$110.78	\$107.46	\$109.02
Dominion Energy South Carolina, Inc.	\$85.20	\$85.98	\$80.36	\$77.54	\$82.27
Duke Energy Carolinas, LLC	\$117.76	\$104.47	\$129.26	\$108.01	\$114.87
Duke Energy Florida, LLC	\$79.75	\$90.19	\$82.66	\$84.24	\$84.21
Duke Energy Indiana, LLC	\$130.79	\$140.70	\$140.33	\$121.46	\$133.32
Duke Energy Kentucky, Inc.	\$80.39	\$109.30	\$101.82	\$128.76	\$105.07
Duke Energy Ohio, Inc.	\$106.79	\$115.03	\$110.81	\$132.42	\$116.26
Duke Energy Progress, LLC	\$100.42	\$108.95	\$126.56	\$98.48	\$108.60
Entergy Arkansas, LLC	\$119.37	\$114.98	\$118.00	\$120.17	\$118.13
Entergy Louisiana, LLC	\$87.96	\$85.42	\$83.10	\$81.19	\$84.42
Entergy Mississippi, LLC	\$120.41	\$111.34	\$109.40	\$105.32	\$111.62
Entergy New Orleans, LLC	\$87.97	\$90.22	\$102.49	\$84.21	\$91.22
Entergy Texas, Inc.	\$98.56	\$94.49	\$95.91	\$84.39	\$93.34
Georgia Power Company	\$100.92	\$118.83	\$118.89	\$107.41	\$111.51
Gulf Power Company	\$80.09	\$83.55	\$99.81	\$104.63	\$92.02
Mississippi Power Company	\$229.73	\$230.04	\$200.68	\$168.27	\$207.18
Oklahoma Gas and Electric Company	\$105.10	\$116.20	\$125.54	\$115.20	\$115.51
Southwestern Electric Power Company	\$164.82	\$167.64	\$156.30	\$160.59	\$162.34
Union Electric Company	\$114.95	\$121.67	\$128.18	\$115.06	\$119.96

Sorted Low-to-High

Company Name	2017-2020 Average
Dominion Energy South Carolina, Inc.	\$82.27
Duke Energy Florida, LLC	\$84.21
Entergy Louisiana, LLC	\$84.42
Entergy New Orleans, LLC	\$91.22
Gulf Power Company	\$92.02
Entergy Texas, Inc.	\$93.34
Duke Energy Kentucky, Inc.	\$105.07
Duke Energy Progress, LLC	\$108.60
Cleco Power LLC	\$109.02
Georgia Power Company	\$111.51
Entergy Mississippi, LLC	\$111.62
Duke Energy Carolinas, LLC	\$114.87
Oklahoma Gas and Electric Company	\$115.51
Duke Energy Ohio, Inc.	\$116.26
Entergy Arkansas, LLC	\$118.13
Union Electric Company	\$119.96
Duke Energy Indiana, LLC	\$133.32
Southwestern Electric Power Company	\$162.34
Alabama Power Company	\$191.34
Mississippi Power Company	\$207.18
Mean =	\$117.61

**ETI Distribution FERC Form 1 O&M Expense Per kWh
(2017 – 2020)**

	Distribution O&M expense per kWh (\$/kWh)				
	2020	2019	2018	2017	2017-2020 Average
Alabama Power Company	\$0.0054	\$0.0068	\$0.0046	\$0.0045	\$0.0053
Cleco Power LLC	\$0.0037	\$0.0039	\$0.0036	\$0.0037	\$0.0037
Dominion Energy South Carolina, Inc.	\$0.0030	\$0.0029	\$0.0026	\$0.0025	\$0.0028
Duke Energy Carolinas, LLC	\$0.0042	\$0.0035	\$0.0041	\$0.0036	\$0.0038
Duke Energy Florida, LLC	\$0.0038	\$0.0042	\$0.0038	\$0.0039	\$0.0039
Duke Energy Indiana, LLC	\$0.0042	\$0.0042	\$0.0041	\$0.0036	\$0.0040
Duke Energy Kentucky, Inc.	\$0.0030	\$0.0039	\$0.0035	\$0.0046	\$0.0038
Duke Energy Ohio, Inc.	\$0.0041	\$0.0041	\$0.0038	\$0.0048	\$0.0042
Duke Energy Progress, LLC	\$0.0038	\$0.0039	\$0.0045	\$0.0035	\$0.0040
Entergy Arkansas, LLC	\$0.0041	\$0.0038	\$0.0037	\$0.0041	\$0.0039
Entergy Louisiana, LLC	\$0.0018	\$0.0017	\$0.0016	\$0.0016	\$0.0017
Entergy Mississippi, LLC	\$0.0044	\$0.0038	\$0.0036	\$0.0036	\$0.0039
Entergy New Orleans, LLC	\$0.0033	\$0.0032	\$0.0035	\$0.0030	\$0.0033
Entergy Texas, Inc.	\$0.0025	\$0.0023	\$0.0023	\$0.0021	\$0.0023
Georgia Power Company	\$0.0033	\$0.0036	\$0.0035	\$0.0033	\$0.0034
Gulf Power Company	\$0.0035	\$0.0035	\$0.0042	\$0.0044	\$0.0039
Mississippi Power Company	\$0.0048	\$0.0045	\$0.0038	\$0.0033	\$0.0041
Oklahoma Gas and Electric Company	\$0.0034	\$0.0035	\$0.0038	\$0.0037	\$0.0036
Southwestern Electric Power Company	\$0.0055	\$0.0052	\$0.0047	\$0.0050	\$0.0051
Union Electric Company	\$0.0046	\$0.0047	\$0.0047	\$0.0044	\$0.0046

Sorted Low-to-High

Company Name	2017-2020 Average
Entergy Louisiana, LLC	\$0.0017
Entergy Texas, Inc.	\$0.0023
Dominion Energy South Carolina, Inc.	\$0.0028
Entergy New Orleans, LLC	\$0.0033
Georgia Power Company	\$0.0034
Oklahoma Gas and Electric Company	\$0.0036
Cleco Power LLC	\$0.0037
Duke Energy Kentucky, Inc.	\$0.0038
Duke Energy Carolinas, LLC	\$0.0038
Entergy Mississippi, LLC	\$0.0039
Gulf Power Company	\$0.0039
Entergy Arkansas, LLC	\$0.0039
Duke Energy Florida, LLC	\$0.0039
Duke Energy Progress, LLC	\$0.0040
Duke Energy Indiana, LLC	\$0.0040
Mississippi Power Company	\$0.0041
Duke Energy Ohio, Inc.	\$0.0042
Union Electric Company	\$0.0046
Southwestern Electric Power Company	\$0.0051
Alabama Power Company	\$0.0053
Mean =	\$0.0038

**Predominant Affiliate Billing Methods for
 Distribution Operations and T&D Support**

Billing Allocation Methodology	Basis for Selection of Billing Allocation Methodology
DIRECTTX	Billing method “DIRECTTX” represents ESL costs that are directly applicable to ETI only. The billing method directly bills ETI 100% of the charges. Projects using this billing method represent costs appropriately charged solely to ETI. For example, Project F3PCTDTR06 uses billing method DIRECTTX to capture the costs of the centralized Skills Training group, which are incurred in the direct support of skills training for ETI employees.
CUSTEGOP	Billing method “CUSTEGOP” represents costs that are allocable to the EOCs based on the number of electric and gas customers in each EOC. This billing method allocates costs based on the twelve-month average number of electric and gas residential, commercial, industrial, government, and municipal general business customers. ETI is one of the EOCs that receives an allocation of costs based on this billing method. For example, Project F3PCT29400 captures costs related to Operations Safety. The driver of these costs is the number of electric and gas customers in each EOC. Therefore, billing method CUSTEGOP is the appropriate billing method for these costs.
CUSEOPCO	Billing method “CUSEOPCO” represents costs that are allocable to the EOCs based on the number of electric customers in each EOCs based on the number of electric customers in each EOC. This billing method allocates costs based on the twelve-month average number of electric residential, commercial, industrial, government, and municipal customers. ETI is one of the EOCs that receive an allocation of costs based on this billing method. For example, Project F5PPAMI EDU captures costs related to AMS Customer Education. The driver of these costs is the number of electric customers in each EOC. Therefore, billing method CUSEOPCO is the appropriate billing method for these costs.

See Native Excel file Taylor Direct_Exhibits A through D.

See Native Excel file Taylor Direct_WP_MLT-3 and MLT-5.