Vegetation Management Program – Consists primarily of cycle-based, proactive vegetation management but also includes reactive, customer driven projects and selective herbicide treatment. The proactive trim cycles are examined annually and are determined by several factors, including growth rates, type and density of side and floor vegetation, vegetation-related outage information, and time since last maintenance. Identified circuits or areas are maintained using a combination of both conventional side trimming and herbicides depending on the specific application. The reactive component of the program consists of investigating potential problem areas that are identified by Company personnel and/or stakeholders and determining a remedial course of action when the potential problem involves the Company's facilities.

Q34. HOW WILL GRID MODERNIZATION AND ONGOING MAINTENANCE AND RELIABILITY WORK BE COORDINATED AND EXECUTED?

A. Through the Power Delivery organization that I described above. The structure of that group provides resources dedicated to both maintaining the distribution grid and responding to outages, as they do today, with a set of dedicated resources focused on the strategic long-term planning and modernization of the distribution grid, enabling the Company to better meet customers' expectations for safe, reliable service. The structure also helps to ensure that these efforts, along with ELL's proposed Resilience Plan, are conducted in a coordinated and strategic manner that enables efficiencies in the deployment of investments in the distribution grid and minimizes the number of service interruptions needed to perform work. This coordination, along with utilization

of evolving technology and innovations, allows the Company to evaluate and prioritize distribution work to support reliable service to customers.

B. Distribution Capital Additions

Q35. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. ELL, like the electric utility industry in general, is in a cycle of increased capital expenditures to replace or upgrade aging distribution infrastructure to improve reliability and keep pace with, among other things, evolving technology and expanding regulatory and safety requirements. This section of my testimony discusses the types and dollar amounts of distribution capital investments ELL has made in recent years and plans to make in the near-term to address these goals.

Q36. WHAT IS THE TIME PERIOD FOR THE DISTRIBUTION CAPITAL ADDITIONS PRESENTED IN THIS SECTION OF YOUR TESTIMONY?

A. The total time frame I present here spans the ten-year period from 2016-2027. The historical investment levels (2016-2022) are provided for context to illustrate the magnitude of the upward trend in investment levels. The forecasted investments in years 2023-2027 reflect the period for which the Company would seek to recover through the rate mechanisms proposed in this proceeding.

Q37. PLEASE DESCRIBE THE PROCESS ELL UTILIZES TO UNDERTAKE DISTRIBUTION CAPITAL EXPENDITURES.

A. The Power Delivery organization identifies new capital projects based on information from its reliability and infrastructure improvement programs, customer requests, system growth requirements, System Improvements (which I discuss further below), new customers, system-wide applications, and upgrades. The projects are evaluated, designed, and prioritized using parameters that balance the costs of a project against the reliability improvements and other benefits it can provide to customers. Most of these capital projects are assigned to Company personnel or contractors for construction. Contractors are selected by evaluated bids, which include safety, quality of work, performance, storm response, and costs. Both during construction and upon completion, the jobs are audited for quality assurance and accuracy of invoice processing.

Q38. WHAT ARE THE LEVELS OF ACTUAL AND PROJECTED DISTRIBUTION CAPITAL INVESTMENT FOR THE 2016-2027 PERIOD?

A. The total dollar amount of Distribution Line and distribution-related General Plant additions closed to plant from January 1, 2016 through December 31, 2022 was approximately $2.0 billion, and the projected dollar amount of these capital additions for 2023-2027 is approximately [redacted]. The major drivers of the investment levels can be broken down into the following categories of costs: (1) Distribution Line Reliability, (2) Load Additions, (3) Substation Reliability, and (4) Lighting - Other. Table 3 summarizes the annual costs in each of these categories for the historical period

2016-2022 and the projected period 2023-2027, and Figure 3 illustrates the trend in increased distribution plant investment over those periods.

Table 3

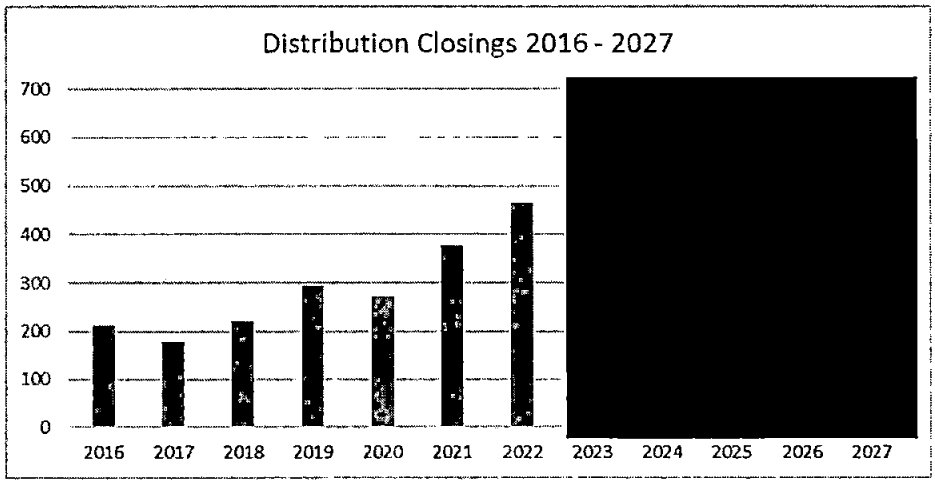
ELL Distribution Line Dollars
Closed to Plant in Service
January 1, 2016 – December 31, 2027

HIGHLY SENSITIVE PROTECTED MATERIALS

Distribution Closing to Plant ($M)	2016	2017	2018	2019	2020	2021	2022	[redacted]
Distribution Line Reliability	75	70	98	145	123	235	286	
Load Additions	70	56	65	74	97	80	106	
Substation Reliability	43	26	33	52	30	40	33	
Lighting - Other	24	24	26	22	23	22	39	
Total	213	177	222	294	273	377	464	

*Note: These totals exclude amounts related to storm damage and Advanced Metering Systems investments. Totals for 2023-2027 represent projected closings, not actual closings. Any discrepancies in Total row due to rounding

Figure 3



*Note: These totals exclude amounts related to storm damage and Advanced Metering Systems investments. Totals for 2023-2027 represent projected closings, not actual closings.

Table 3 and Figure 3 demonstrate that ELL's historical baseline Distribution Line investment levels have increased significantly in recent years, with annual Distribution Line plant closings increasing from $213 million in 2016 to [redacted] million in 2023 and projected to increase to [redacted] million by 2027. Most of the costs fall under the Distribution Line Reliability category, which includes the routine reliability and infrastructure programs and grid modernization efforts I discussed above in Section V, Subsection B. The Distribution Line Reliability category represents approximately 51% of the total historic spend (2016-2022) and 65% of the projected spend (2023-2027). The increase in Distribution Line Reliability investment has been increasingly substantial since the implementation of the DRM in 2020. As such, this section of my testimony largely focuses on the Distribution Line Reliability category given its relative effect on ELL's overall distribution spend. The other categories of costs (Load Additions, Substation Reliability, and Lighting – Other) have been relatively flat since 2020. However, the upward trend in aggregate distribution infrastructure investment levels is expected to continue for the years 2023-2027. Indeed, while ELL's distribution plan involved an average annual closings to plant of $288 million for the historical period 2016-2022, the Company expects an average annual closings to plant of [redacted] for the forecasted period 2023-2027.

Q39. PLEASE DEFINE EACH OF THE CATEGORIES DEPICTED IN TABLE 3.

A. These categories of costs are described as follows:

Distribution Line Reliability: This category primarily includes the routine reliability and infrastructure programs (such as the FOCUS Program, the Pole Program,

Equipment Maintenance, and URD/Cable Projects, the Strategic Reliability program and the Sectionalizing program) and grid modernization efforts discussed above in Section V, Subsection A of my testimony. This category includes projects to replace critical equipment that has failed and must be replaced on an emergency basis, as well as activities performed as a result of CIs. It also includes what we refer to as "System Improvements," which are projects that maintain the integrity and reliability of the overall distribution system, for example: projects to plan for load growth, to plan for contingencies, to maximize circuit availability, and to minimize the number of CIs.

Load Additions: ELL undertakes Load Addition or "Revenue" projects to connect new customers to the system or to serve load additions for existing customers. ELL's obligation to serve drives these projects. This category also includes projects for which the Company receives facility charges and projects to install/remove metering.

Substation Reliability: This category captures investments at substations, which are the points of transition from the transmission grid to the distribution system. These investments primarily include power transformers, switches, bus work, main and feeder breakers, and associated components needed to transform the power to a level suitable for distribution.

Lighting - Other: This category largely consists of (1) street and private area lighting projects and (2) certain technological investments that enable ELL to be more effective in response to customer demands and operational needs.

Although these four categories include different types of projects, they all collectively dovetail with the objectives of sustaining or improving ELL's service quality and modernizing its electric grid.

Q40. PLEASE DISCUSS THE TRENDS YOU OBSERVED FOR INVESTMENTS IN THE LOAD ADDITIONS CATEGORY.

A. Of the four categories of costs presented in this section of my testimony, the Load Additions category reflects the second highest source of ELL's distribution capital investment. Table 3 depicts that the level of investment in this category has grown over the past few years. This is due to the number of new locations and subdivisions being served by ELL, as well as the distribution system's limited capacity for growth. For example, there has been an increase in the number of multi-lot subdivision developments in rural portions of ELL's service area, where distribution facilities previously served only a few farm homes. In some cases, the smaller conductors that previously provided power must be replaced to ensure capacity to serve the homes in the new development. Installing larger conductors, in turn, requires that the existing poles be replaced with taller and stronger poles to meet NESC requirements. Projects like these have become more frequent, as reflected in the spending amount in this category for test year 2022.

Q41. WHAT TRENDS HAVE YOU OBSERVED REGARDING INVESTMENTS IN THE SUBSTATION RELIABILITY CATEGORY?

A. Table 3 shows that while investment levels in this category have increased over time, there are not many significant fluctuations in the estimated costs year-over-year in the forecasted period.

Q42. WHAT TRENDS HAVE YOU OBSERVED WITH RESPECT TO INVESTMENTS IN THE LIGHTING - OTHER CATEGORY?

A. Table 3 shows slight increases in annual investment levels in this category, including a general upward trend starting in 2022.

Q43. YOU NOTED ABOVE THAT THE BULK OF ELL'S DISTRIBUTION LINE INVESTMENTS OCCUR IN THE DISTRIBUTION LINE RELIABILITY CATEGORY. PLEASE ELABORATE ON THE TRENDS OBSERVED IN THAT CATEGORY.

A. This category reflects the largest source of ELL's distribution investments for the historical and projected periods. As detailed above in Table 3, the aggregate additions to plant in service for Distribution Line Reliability projects from 2016-2022 was $147 million. The aggregate investment level for the projected period of 2023-2027 is expected to be [redacted] the investment levels in the historic period. This category of costs reflects the primary focus of ELL's strategic efforts to improve its distribution system.

Q44. WILL YOU PROVIDE EXAMPLES OF THE TYPES OF PROJECTS THAT ELL HAS UNDERTAKEN TO IMPROVE ITS DISTRIBUTION SYSTEM?

A. Yes. I will provide examples from each of the five regions of the ELL distribution system:

1. <u>EGSI-EAST REGION</u>

An example of the projects that ELL is undertaking to modernize its distribution system is the recent series of projects on Feeder 548HL to the Plantation Trace subdivision, University Hills subdivision, LSU lakes corridor, LSU systems building, Crescent at University Lake condominiums, and Bayonne at Southshore condominiums. For a period, these customers have been experiencing long duration outages due to vegetation and overall feeder reliability. Approximately 2,000 customers off this section of 548HL are served by ELL's Highland Substation. In 2021-2022, there were 16,064 CIs on the feeders that serve this area. There are a total of 1,802 customers served off this feeder.

Regarding improving reliability in this area, ELL analyzed numerous outages causes and developed a plan to inspect the service area, address vegetation concerns, complete reliability projects and install automated technologies to minimize the outages affecting customers. ELL invested over $585,773 between 2022 and 2023 to improve overall reliability. The Company has replaced numerous poles and associated equipment and components such as crossarms, brackets, fuse switches and lightning arrestors.

2. ELL-SOUTHEAST REGION

ELL has improved its distribution system through a recent reliability project in the Southeast region on Feeder W3114. The residents on Ollie Drive and Hufft Drive in Belle Chasse were experiencing repeat outages between March 2021 and September 2022. During this time, there were 8 outages resulting in 149 CIs totaling 40,289 customer minutes without power. These outages were due to lightning, contamination, vegetation, and equipment failure. ELL implemented a reliability inspection behind device 5168 where these outages were occurring. The inspection revealed poles in need of replacement, fiberglass standoff arm deterioration, damaged/flashed insulators, and vegetation issues. ELL invested $195,000 to replace the poles and hardware; install animal guards, lightning arrestors, and ground rods; and to address vegetation issues. There have been no outages since this project was completed.

3. EGSI-WEST REGION

ELL has improved its distribution system through a recent reliability project in the west region on Feeder 918CN. Approximately 914 residents behind recloser RL0917 were experiencing repeat outages, with an extended return to service time. Some of the extended time was due to inaccessibility and special equipment being needed to patrol/restore a section just downstream of RL0917. There was also another segment of backlot line that was inaccessible by trucks and needed to be climbed whenever it was worked on. In 2021, there were 113 outages resulting in 7,925 CIs totaling 1,340,330 customer minutes without power. These outages were due to lightning, primary conductor issues, animals, vegetation, equipment failure, and more. ELL implemented a reliability inspection behind device RL0917, where these outages

were occurring. The inspection confirmed the issues above, as well as highlighted some other issues with the line section. ELL invested $831,449, to replace the 0.4 mile 4/0 AL overhead line segment with underground cable. ELL also built a new three-phase 336AL line for 0.2 miles to reroute the backlot backbone. These combined repairs greatly reduced restoration times and improved reliability for all downstream customers. It also enhanced safety by reducing exposure to our servicemen and customers. In 2022, there was a reduction in outages, CIs and outage minutes. There were 92 outages on Feeder 918CN, resulting in 1,604 CIs totaling 224,073 customer minutes without power, representing a decline in customer minutes for this feeder of over 80% in comparison to the year before.

4. ELL-SOUTH REGION

The Company has improved its distribution system through a recent reliability project in the south region on Feeder F0938. This project was identified through an initiative to invest in feeder reliability. In 2020-2021, Feeder F0938 was the worst performing feeder on one of South Region's biggest networks, Hammond. The Company invested $4.9 million to upgrade to modern micro-processing controlled reclosers, replace the 2.9 miles of 1/0 AL overhead line with 795 AL, also updating the construction to our newest standards in resiliency and increasing our insulation level (BIL) against faults. This new standard includes building our line as "unshielded" to further protect from lightning-caused power outages.

There are approximately 3,300 customers on the F0938 Breaker. From 2018-2021, this device incurred 10 sustained outages resulting in 18,497 customer interruption totaling in 822,959 customer outage minutes. These outages were due to

lightning, emergency switching, scheduled interruptions, and unknown causes. This portion of the project focused on rebuilding to our newest construction standards in resiliency and BIL. Since the completion of this project in December 2021, this breaker has sustained only one outage, which was due to a crossarm failure.

Approximately 2,100 customers behind recloser RL0895 were experiencing repeat outages. Before this project completion, there were 13 outages resulting in 31,036 CIs totaling 2,639,704 customer minutes without power in 2018-2021. These outages were due to public-inflicted damage, lightning, miscellaneous equipment failures, emergency switching for emergency repairs, vegetation, and more. Since completing the work in December 2021, RL0895 has experienced only two (2) outages, which resulted in minor adjustment work to provide power as intended.

In 2022-2023, Feeder F0938 has performed much better than it has in previous years, allowing the Company to focus efforts on other problem areas.

5. ELL-NORTH REGION

a. N0959 Oak Grove Substation-Bastrop Network

ELL has implemented projects on its North Region-Bastrop Network to improve Feeder N0959, which is behind Devices 47158 (now R04981) and 54102. These devices were identified as repeat outages devices. Device 47158 has over 970 customers and Device 54102 has over 530 customers, and both were experiencing long duration outages due to overall feeder reliability and issues with the functionality of sectionalization. All work completed was in the Town of Lake Providence, and the Company also added additional sectionalization in the town to help minimize outage

duration for our customers. ELL invested over $400,000 between 2022 and 2023 to improve overall reliability.

b. N4205 Canal Street Subdivision – West Monroe Network

ELL has implemented projects on its North Region-West Monroe Network to Feeder N4205. The feeder has 1,219 customers. The Company was able to convert to a higher voltage in the Mississippi and Alabama neighborhoods connecting Plum Beauregard and Winnsboro. ELL also created a feeder tie and improved the feeder by installing sectionalization around a business district, residential area, and the zoo. ELL invested over $1.0 million in 2021 to improve overall reliability in this area.

Q45. ARE THERE OTHER RELEVANT EXAMPLES OF INVESTMENTS THAT THE COMPANY HAS MADE TO IMPROVE ITS DISTRIBUTION SYSTEM?

A. Yes. These are other relevant examples:

1. The construction of the new Cadeville Substation in 2018: The need for this new substation was driven by continued load growth in Southwest Ouachita Parish, which, over time, resulted in low voltage issues and suboptimal reliability performance in the West Monroe area, despite targeted maintenance being performed on the feeder serving the area. To address this, ELL constructed 14 miles of radial transmission line to replace the conductor that was overloading at times and causing low voltage; constructed a new substation at ELL's Cadeville site and replaced line equipment in order to meet the load requirements in the area; and installed power transformers needed to transform the power to a level suitable for distribution to the area. In addition to addressing the voltage concern, this project included the installation of three self-

healing networks, providing over 2,200 customers with an alternate source of power should their normal source experience an outage outside of the protected area. A fourth self-healing network is being assessed upon the completion of the Cotton Substation, which was energized in February 2022. These self-healing networks are an excellent example of how the Company is using technology to improve reliability and reduce restoration times. The new substation and infrastructure improvements have significantly improved reliability for customers in Southwest Ouachita Parish.

2. The Alaska Substation improvement project in downtown Baton Rouge: A loss of a transmission source or an equipment failure at ELL's existing Beauregard Substation had the potential to result in an outage to the entire downtown Baton Rouge network grid, a load of approximately 19 MW. The projected load growth in the area between Louisiana State University and downtown Baton Rouge over the next five (5) years, including an additional 10 MW at the Water Campus, further exacerbated the number of customers that could be affected by a potential disturbance. To resolve this, ELL installed a third power transformer and two new feeder breakers at Alaska Substation. This solution, which was completed in 2018, allowed ELL to automatically isolate and reenergize undamaged sections of a feeder after a disturbance using an alternative power source to ultimately minimize the impact of an outage by decreasing the number of affected customers.

3. The Chackbay Substation construction: This new substation is located in Lafourche Parish north of Thibodaux near ELL's existing 230kV transmission line in close proximity to Highway 307. The project was identified as an optimal solution to address multiple area needs including capacity limitations on both the existing

distribution feeder served from the Thibodaux substation and the power transformer at the Vacherie substation. The work included the construction of a new substation featuring a distribution power transformer and three new distribution feeder bays within the substation fence. The distribution portion of this project outside of the substation fence included the construction of a new 3.4 mile feeder and the rebuild of approximately two (2) miles of existing distribution feeder trunk. This new substation provides benefits to customers in the form of improved area reliability and electrical capacity to support economic growth. Specifically, the new substation provides an alternate source of electricity to laterals affecting over 5,000 customers currently radially served from existing distribution infrastructure. Similar to the Cadeville Substation, the project included the construction of two ALT systems each designed to provide an alternate source of electricity for customers in rapid fashion. The new substation capacity also provides incremental operational and maintenance flexibility for substation and transmission lines that could otherwise affect customer reliability. This project was completed in August of 2022.

4. Tangipahoa Parish projects: Between 2018 and 2020, the Company completed 142 projects in Tangipahoa Parish (specifically the Amite and Hammond network areas) on various scales, totaling roughly $2.2 million of investment. These infrastructure and reliability improvements helped to reduce CIs going forward. In addition, ELL executed 19 projects in the Hammond/Ponchatoula/Springfield areas in 2021 with a roughly $1.8 million investment that helped to reduce CIs in the area. These projects included work that involved upgrading conductor wire, installing sectionalizers, changing out poles or crossarms and improving insulators for the

circuits. This work also involved installing six (6) self-healing networks (in the Hammond, Ponchatoula, Robert, Springfield areas). The project also involved building a feeder that ties between Bankston Road and Happywoods in the Hammond and Albany area and another project upgraded conductor wires in the Springfield area. Other examples of projects include a roughly $230,000 investment into improving feeders in the CC Road/Bedico area of Hammond. The purpose of this job was to upgrade the single-phase primary to three-phase. This improvement will become an infrastructure tie for Bedico Creek Subdivision and help with the increasing load growth in this area of the Parish.

5. Projects in the Amite/Independence areas: For the period of October 2020 through April 2021, the Company had 39 projects in Amite/Independence areas at an investment of approximately $2 million that helped to eliminate CIs and improve reliability in the area. For example, one such project improved the infrastructure by reconductoring a section of the feeder and built a new three phase line on Black Cat Road to improve reliability and outage performance for the hospital in Independence. In addition, ELL plans to build new three-phase infrastructure on Antioch Road to benefit the customers on Highway 442. Another project in the Amite/Independence area is planned for upgrading roughly 2.5 miles of conductor and replacing 10 poles that will also lay the foundation for a new self-healing network project in this area.

These examples illustrate how the Company is upgrading and replacing aging distribution infrastructure while also leveraging advanced technological capabilities to modernize the distribution grid and improve reliability and the overall level of service provided to customers.

Q46. CAN YOU PROVIDE EXAMPLES OF SIMILAR INVESTMENTS THAT THE COMPANY HAS IDENTIFIED FOR FUTURE DEPLOYMENT?

A. Yes. One example of planned work that will serve a similar function as the recent projects I described above is the Belle Chasse Substation construction. This new substation will be located in Plaquemines Parish east of Belle Chase near ELL's existing 230kV transmission line near Highways 23 and 406. The project was identified as an optimal solution to address multiple area needs including capacity limitations on three existing distribution feeders served from the Behrman Substation and the power transformers at the Behrman Substation. The work will include the construction of a new substation featuring a distribution power transformer and four new distribution feeder bays within the substation fence. The distribution portion of this project outside of the substation fence includes the rebuild of approximately 0.7 miles of existing distribution feeder trunk and new feeder getaways to tie into existing feeder circuits to off-load the Behrman transformers. It is expected that upon completion, this work will provide benefits to customers in the form of improved area reliability and electrical capacity to support economic growth as well as provide the capability of service backup to the Belle Chase Naval Air base facility. Specifically, the new substation will provide an alternate source of electricity to laterals affecting over 5,000 customers currently served from existing distribution infrastructure. Similar to the Chackbay Substation project described in the prior answer, this project will include the construction of three self-healing network systems, each designed to provide an alternate source of electricity for customers in rapid fashion. The new substation capacity will also provide incremental operational and maintenance

flexibility for substation and transmission lines that could otherwise affect customer reliability.

Q47. PLEASE SUMMARIZE THE PRIMARY COMPONENTS OF ELL'S PLANNED DISTRIBUTION INVESTMENTS FOR 2023 THROUGH 2027.

A. The prospective portion of ELL's planned investments will remain focused on delivering improved reliability of electric service to its customers by continuing to invest in the foundational reliability and infrastructure programs I discussed above (such as the FOCUS Program, the Backbone Program, the Pole Program, Equipment Maintenance, and URD/Cable Projects), while maximizing the use of technology and incorporating more holistic solutions to establish a modernized grid and a more resilient distribution system. By undertaking more projects such as the examples described above, ELL will continue to improve customer satisfaction. As depicted in Table 3 above, the projected investment levels from 2023-2027 are significant and reflect higher infrastructure investments than in the historic period. Of course, new or different circumstances could cause projects to be added and others to be modified or even removed if no longer cost effective. In addition, actual timing can and likely will differ from that estimated.

Q48. WILL THE SPENDING LEVELS IDENTIFIED IN TABLE 3 ABOVE ENABLE ELL TO PROVIDE RELIABLE SERVICE TO ITS CUSTOMERS AT THE LOWEST REASONABLE COST?

A. Yes. While Table 3 reflects a significant increase in distribution investment levels, as I have explained, ELL develops planned investments carefully, based on a systematic prioritization of distribution investments that are focused on reducing CIs and improving system resilience at the lowest reasonable cost to customers. As I stated earlier, the Company considers multiple factors when selecting and prioritizing distribution capital projects for its distribution plan. This balanced approach will provide both short-term and long-term reliability improvements while addressing distribution system requirements to meet customers' expectations for increased resiliency and the ability of the grid to accommodate new technologies.

Q49. PLEASE ELABORATE ON HOW THE COMPANY'S FORECASTED CAPITAL ADDITIONS FOR 2023 THROUGH 2027 ARE EXPECTED TO IMPROVE SERVICE FOR CUSTOMERS.

A. The level of investment reflected in the distribution plan is necessary and reasonable to support distribution capital projects, mandatory reliability requirements, and capital maintenance programs that, in turn, will allow ELL to continue providing reliable service to its customers and avoid degradation of the distribution grid, which would in turn negatively affect reliability. These investments address replacing aging infrastructure, targeting solutions to improve reliability in the short-term while planning for longer term, sustainable reliability, and putting processes in place to

ensure ELL's portfolio is executed in a comprehensive manner to better ensure the delivery of benefits to customers. These benefits include (i) enhanced reliability for customers due to technological upgrades designed to minimize the frequency, effects, and duration of service interruptions to customers; (ii) increased system visibility and awareness that enable faster response times during service interruptions; (iii) enablement of a more proactive and efficient approach to reliability planning and system maintenance; and (iv) increased customer centricity and expanded access to the benefits of technological advancements. In the near term, the Company expects that these benefits will materialize in the form of observable improvements to reliability on the distribution grid.

The investments I described above are needed to maintain reliable service, and Mr. O'Malley explains the necessity of continuation of the DRM to support the Company's ability to make these investments.

C. The ELL Resilience Plan

Q50. WHAT IS THE COMPANY'S RESILIENCE PLAN?

A. The Company's Resilience Plan ("Resilience Plan") is currently the subject of LPSC Docket No. U-36625 ("Resilience Plan Docket"). Through the Resilience Plan, ELL seeks to improve the resilience[16] of its electric system through accelerated infrastructure hardening and vegetation management over the course of ten years. The

[16] In context of the Resilience Plan, resilience is the ability to prepare for, adapt to, and recover from non-normal events, such as hurricanes, floods, winter storms, and other major weather disruptions. By comparison, system reliability focuses on the availability of power to customers under normal operating conditions, which include day-to-day operational challenges such as thunderstorms.

Company's Application in the Resilience Plan Docket provides quantifications of the anticipated level of investment and estimated customer benefits related to the Plan.

Q51. WHAT IS THE COMPANY'S REQUEST IN THE RESILIENCE PLAN DOCKET?

A. It is my understanding that the Company sought approval to commence Phase I of the Resilience Plan and approval of a Resilience Plan Cost Recovery Rider to permit timely recovery of the Resilience Plan's revenue requirement as ELL completes the plan's resilience improvements and customers begin receiving the benefits of those improvements. Mr. O'Malley discusses these requests in his Direct Testimony as well as how the Resilience Plan relates to the Company's requests in this proceeding.

Q52. WOULD THE RESILIENCE PLAN ELIMINATE THE NEED FOR ONGOING INVESTMENT IN AND MAINTENANCE OF THE COMPANY'S DISTRIBUTION SYSTEM?

A. No. Notwithstanding the potential investments in the Company's Resilience Plan, ELL will still need to invest time, effort, and capital to maintain and modernize its distribution system.

VI. ELL'S RELIABILITY PERFORMANCE

Q53. PLEASE DESCRIBE ELL'S OBJECTIVES FOR PROVIDING RELIABLE SERVICE TO ITS CUSTOMERS.

A. ELL strives to minimize the frequency of CIs and restore service as quickly and safely as possible following interruptions to service. Reducing the frequency and duration of

CIs also form the basis of the standards the Commission has established for tracking reliability performance, which standards I describe in greater detail below.

Q54. WHAT CHALLENGES DOES ELL FACE IN SEEKING TO MEET THESE OBJECTIVES AND PROVIDE RELIABLE SERVICE TO CUSTOMERS?

A. As I noted above, ELL faces challenges presented by severe weather (*e.g.*, heavy rain, lightening, tornados, hurricanes, strong thunderstorms, etc.). That is endemic to the region, which is a challenge that has presented increasing difficulties in recent years necessitating the hardening and resilience investments I described above. While many other utilities in the gulf region face similar threats from severe weather, ELL also faces challenges that are unique to the Company due to the nature of its service area. Specifically, because ELL serves many rural areas with low numbers of customers per circuit mile, the Company is required to spend more money on a per-customer basis than peers with more concentrated customer bases to maintain its distribution facilities with activities like vegetation maintenance and other reliability-focused work I have described above. This challenge is compounded by the fact that ELL's service area has a vegetation growth rate that is among the highest in the nation – with multiple growing seasons, which, again, requires more investment on a per-customer basis. ELL's service area is also topographically unique in terms of the amount of marsh and wetlands it covers, as well as in terms of the quality and nature of soil. Combining these factors with ELL's need, and the commission's desire, to maintain affordable rates, creates a unique challenge for ELL in terms of maintaining reliability. Additionally, ELL also faces challenges presented by an aging distribution system

(which the company is proposing to address) and customer inflicted damages, such as vehicle incidents that cause interruptions to service that the company cannot predict.

Q55. PLEASE DESCRIBE ELL'S TRACK RECORD IN PROVIDING RELIABLE SERVICE TO ITS CUSTOMERS.

A. In the Reliability General Order, the Commission set minimum distribution reliability performance standards that were phased-in over a period of seven years to reach the current metrics: an annual SAIFI[17] score of 2.28 and an annual SAIDI[18] score of 2.87 hours, or 172.2 minutes. In the two decades after that order was issued, ELL consistently exceeded the LPSC's minimum performance levels. ELL's SAIFI score was significantly lower (and therefore better) than the LPSC's minimum performance level in each year. Although there were exceptions in 2018, 2019, and 2022, years when ELL's SAIDI score was not within the Commission's performance target have been rare, and the Company's SAIDI scores for 2020 and 2021 were within the

[13] SAIFI, which stands for System Average Interruption Frequency Index, is used to measure the number of outages or interruptions per customer per year. Most electric utilities use this measurement as a tool to assess the reliability of their electrical system, excluding major outage events that cause interruptions to a significant portion of their customer base. SAIFI is calculated by adding up the number of customers experiencing a sustained outage longer than five (5) minutes during the reporting period and then dividing it by the average annual number of electric customers.

[18] SAIDI, which stands for System Average Interruption Duration Index, measures the number of outage minutes per customer per year. Most utilities also use this measurement when reviewing the reliability of their electrical system, excluding outage events that cause interruptions to a significant portion of their customer base due to extreme weather or unusual events. SAIDI is calculated by adding up the outage minutes of all the customers that have been without power during a sustained outage longer than five (5) minutes and then dividing by the average annual number of electric customers.

Commission's performance target.[19] More recently, however, ELL's SAIDI score increased from 2.83 hours (169.9 minutes) in 2021 to 3.71 hours (223 minutes) in 2022.

It is important to note that ELL's SAIDI scores in 2018, 2019 and 2022 reflected the implementation of updated safety practices for linemen and distribution workers, which necessitated that more planned outages be taken during the performance of work on the grid. These planned outages, while necessary to perform the work to improve the Company's facilities that I have described and to protect the safety of its workforce, caused the Company to be penalized under the Commission's current standards.

Additionally, it should be noted that there were fewer events in those years that qualified for the Major Event exclusion of the Commission's General Order, which tends to increase the number and frequency of weather-related outages that are included in the SAIFI and SAIDI scores. In other words, duration (SAIDI) will tend to increase for safety-related planned outages, and SAIDI and SAIFI will both tend to increase when there are weather-related outages that do not rise to the level of a Major Event, which would be excluded from the statistics. Yet these circumstances are not necessarily indications of poor or declining reliability. Indeed, the nature of the Commission's definition of a Major Event[20] could, and ELL believes has, cause ELL to be penalized for succeeding in implementing investment strategies that reduce the impact and duration of outages. This is because the definition is tied to restoration

[19] The highest contributing outage categories to both frequency and duration of CIs in 2018, 2019, and 2022 were consistent with historical interruption patterns, including primary conductor equipment failure, the presence of vegetation from outside of ELL's rights-of-way falling onto the Company's distribution lines, lightning, and vehicle incidents.

[20] *See,* FN 15, *supra.*

taking more than 24 hours and the number of customers who are affected. Investments in technologies like self-healing networks, automated reclosers, and other modernized distribution equipment, which I described above, are intended to minimize number of customers affected by an outage causing event and the duration of outages. Thus, those investments fulfilling their intended purposes would cause fewer days to qualify as Major Event Days under the Commission's definition, seemingly worsening performance under the Commission's standards.

Overall, ELL continues to provide reliable service, consistent with the Commission's established requirements, but it also is in a transformative period during which it must increase its investment in the distribution system to maintain reliable service in the future, in addition to fulfilling its grid modernization objectives.

Q56. WHAT DO ELL'S RECENT RELIABILITY SCORES INDICATE?

A. Those scores indicate that the Company needs to continue working to improve its distribution system, including replacement of aging infrastructure comprising that system with more resilient and modern facilities, as well as leveraging data and technological advancements to improve and enhance the manner in which distribution reliability work is planned and performed. In other words, these scores evidence the need to continue to make the investments that my testimony describes to modernize and harden the distribution system.

However, due to the factors I have described above, these scores also indicate a need to refine the standards through which reliability is tracked to ensure that such

standards provide an accurate view of utilities' performance in maintaining reliable service.

Q57. IS ELL PROPOSING TO MODIFY THE RELIABILTIY GENERAL ORDER IN THIS PROCEEDING?

A. No. However, the Company is proposing to modify the additional standards the Commission has adopted for ELL, which are more stringent than the standards applied to all LPSC-jurisdictional utilities under the Reliability General Order.

Q58. WHAT RELIABILITY STANDARDS HAS THE COMMISSION ADOPTED FOR ELL IN ADDITION TO THE STANDARDS OF THE RELIABILITY GENERAL ORDER?

A. In approving the DRM as part of ELL's FRP in Docket No. U-35565, the Commission adopted DRM Performance Accountability Standards that compare ELL's SAIFI and SAIDI indices for the years 2021-2023 to the lesser of (i) the Commission's SAIDI and SAIFI values from the Reliability General Order or (ii) ELL's annual SAIDI and SAIFI values for 2019. It is my understanding that ELL has calculated and reported the credits due under the DRM Performance Accountability Standards in Docket No U-36822.

Q59. DOES THE COMPANY'S PROPOSAL TO EXTEND THE DRM ALSO INVOLVE CONTINUING THE DRM PERFORMANCE ACCOUNTABILITY STANDARDS?

A. Yes, ELL believes it is important to continue holding itself accountable to deliver the improved reliability its proposed investments seek to provide. However, ELL is

proposing certain necessary modifications to the way the DRM Performance Accountability Standards are measured.

Q60. PLEASE DESCRIBE THESE PROPOSED MODIFICATIONS.

A. The initial DRM Performance Accountability Standards used 2019 as the baseline year for measuring ELL's performance, as this was the most recent year for which data was available when the DRM was adopted. ELL proposes that targets adopted for the continuation of the DRM requested in the proceeding incorporate the test year for this filing, *i.e.*, 2022. ELL also proposes that planned outages that are taken for the purpose of performing work on the distribution system, which as noted above are a safety-focused measure, not be included in the calculation of ELL's SAIDI and SAIFI scores for the DRM Performance Accountability Standards. In other words, ELL should not be penalized for prioritizing the safety of its workers. Similarly, ELL proposes that it be allowed to exclude outages that result from third-party inflicted damages (*e.g.*, vehicle incidents) that are beyond the control of the Company to prevent, and which can have significant impacts on SAIDI and SAIFI scores.

Q61. WHAT SPECIFIC DRM PERFORMANCE ACCOUNTABILITY STANDARDS IS ELL PROPOSING THE COMMISSION TO ADOPT AS PART OF THIS PROCEEDING?

A. As noted above, ELL is proposing that 2022 be used as the baseline year against which the updated DRM Performance Accountability Standards are measured. Consistent with ELL's proposal to remove planned outages and public inflicted damage from

measurement of ELL's performance, ELL has removed outages related to those causes from the 2022 baseline numbers against which ELL's future performance will be tracked. Subject to approval of the modifications I described above, and assuming the Commission approves the modified DRM as proposed in this filing, ELL believes the following DRM Performance Accountability Standards are reasonable to adopt for holding ELL accountable to delivering the reliability benefits associated with the proposed investments I have described in my testimony.

Table 4

Proposed Modified DRM Performance Accountability Standards

	2022 Baseline	2024 Target	2025 Target	2026 Target	2027 Target
DRM SAIFI	1.1371	1.1187	1.1074	1.0961	1.0848
DRM SAIDI	168.01	166.33	164.65	162.97	161.29

Q62. IS ELL PROPOSING ANY OTHER CHANGES TO THE DRM PERFORMANCE ACCOUNTABILITY STANDARDS ADOPTED IN ORDER U-35565?

A. No. The Company is proposing to continue the financial aspects of those standards. It should be noted that because those standards are based on the amount of revenue requirement recovered through the DRM, and because the Company is proposing to remove the "cap" on the amount of revenue requirement eligible for recovery through the mechanism (as Ms. Maurice Anderson describes), the Company's proposal in this proceeding would potentially subject ELL to more significant financial penalties than were initially adopted in Order U-35565.

Q63. IN ADDITION TO THE DRM PERFORMANCE ACCOUNTABILITY STANDARDS, ARE THERE OTHER WAYS IN WHICH ELL IS PROPOSING TO BE HELD ACCOUNTABLE FOR DELIVERING BENEFITS UNDER THE MODIFIED DRM?

A. Yes. The Company is also proposing to continue to fulfill the reporting requirements the Commission adopted in Order No. U-35565 related to the DRM. These requirements mandate that ELL provide extensive details on the work that will be performed and investments that will be made with funds that are recovered through the DRM, which that Order describes in detail. ELL believes that continuing to fulfill these reporting requirements will provide transparency to the Commission and stakeholders in terms of ELL's distribution investments that will be facilitated by the DRM.

VII. CONCLUSION

Q64. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, at this time.

AFFIDAVIT

STATE OF LOUISIANA

PARISH OF JEFFERSON

NOW BEFORE ME, the undersigned authority, personally came and appeared, **STEVEN N. BENYARD**, who after being duly sworn by me, did depose and say:

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

Steven N. Benyard

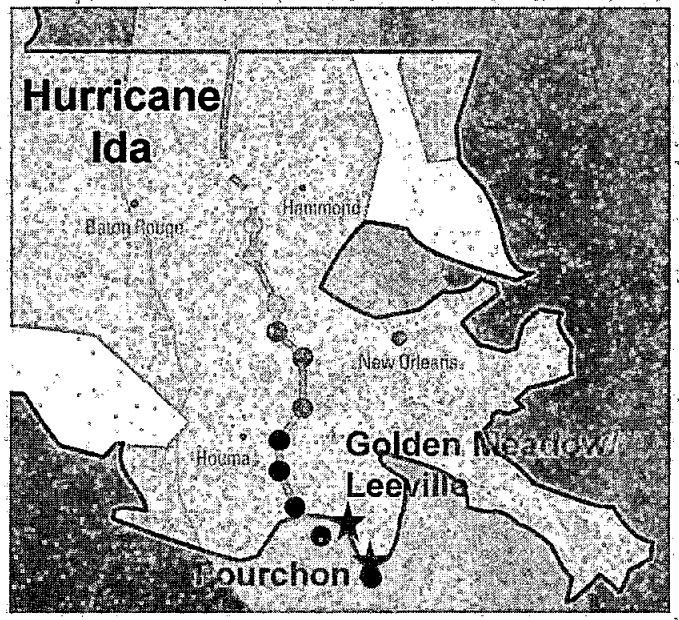
SWORN TO AND SUBSCRIBED BEFORE ME
THIS 28 DAY OF AUGUST 2023

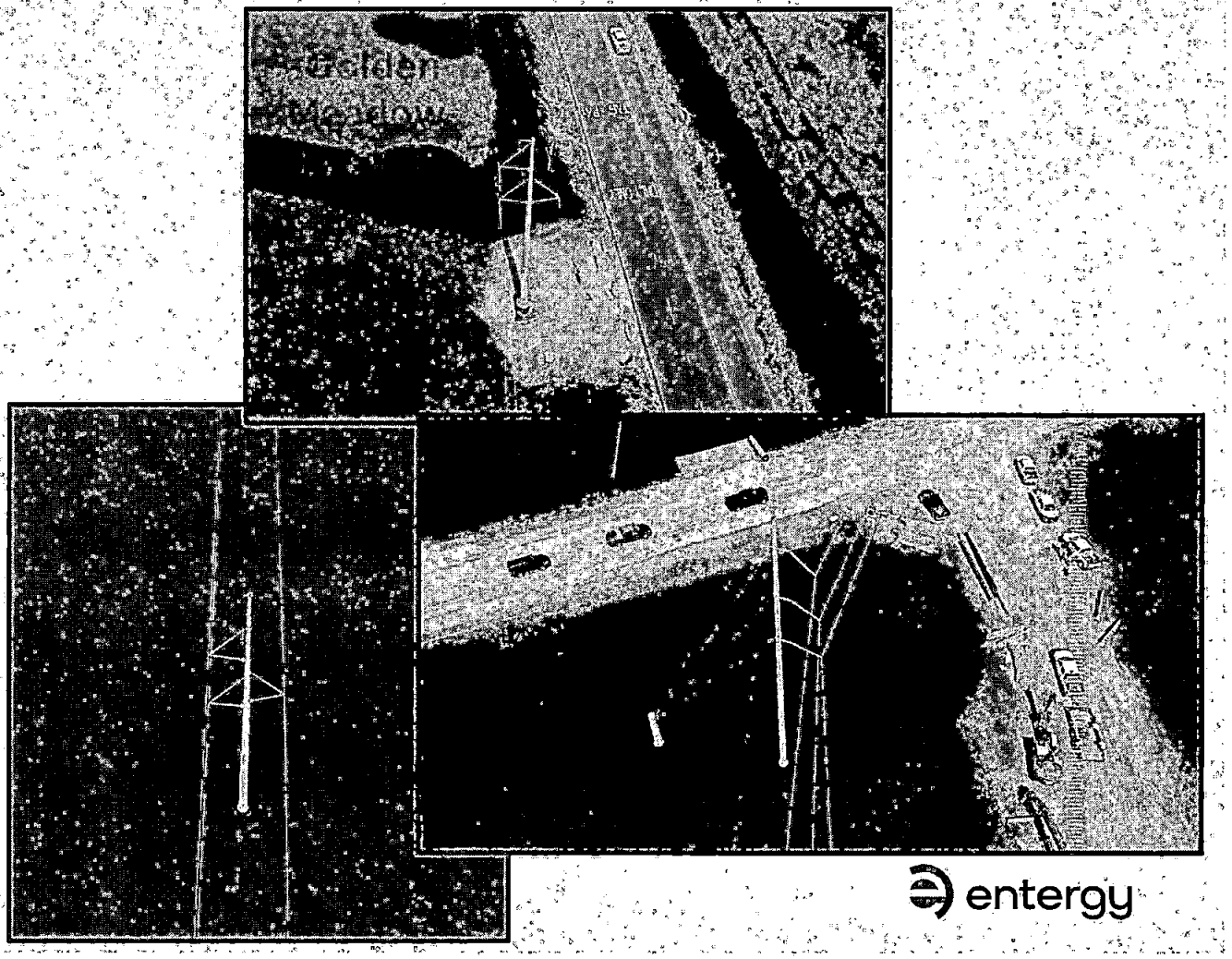
NOTARY PUBLIC

My commission expires: at death

LAWRENCE J. HAND, JR., 23770
Notary Public in and for
the State of Louisiana.
My Commission is for Life.

More Recently Installed Transmission Facilities Performed Well During Hurricane Ida





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