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February 28, 2025

VIA ELECTRONIC FILING
Adam Teitzman, Commission Clerk
Division of Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 20250011-EI
Petition by Florida Power & Light Company for Base Rate Increase

Dear Mr. Teitzman:

Attached for filing on behalf of Florida Power & Light Company ("FPL") in the above docket are the direct testimony and exhibits of FPL witness Eduardo De Varona.

Please let me know if you have any questions regarding this submission.

Sincerely,

s/ John T. Burnett
John T. Burnett
Vice President & General Counsel
Florida Power & Light Company

(Document 5 of 30)

CERTIFICATE OF SERVICE
Docket 20250011-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic service this 28th day of February 2025 to the following:

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By: *s/ John T. Burnett*
John T. Burnett

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20250011-EI

FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF EDUARDO DE VARONA

Filed: February 28, 2025

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Eduardo De Varona. My business address is Florida Power & Light Company, 15430 Endeavor Drive, Jupiter, FL 33478.

Q. By whom are you employed and what is your position?

A. I am employed by Florida Power & Light Company ("FPL" or the "Company") as Vice President of Power Delivery.

Q. Please describe your duties and responsibilities in that position.

A. As Vice President of Power Delivery, I am responsible for the planning, engineering, construction, operation, maintenance, and restoration of FPL's transmission and distribution ("T&D") electric grid. This includes the systems, processes, analyses, and standards utilized to ensure FPL's T&D facilities are safe, reliable, secure, effectively managed and in compliance with regulatory requirements. I also serve as the chair of the North American Transmission Forum, an organization comprised of electric transmission system owners and operators in the United States and Canada that seeks to advance transmission performance and reliability throughout North America.

Q. Please describe your educational background and professional experience.

A. I have a Bachelor of Science degree in Electrical Engineering from the University of Florida. I joined FPL in 1991 and have more than 34 years of technical, managerial, and commercial experience gained from serving in a variety of positions within FPL, NextEra Energy Transmission, and NextEra Energy Resources. Over the last 20 years, I have served in a variety of leadership positions including executive director of transmission business management, senior director of emergency preparedness,

director of transmission operations, director of technology, and Vice President of Transmission and Substation.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring the following exhibits:

- Exhibit EDV-1 List of MFRs Co-Sponsored by Eduardo De Varona
- Exhibit EDV-2 FPL FPSC T&D SAIDI
- Exhibit EDV-3 FPL FPSC Distribution MAIFIe
- Exhibit EDV-4 National & Regional Distribution SAIDI Benchmarking
- Exhibit EDV-5 FPL's AFS Avoided/Actual Customer Interruptions

Q. Are you sponsoring or co-sponsoring any Minimum Filing Requirements in this case?

A. Yes. Exhibit EDV-1 lists the minimum filing requirements ("MFR") that I am co-sponsoring.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe how FPL's Power Delivery organization provides excellent performance benefiting more than 6 million customer accounts in Florida. I describe how Power Delivery initiatives have been and continue to be utilized to strengthen and modernize our T&D infrastructure and support customer growth in Florida, as well as how our team of highly dedicated and motivated employees continues to share best practices and align processes, procedures, material, applications and systems. My testimony also lays out and explains the ongoing plan for capital investments that are making our T&D infrastructure smarter, more reliable, secure, and resilient. Finally, my testimony demonstrates that the capital costs and

T&D operations & maintenance ("O&M") expenses for Power Delivery are reasonable.

Q. Please summarize your testimony.

A. FPL customers, Florida's economy, and the state's critical infrastructure, rely on, require, and increasingly expect safe and reliable electric service to meet the demands of a growing customer base. As FPL witnesses Bores and Cohen explain, Florida has seen significant population growth and expects that growth to continue. FPL has an obligation to not only provide safe and reliable service to its existing customers, but also to ensure that it can serve those new customers and businesses that request electric service within the FPL service area. Power Delivery requires significant ongoing capital investments in infrastructure to meet this growing demand, changes in load patterns, and challenges in customer requirements and expectations. Meeting the demands of customer growth throughout the service area is a major portion of Power Delivery's investment, along with the associated engineering and construction effort required to meet these demands.

As FPL strives for continuous improvement in every aspect of the business, we endeavor to expand and develop new opportunities to increase overall customer satisfaction, ensure compliance with all federal, regional, state, and local regulations and agency policies, and make advances that improve the electric grid. Through the use of technology, FPL has implemented numerous programs, several of which are outlined in my testimony, that have improved the customer experience, enabled employees to be more efficient and make timely decisions, ensure compliance, and

improved the performance of the grid in a way that has allowed FPL to provide customers service reliability that is top-decile in the industry and the best amongst Florida's investor-owned utilities ("IOU"). As an example, smart grid technology implemented by FPL was responsible for avoiding approximately 1.9 million non-storm related customer interruptions in 2024.

Power Delivery's ability to deliver exceptional service reliability has been recognized throughout the industry. One specific example of this is the ReliabilityOne® National Reliability Award, which FPL has received in seven of the last ten years – a testament to FPL's commitment to provide reliable service to the customers and communities we serve.

Going forward, FPL remains committed to continuing the effective management of investments and expenses necessary to construct, operate, maintain, protect and improve the T&D electrical grid. These investments and expenses result from: (1) maintaining excellent reliability by executing our comprehensive T&D reliability/grid modernization initiatives; (2) customer growth and system expansion; (3) complying with regulatory requirements; and (4) servicing the electrical grid/other support activities. Effective management of these programs has resulted in excellent service, such as back-to-back best-ever Florida Public Service Commission ("FPSC") T&D System Average Interruption Duration Index ("SAIDI") in 2023 and 2024.

Consistent with FPL's forward-looking approach and the expectation of continued growth, FPL is anticipating the need to construct or upgrade facilities to serve prospective customers with new or incremental loads that are significant in size. It is imperative that we fulfill our mission to serve every customer but, at the same time, ensure that extensions of new service are not being made to the detriment our existing customers. FPL is therefore proposing a tariff modification to add a new contribution-in-aid-of-construction ("CIAC") requirement for large new or incremental loads to better protect our customers and reduce the risk of subsidization.

FPL is positioned to meet the challenges of tomorrow through the continued and successful implementation of programs to strengthen, modernize, and maintain the reliability of the electric grid. These efforts are producing excellent results and providing a foundation for continuing the capital investments targeted at maintaining and improving the safety, reliability, and security of the grid to the benefit of our customers.

II. OVERVIEW OF FPL'S GRID

Q. Please provide an overview of FPL's T&D grid.

A. FPL manages the most expansive T&D grid in the state of Florida. FPL's T&D grid is flexible and dynamic and continuously expanding to serve a rapidly growing customer base. Currently, FPL serves more than 6 million customer accounts representing approximately 12 million people in 43 counties in peninsular and Northwest Florida, with approximately 82,000 miles of distribution lines, 9,500 miles of high-voltage

transmission lines, and 921 substations. FPL's operation of this T&D infrastructure has enabled, and continues to enable, the Company to bring reliable power to customers representing more than half of Florida's total population.

Q. Does operating and maintaining an electrical system in Florida present unique challenges?

A. Yes. As an electric service provider in the state of Florida, FPL faces Florida's unique geographic and weather-related challenges daily. FPL's service area is encompassed by approximately 610 miles of coastline (one of the longest of any utility in the U.S.), which presents challenges unlike those faced by any other electric system in the country. For example, because the vast majority of our customers live within 20 miles of the coast, a significant portion of our electric infrastructure is constantly exposed to the corrosive effects of salt spray and to the highest wind speeds when a storm hits. In addition to being more susceptible to tropical storms and hurricanes, Florida experiences more lightning strikes by density than any other U.S. state, with FPL's service area experiencing approximately 172,000 lightning strikes in 2024 alone. Florida's subtropical climate also promotes one of the fastest vegetation growth rates in the nation, which presents unique challenges for operating and maintaining the T&D system.

Q. Have there been operational changes to FPL's T&D system since FPL's prior rate case in 2021?

A. Yes. In 2022, the peninsular Florida and Northwest Florida electrical systems were electrically interconnected, allowing FPL to dispatch electricity from across our

modernized and diverse power generation fleet to generate long-term savings for customers.

III. SAFETY

Q. Please describe FPL's commitment to safety.

A. The Company considers safety to be paramount to effective operations. Embracing this philosophy, FPL has provided excellent reliability and service while maintaining a continual focus on safety. As a result of concerted and sustained efforts, FPL achieved a 27.14% improvement from 2014 to 2024 in the Occupational Safety and Health Administration's ("OSHA") industry-standard metric of reportable injuries per 200,000 man-hours. A key reason for this improvement is our continued commitment to safety, which the Company has furthered through innovation, leveraging technology, and engineering out injuries with enhanced tools, processes, and equipment. The Company's safety programs involve establishing a partnership with employees to institute an environment where actions are guided by our safety principles. These principles are in addition to the corporate-sponsored safety program "Zero Today," which serves to constantly reinforce the need for everyone's continued commitment to safety principles. "Zero Today" is our commitment to maintaining a safe work environment and creating an inclusive safety culture where safety is everyone's job – a philosophy that all injuries are preventable.

FPL's commitment to safety has been repeatedly recognized in the electric industry. In 2022, Power Delivery was honored with two prominent safety-specific awards: the

Southeastern Electric Exchange Top Performance Safety Award for T&D Safety and the AEIC Achievement Award for FPL's utilization of safety-related technology and mobile applications that make safety inspection information more accessible in real time.

IV. T&D RELIABILITY PROGRAM

Q. Please provide an overview of FPL's T&D reliability program.

A. Society's ever-increasing reliance on digital technology and customers' increasing demands for reliable service require a focus on continuous reliability improvement. As a result, the goals of the T&D reliability initiatives are to reduce day-to-day outages and restoration times. FPL's T&D reliability program, which has produced excellent results for our customers, includes multiple initiatives that prevent outages and reduce outage durations. For distribution, in addition to smart grid technology, and predictive and proactive reliability measures, reliability initiatives are also developed by identifying and analyzing causes of past interruptions. FPL then targets the causes of those interruptions to determine if they can be remedied proactively to the benefit of customers. For the transmission system, reliability initiatives focus on facility/system assessments, targeted maintenance, prevention through prediction, utilizing smart grid technology, and prevention of recurrence.

Q. Please provide an overview of FPL's results.

A. Since 2021, FPL's T&D initiatives have enabled FPL to maintain excellent reliability metrics. FPL's 2023 FPSC T&D SAIDI was the best among the Florida IOUs and FPL maintained excellent performance results for FPSC T&D SAIDI and FPSC Distribution

Momentary Average Interruption Frequency Event Index ("MAIFIe") in 2024 as can be seen on Exhibits EDV-2 and EDV-3. FPL's excellent distribution performance has particularly benefitted FPL's Northwest customers, whose service reliability has improved by 63% since 2018. Exhibit EDV-4 shows FPL's Distribution SAIDI performance (calculated using the Institute of Electrical and Electronics Engineers ("IEEE") 2.5 beta methodology) for 2023 (49.7 minutes), which ranked 59% better than the national average. This ranking was determined utilizing the most recent data reflected in PA Consulting's annual 2023 ReliabilityOne® benchmarking summary and the U.S. Energy Information Administration's 2023 Annual Industry Report. This benchmarking study included 2023 Distribution SAIDI results (the vast majority calculated using IEEE's 2.5 beta methodology) from approximately 100 IOUs throughout the nation. Achieving these excellent reliability performance results in 2023 and 2024 demonstrate that our grid modernization and reliability initiatives are effective and beneficial.

With FPL's continued commitment and the necessary investments to employ these initiatives, we expect to continue to provide excellent reliability performance for our customers.

Q. Please provide specific examples of FPL's key distribution system initiatives to maintain and improve reliability.

A. FPL continuously seeks to identify programs and initiatives that enhance its distribution system to the benefit of customers. To that end, FPL has identified, planned, and implemented the following key distribution reliability initiatives:

Grid Modernization/Smart Grid – This program includes several focused initiatives that have advanced FPL's effort to develop a modern, automated and self-healing grid. Included in these initiatives are smart devices, *e.g.*, automated feeder switches ("AFS"), automated lateral switches, automated underground switches, automated transformer switches, fault current indicators ("FCI"), and distribution transformer monitors ("DTM"), that are used to automatically identify and isolate problematic line sections and clear temporary faults – avoiding or mitigating interruptions and reducing restoration times and costs. These devices are providing significant reliability improvement results. For example, as shown in Exhibit EDV-5, AFS devices were responsible for avoiding approximately 1.9 million non-storm related FPL customer interruptions in 2024. This illustrates that the smart grid technology implemented through these initiatives continues to improve reliability for our customers.

Targeted Performance Improvement – This includes multiple initiatives that target specific infrastructure and devices experiencing a higher number of outages and/or momentary interruptions. Examples of these reliability initiatives include prioritization feeders, submarine cable, momentary outliers and device outliers.

Underground Cable - This initiative addresses "direct-buried" feeder and lateral cable failure modes through rehabilitation (by injecting cable with silicone, which extends its useful life) or, when rehabilitation is not an option, replacement of the cable. These solutions help prevent interruptions and improve service on underground facilities.

Q. Please provide specific examples of FPL's transmission initiatives to maintain and improve reliability.

A. As with its distribution initiatives, FPL also continuously seeks out transmission innovations that enhance service to customers. Key transmission system reliability initiatives include:

Facility/System Assessments – Under this initiative, transmission line and substation assessments are conducted utilizing equipment diagnostics and both on-site and remote system surveillance to evaluate the health of facilities and equipment. Holistic station and equipment assessments, including oil sampling and testing, equipment and protective systems testing, and thermal imaging are performed, providing information used to prevent or predict equipment failures. Also, certain system surveillance is accomplished through equipment performance monitoring and diagnostics, using remote monitoring tools and analysis programs.

Grid Modernization/Smart Grid – FPL continues to incorporate intelligent technology within substation systems to better anticipate and respond to system disturbances. For example, the substation transformer relay scheme upgrades, use of microprocessor-based systems to gather data and assess equipment operating conditions, and the use of auto-restoration and self-healing systems result in improved reliability, increased situational awareness of grid operations, and optimized asset utilization.

Prevention through Prediction – By considering advanced diagnostics of asset performance and risk assessment, our team develops plans to replace major transmission equipment and facilities in a more predictive manner. Following these replacements, the team makes technological advances and design improvements to reduce future interruptions and maximize asset utilization.

Prevention of Recurrence – Through the use of an event response process where each outage event is recorded, classified, and analyzed, our team develops countermeasures to prevent the recurrence of similar events. For example, if it is determined that a relay operated improperly, the team determines the root cause, and implements countermeasures for similar devices throughout the system to prevent recurrence.

Targeted Maintenance – Our team evaluates information from condition assessments using predictive models. The team then develops a plan to replace or conduct targeted maintenance on major equipment and facilities. Targeted maintenance extends the useful life of equipment and minimizes costs by optimizing the assets and deferring the need for substantial investment in new equipment and facilities.

Q. Is FPL undertaking any other major construction projects for the purposes of ensuring FPL customers continue receiving reliable power?

A. Yes. FPL has been and continues to undertake a rebuild of its 500 kilovolt ("kV") system, which is the electricity delivery backbone of FPL's system. Since beginning the project in 2019, FPL has replaced more than 3,700 aging transmission structures.

This replacement project is crucial to ensuring the continued performance of the electric system in Florida.

Q. Please describe how the 500 kV rebuild furthers FPL's goal of providing reliable service.

A. FPL's assessment of key facilities and its analysis of the age of its critical infrastructure led FPL to begin the rebuild of its 500 kV system. The rebuild program replaces the system structures that are nearing the end of their useful life, a process that requires the removal and replacement of each structure that is part of the program. The majority of the 500 kV transmission structures were originally built during the same timeframes in the 1970s and 1980s and are being replaced with steel or concrete structures. Replacement structures are engineered and constructed to meet or exceed current National Electrical Safety Code design requirements, providing the additional benefit of enhanced resiliency.

The 500 kV system provides Florida the means to transport bulk power around the state and serves as Florida's only major connection to the eastern interconnection of the United States. As such, it is imperative that this critical transmission infrastructure function properly and securely to meet FPL's goal of providing reliable service to customers now and in the future.

V. EMERGENCY PREPAREDNESS & RESPONSE

Q. Does FPL have plans and processes in place to respond to emergency events?

A. Yes. Emergency preparedness is a core focus for the Company, and is the central tenet in FPL's Corporate Emergency Management Plan ("CEMP"). The CEMP provides a response framework and applies to all threats and incidents including severe weather, cybersecurity, grid or supply disruptions, physical security, floods, fires, chemical spills, pandemics, civil unrest, or any other hazards that threaten the company's systems, employees or contractors.

Q. Does FPL conduct training and exercises to ensure the organization is ready to respond to potential threats or incidents?

A. Yes. FPL's comprehensive and multifaceted emergency response training occurs throughout the year to ensure that employees are ready and prepared to respond to an emergency event. Additionally, for certain potential significant threats or events, simulated events and response exercises are conducted annually to enhance training and preparedness (*e.g.*, company-wide storm dry run, capacity shortfall, and cybersecurity simulations/exercises).

Q. Please describe FPL's emergency preparedness and training.

A. FPL engages year-round in emergency preparations and drills. One such example is our annual storm dry-run exercise, which simulates a hurricane impacting FPL's service area. Emergency preparation drills like this provide opportunities for interactions between FPL and governmental agencies as well as other external entities (*e.g.*, the FPSC, Office of Public Counsel, U.S. Department of Energy, the Edison

Electric Institute ("EEI"), and other utilities) who routinely attend annual storm dry run events to observe and learn about our industry-recognized restoration processes.

As part of FPL's continued leadership in emergency preparedness and response, FPL serves as a founding member of the National Response Executive Committee ("NREC"). The NREC is an industry group, as part of EEI, that is responsible for overseeing nationwide mutual assistance and resource sharing during events that are larger than can be accommodated through the industry's regional mutual assistance processes. As a member of NREC, FPL closely coordinates with the Southeastern Electric Exchange and other industry regional groups as needed to provide and receive mutual assistance.

In the area of cybersecurity, FPL performs annual internal drills with the participation of federal agencies (*e.g.*, Department of Homeland Security, U.S. Secret Service, Federal Bureau of Investigation). These drills help ensure the readiness of the organization. In addition, FPL participates with other electric utilities across the country in the North American Electric Reliability Corporation's ("NERC") biennial GridEx exercise, and participates in industry forums (*e.g.*, Electricity Subsector Coordinating Council and NERC activities) to ensure lessons learned are effectively applied.

Having these trainings, plans, and processes in place allows FPL to timely execute on its commitment to provide safe and reliable service to the customers and communities it serves.

VI. GROWTH AND EXPANSION

Q. How do new service accounts, major new construction projects, and increased electrical demand affect FPL's T&D planning operations?

A. All of these factors can significantly impact resources, costs, and reliability. Forecasted new service accounts, as sponsored by FPL witness Cohen, are expected to total approximately 462,000 over the course of FPL's proposed four-year rate plan. As a reference point to better understand the pace of this growth, this number of new service accounts would equate to approximately the total number of customers served by Gulf Power Company prior to its consolidation with FPL. This rapid growth trend is expected to continue as Florida is the fastest growing state in the nation and is projected to continue to grow in the coming years. Accommodating new customers, whether a typical residential customer or a major project, requires the installation of new infrastructure. Depending on the new customer's load and requirements, the new infrastructure to serve this load could be as simple as installing a single service line to a home or business or could require constructing new feeders and/or transmission lines and substations.

The cumulative effect of increases in load due to new customers and increased customer demand in certain areas also can require upgrades to existing infrastructure

and/or the installation of new facilities. FPL's fast-growing service area will require significant ongoing capital investment to meet customer growth, additional load requirements, and new construction development, such as the State Road ("SR") 70 and 80 projects that I describe below. Importantly, our customers are depending on us now more than ever, and Power Delivery is committed to meet those expectations by continuing to provide safe and reliable service for both our existing and new customers.

Major new infrastructure projects throughout FPL's service area also have a significant impact on resources and costs (*e.g.*, projects require new feeders, new transmission lines and even new T&D substations). Some examples of major projects that are currently under construction or expected to be under construction in the next several years include the following:

- Master Planned Communities – Multiple large community projects each serving approximately 4,200 to 24,000 residential homes with associated commercial, hospitality, educational, and recreational facilities in Walton, Bay, Sarasota, and Martin counties.
- Florida Space Coast – Transmission and distribution expansion continues with interest from aerospace companies, including plans for a second launch pad, Space Launch Complex (SLC-37).
- Major Medical Campuses – Large medical and emergency facilities with multiple buildings in Panama City Beach and Fort Myers that require construction of a new feeder and upgrades to an additional feeder for redundancy.

While these are considered major construction projects for the electric grid, they are also examples of community economic growth projects that impact growth in the residential and commercial markets as well.

Q. Please describe how growth and expansion initiatives such as FPL's SR 70 and SR 80 projects benefit customers.

A. As a result of FPL's recent transmission assessment studies and continued load growth throughout FPL's service area, we initiated the SR 70[1] and SR 80 projects in late 2021. These projects involve installing new transmission lines, rebuilding and reconductoring existing transmission, and completing various substation projects. FPL undertook these projects to address the need for additional transmission paths to increase power transfers from east to west. The SR 70 and SR 80 projects provide additional hardened and resilient 230 kV circuits, relieve potential overloads, improve reliability and low voltage conditions in the case of contingency events, and reduce line loading on existing transmission circuits. The projects meet area load requirements by serving potential future load while maximizing system reliability. The 500 kV rebuild project I discussed earlier is similarly imperative for proper functioning of FPL's expanding transmission system.

[1] FPL's SR 70 project is part of the Sweatt-Whidden transmission line, the need for which was approved by the FPSC in Order No. PSC-2022-0196-FOF-EI, issued on June 3, 2022 in Docket No. 20220045-EI.

Q. As part of the required expansion of the system to meet the growing customer demand, please describe some of the considerations that the Company must take into account in acquiring and holding T&D Property Held for Future Use ("PHFU").

A. Customer growth, increased electrical demands, and major new construction projects require T&D to acquire and hold PHFU for this new infrastructure. As provided in MFR B-15, these T&D PHFU investments have been identified as being geographically and strategically located and necessary to meet future customer load growth, maintain and improve customer reliability, comply with NERC standards regulating the reliability of the grid, and/or integrate future generation into the grid. With suitable properties on hand for future needs, FPL avoids being in a time pressure situation or being limited on suitable options, both scenarios in which property sellers may take advantage, resulting in higher costs for our customers.

T&D substations and transmission lines can take years to plan, design, permit and construct. This includes securing necessary sites and properties. Additionally, the annual planning process is very dynamic and, by virtue of its close linkage to load growth forecasts, results in yearly modifications of system expansion plans. PHFU ensures we are able to secure the land we need to move an adequate and reliable supply of power across the system to meet an ever-evolving set of electrical grid conditions and customer needs.

VII. REGULATORY COMPLIANCE

Q. Are the operation and maintenance facilities of FPL's T&D system significantly impacted by mandated compliance and regulations?

A. Yes. As a regulated electric utility, FPL's T&D system operation and maintenance facilities must comply with a variety of policies, standards, orders and requirements of federal, regional, state and local regulatory commissions and agencies. In addition to FPSC rules and requirements, these include the requirements of the Federal Energy Regulatory Commission ("FERC"), NERC, the U.S. Environmental Protection Agency ("EPA"), Department of Energy ("DOE"), OSHA, Florida Department of Environmental Protection ("FDEP"), and numerous cities and counties. Of course, compliance with newly mandated requirements can incrementally increase costs for new and existing assets and require implementation of new or enhanced processes and related training.

Q. Please provide examples of rules, regulations, and requirements that can have a significant impact on FPL's T&D operations, processes, and costs.

A. FPL currently complies with 88 FERC and NERC reliability standards for reliability, physical security and cybersecurity, containing in excess of 1,600 requirements and sub-requirements that govern the operation and maintenance of FPL's bulk electric system and prevent malicious cyber-attacks on the grid. FERC has recently finalized and is in the process of creating additional transmission rules that may result in future compliance responsibilities for the Company. There are also new transmission standards from FERC and NERC related to transmission operations and planning, generation, and cybersecurity that are scheduled to take effect in mid-2025 and 2026,

requiring increased investment. As the national grid continues to evolve, new standards and requirements will likely continue to be added to NERC's list for mandatory compliance.

FPL is also subject to a wide range of environmental laws and regulations from government agencies (*e.g.*, EPA, FDEP, the Florida Fish and Wildlife Conservation Commission) to protect and minimize impacts to Florida's natural resources. These state and federal regulations require FPL to incorporate environmental considerations and protection measures into the design, construction, operation, and maintenance of its T&D facilities.

Lastly, Regulatory Compliance includes obligations associated with the construction and relocation of facilities as required by state agencies, such as the Florida Department of Transportation, and local municipalities to meet the needs of the state and communities we serve.

VIII. CUSTOMER SATISFACTION AND TECHNOLOGY

Q. What efforts have been made to improve customer communications?

A. In addition to maintaining and improving the reliability of electric service, FPL continually strives to increase overall customer satisfaction, including how the Company communicates with customers, provides clear and timely information, and improves customer access to that information. Many of these processes and interactions are described in the testimony of FPL witness Nichols. Not only do these

initiatives improve customer satisfaction, but they also enable customers to make informed and timely decisions. For example, the new Advanced Distribution Management System ("ADMS") utilized by FPL's control center operators leverages the smart grid network to better determine customers affected by outages, improves estimated time of restoration ("ETR"), and streamlines notifications to customers.

Q. Please elaborate on how the ADMS improved service to customers.

A. ADMS has evolved how FPL manages the grid to the benefit of customers. ADMS is a specialized system that centralizes and visualizes grid-related data including technical information from meters, which in turn enables FPL enhanced system visibility and intelligence. Using ADMS, FPL can automatically ping an individual customer's meter to retrieve outage information, and better identify potential service issues and restoration needs. ADMS also provides a heatmap functionality, which allows FPL a visual assessment of restoration progress in nearly real time and identifies pockets of challenged restoration areas, such as nested outages (secondary points of damage that were initially unknown), to more efficiently allocate resources during restoration events. These capabilities allow FPL to deliver more precise information to customers, such as ETRs and notifications, which improve the customer's experience.

Q. How has FPL used technology to improve system reliability?

A. FPL has focused its efforts on significantly increasing the utilization of information technology and automation to modernize its grid to make it smarter, self-healing, and more reliable. This focus was initiated by FPL in 2006 with the installation of advanced metering infrastructure that provides two-way communication with the customer's meter and has continued with smart grid devices such as automated feeder switches,

automated lateral switches, automated underground switches, automated transformer switches, fault current indicators and distribution transformer monitors, which also provide data to ADMS. These investments in developing an intelligent, modernized grid have improved the customer experience and led to increased reliability. To highlight a specific data point, FPL's smart grid helped avoid more than 1.4 million storm-related outages during the last three hurricane seasons. This operational efficiency, enabled by FPL's investment in advanced technology, keeps customers' lights on while at the same time creating efficiencies and putting downward pressure on costs.

Q. Has FPL implemented other technological initiatives?

A. Yes. FPL has also implemented the following technological initiatives to efficiently serve its customers and contribute to customer satisfaction:

System Control Center ("SCC") – FPL's SCC is a sophisticated facility that enables more efficient operation and coordination of FPL's transmission and substation network. Another central purpose of the SCC is ensuring full compliance with applicable standards, *e.g.*, NERC Operating and Critical Infrastructure Protection cybersecurity standards/requirements. The quality and availability of energy management system tools and status information on FPL's transmission and substation system housed within the SCC allow for improved and continuous monitoring and control by system operators.

Distribution Control Center ("DCC") – FPL's DCC is a sophisticated facility that enables centralized and more efficient operation and coordination of FPL's distribution network.

Power Delivery Diagnostic Center ("PDDC") – The PDDC acts as a "nerve center" for FPL's smart grid. The PDDC provides real-time monitoring of critical operating parameters of T&D equipment/devices; gathers and analyzes data from advanced sensors, monitors, switches, and smart meters; and utilizes FPL-developed analyses, applications, algorithms, and other tools to predict likely equipment failures so that remediation can be efficiently planned and completed before a failure or outage occurs. The PDDC also provides analyses of system events and coordination and support to the SCC, DCC, and T&D operations. For example, when an outage event occurs, the PDDC immediately begins to collect and analyze pertinent data, before a restoration crew has even reached the event site. Equipped with this information upon arrival, the restoration crew can perform the restoration more quickly and effectively.

Restoration Spatial View ("RSV") – RSV, an FPL-developed application that runs on tablets, smart phones, and laptops, provides real-time situational awareness (from multiple systems) and acts as a "one-stop shop" for restoration crews. It provides real-time outage information, weather radar and alerts, electrical network information, customer energy consumption data, voltage detail, crew location and more – all layered on a map view. A significant customer benefit is the restoration confirmation feature, which allows restoration crews to confirm the power status of all smart meters affected

by an outage before leaving the area. This has resulted in fewer repeat customer calls and restoration crew visits.

Drones – FPL uses drones with high-definition and thermal cameras in day-to-day operations and after severe weather events to assess overhead power equipment, which is an especially valuable tool to assess the energy grid in areas that may be impassable for various reasons. In 2022, FPL launched FPLAir One, a remotely operated drone the size of a small plane equipped with LiDAR (Light Detection and Ranging) technology for day-to-day data collection and onboard cameras, which allows it to create a digital twin of FPL's infrastructure and obtain high-quality images of FPL equipment. FPL's use of drones allows FPL to gather real-time information, assess the electric grid, and identify the causes of outages both for day-to-day reliability purposes and in response to an outage event, such as a storm.

Predictive Algorithms – Power Delivery continues to develop intricate algorithms to detect distinct patterns such as voltage fluctuation in residential smart meters, which allows the team to better predict individual customer outages in advance and avoid power loss.

Q. Has FPL been recognized for its efforts to provide reliable service for customers?

A. Yes. In 2023, PA Consulting presented FPL with its Outstanding System Resiliency Award. FPL also received the ReliabilityOne® National Reliability Award in 2022 for the seventh time in ten years. The ReliabilityOne® National Reliability Award is given to the company that has demonstrated sustained leadership, innovation, and

achievement in the area of electric reliability. Criteria for the award are based primarily on system reliability statistics that measure the frequency and duration of customer outages. After provisional recipients are selected, each company undergoes an on-site certification process, which provides an independent review and confirmation of the policies, processes and systems used to collect, analyze and report a company's reliability results. In addition to the national award, FPL was awarded the ReliabilityOne® award for Outstanding Reliability Performance in the Southeast Region Metropolitan Service Area for the eleventh straight year in 2024.

Q. Have these initiatives been recognized by customers?

A. Yes, the cumulative success of FPL's initiatives to improve our service and how we engage with our customers has contributed to reducing FPSC reliability-related logged complaints per 10,000 customers by 49% since 2020.

IX. FPL T&D COSTS

Q. Please provide an overview of FPL's actual/forecasted T&D costs.

A. FPL's base T&D capital costs and O&M expenses result from five major cost drivers: (1) reliability/grid modernization; (2) growth and system expansion; (3) other base rate costs of removal; (4) complying with regulatory agency requirements, and (5) grid servicing/support. For T&D capital costs, the major drivers have been growth and grid reliability and modernization. For T&D O&M expenses, the major drivers have been grid servicing and support, regulatory compliance, and grid reliability and modernization. For 2025-2027, these same major cost categories are expected to continue to drive T&D capital costs and O&M expenses.

A. T&D CAPITAL COSTS

Q. What are FPL's T&D actual/projected base (i.e., non-clause) capital costs for 2024-2026 and 2027?

A. FPL's T&D base (i.e., non-clause) capital costs for 2024-2026 and 2027 are $8.0 billion and $2.7 billion, respectively. As discussed, the major drivers for capital costs historically and for the projected period are the same.

Q. Please provide 2024-2027 base (i.e., non-clause) capital costs by major driver for FPL.

A. Below are the 2024-2027 base (i.e., non-clause) capital costs for each major driver for FPL:

Major Drivers ($Billions)	2024	2025	2026	2027	Total 2024-2027	Total Driver Ratio %
Reliability/Grid Modernization	$0.37	$0.31	$0.36	$0.36	$1.40	13%
Growth/System Expansion	$1.58	$1.58	$1.67	$1.60	$6.43	60%
Other Base Cost of Removal	$0.09	$0.13	$0.11	$0.13	$0.46	4%
Regulatory Compliance	$0.07	$0.09	$0.09	$0.09	$0.33	3%
Grid Servicing/Support	$0.61	$0.46	$0.52	$0.51	$2.10	20%
Total	$2.71	$2.57	$2.75	$2.68	$10.71	100%

Note: Totals may not add due to rounding.

Key components of these drivers, and their importance in maintaining a resilient, reliable and compliant T&D system, were discussed earlier in my testimony. These figures are also reflective of the inflationary and cost pressures described in the testimony of FPL witness Bores, which have affected numerous parts of our activities and operations, including both construction and cost of removal.

Q. Please provide additional details for capital costs driven by distribution-related Reliability/Grid Modernization.

A. Distribution smart grid devices account for $0.17 billion for 2024-2026 and $0.08 billion for 2027. The capital costs associated with the installation of underground inspection, repair, and rehabilitation of existing underground facilities are $7 million for 2024-2026 and $2 million for 2027. The remaining components for this category, accounting for $0.19 billion for 2024-2026 and $0.09 billion for 2027, are associated with other various distribution reliability initiatives, such as the installation of hand-hole and pad-mount transformer and submarine cable replacements.

Q. Please provide additional details for capital costs driven by transmission-related Reliability/Grid Modernization.

A. Capital costs associated with transmission facility/system assessments, replacements and the prevention through prediction/reoccurrence initiatives account for $0.27 billion in 2024-2026 and $0.12 billion for 2027. The remaining transmission reliability-related capital costs are associated with modernizing the transmission grid. Capital costs for these initiatives are $0.40 billion for 2024-2026 and $0.07 billion for 2027.

Q. Please provide additional details for capital costs driven by Growth/System Expansion.

A. The capital costs associated with the forecasted addition of new service accounts being added to FPL's service area are $1.51 billion in 2024-2026 and $0.49 billion for 2027. Capital costs for expansion and upgrades of both T&D facilities/infrastructure to ensure the safe and reliable operation of the grid for 2024-2026 are $0.27 billion, and $0.24 billion for 2027. Remaining capital costs in this cost category associated with

new large major construction projects such as SR 70 and 80, new substations, and new streetlight systems for 2024-26 are $3.05 billion and $0.87 billion for 2027.

Q. Please provide details for capital costs driven by Regulatory Compliance.

A. This remaining major driver category, accounting for approximately $0.24 billion in 2024-2026 and $0.09 billion for 2027, includes costs associated with FPL's T&D system operation and maintenance facilities complying with various regulatory mandates, rules and regulations as previously discussed.

Q. Please provide details for capital costs driven by Grid Servicing/Support.

A. Capital costs associated with the major components of this key driver category include: (1) restoring customers' service, $0.58 billion for 2024-2026, and $0.19 billion for 2027; (2) the company's vehicle fleet, $0.09 billion for 2024-2026 and $0.05 billion for 2027; (3) installation of fiber for utility use; and (4) other various support activities (*e.g.*, purchase of tools, computer systems/software, maintenance/ upgrades of office facilities, and responding to customer requests). For 2024-2026, these costs are $0.92 billion, and $0.27 billion for 2027.

B. T&D O&M COSTS

Q. What are FPL's T&D base O&M expenses for the 2026 projected test year and 2027 projected test year?

A. FPL has forecasted T&D base O&M expenses of $181.3 million for the 2026 projected test year and $188.4 million in the 2027 projected test year.

Q. How do T&D base O&M expenses compare to typical benchmarks utilized by the FPSC for evaluating the reasonableness of O&M expenses?

A. FPL's T&D base O&M expenses for the 2026 and 2027 projected test years compare favorably to the benchmarks typically used by the FPSC to evaluate the reasonableness of O&M expenses. For example, the T&D O&M expenses for the 2026 projected test year and 2027 projected test year are significantly below the FPSC O&M benchmark as calculated by FPL witnesses Fuentes and Laney in MFR C-41, which are approximately $54.3 million and $57.4 million for 2026 and 2027, respectively. Further details of changes in the O&M expense are provided in MFR C-8 and the O&M benchmark by function is provided in MFR C-41.

Q. Is there other information available indicating that FPL's T&D O&M expenses are reasonable?

A. Yes. As contained in FPL witness Reed's testimony, benchmarking of T&D O&M expenses demonstrates that FPL has "shown excellence in controlling its Distribution O&M expenses" and "performed well in controlling Transmission O&M expenses."

Q. Are FPL's T&D forecasts for capital costs and O&M expenses reasonable?

A. Yes. For the reasons outlined in detail in my testimony and exhibits, FPL's 2026 projected test year and 2027 projected test year T&D forecast for capital costs and O&M expenses are reasonable and reflect our intentions for continued excellent performance. As previously discussed, Power Delivery has the people, the processes and a track record of managing and sustaining excellent T&D system performance for our customers.

Q. Is FPL proposing Company O&M and Capital adjustments related to the Storm Protection Plan Cost Recovery Clause ("SPPCRC")?

A. Yes. There are certain O&M and capital costs related to FPL's Storm Protection Plan ("SPP") that are currently being recovered in base rates. Because these costs are for SPP programs, FPL is proposing accounting adjustments of $1.2 million to move O&M expenses related to FPL's transmission visual patrols and approximately $7.1 million to move capital related to wire and cable materials associated specifically with FPL's SPP capital projects from base rates to the SPPCRC starting in 2026. FPL's SPP Transmission Inspection Programs are line patrol and visual inspections including assessments and thermography of overhead transmission lines. The wire and cable materials are charged to a holding blanket account and then subsequently charged to a SPP capital project. FPL witness Fuentes further discusses these adjustments to move these SPP costs from base to the SPPCRC.

X. CIAC TARIFF

Q. Please provide an overview of CIAC.

A. CIAC is the amount due from applicants who request new or upgraded facilities in order to receive electric service. The CIAC amount to be paid by the applicant is equal to the total estimated transmission and distribution costs to extend service minus four years of expected annual revenue. The amount required to be paid by each applicant varies based on (i) the total cost to extend service to meet the applicant's electrical needs and (ii) the annual revenues estimated to be received based on the applicant's

projected load. These factors are unique and specific to each applicant requesting new or upgraded facilities.

The total cost to extend service to a new applicant is initially assigned to the general body of customers and "repaid" by the applicant through both the CIAC amount and base revenues paid by the applicant. If the applicant's actual load meets or exceeds the projected load used to calculate the CIAC amount, FPL will fully recover the cost to extend service to the applicant through the CIAC amount and the base rates paid by the applicant over the initial four-year period used to calculate the CIAC amount due. However, if the applicant's forecasted load does not fully materialize, there will be a revenue shortfall over that same four-year period and the burden for recovery of the remaining costs to extend service to the applicant will fall to the general body of customers.

Q. Can you provide an example of the impacts to the general body of customers if the applicant's forecasted load used to calculate the CIAC amount does not fully materialize?

A. Yes. The table below provides simplified illustrative examples of the potential impacts to the general body of customers for an applicant that requires FPL to incur $125 in costs to extend service to the applicant with a projected load that produces an estimated annual revenue of $25.

	(1)	(2)	(3)	(4)	(5)
Example	Cost to Extend Service	Estimated Annual Revenue[2]	CIAC Amount Due[3]	Actual Annual Revenue	Burden to Other Customers[4]
1	$125	$25	$25	$25	$0
2	$125	$25	$25	$15	$40
3	$125	$15	$65	$15	$0

Under these simplified examples, the applicant would be responsible to pay a CIAC amount of $25 and the remaining $100 incurred to extend service to the applicant would be recovered through the base rates paid by the applicant over a four-year period. In Example 1, there is no burden placed on the general body of customers because the applicant's actual load resulted in revenues that are equivalent to the estimated annual revenue of $25 used to calculate the CIAC amount. In Example 2, however, the applicant's load only produces actual annual revenues of $15, well below the amount projected by the applicant. Therefore, the remaining balance of $40 would be recovered from FPL's other customers.[5] The incremental impact to the general body of customers could be significant if the examples above were in millions of dollars, as would be the case for a new applicant requesting FPL to extend and upgrade transmission and distribution facilities to serve significantly large new or incremental loads.

[2] Based on applicant's projected load used to calculate the CIAC amount.

[3] CIAC = column 1 – (4 x column 2).

[4] Burden to Other Customers = column 1 – column 3 – (4 x column 4).

[5] Example 3 shows what the CIAC amount would have been if estimated annual revenue was equivalent to the actual revenues in Example 2 ($15). Under this scenario, there would be no burden on the general body of customers, but the applicant would have paid a much higher CIAC amount of $65 as opposed to $25 in Example 2.

Q. Is FPL proposing a modification to its CIAC tariff to mitigate this risk to the general body of customers for large projects requiring significant costs to extend service?

A. Yes. As explained by FPL witness Cohen, FPL is seeking to modify Tariff Sheet No. 6.199, to implement a proposed new CIAC tariff requirement that, if approved, will apply to all non-governmental applicants that (i) have total projected load of 15 megawatts ("MW") or more at the point of delivery or (ii) require new or upgraded facilities with a total estimated cost of $25 million or more at the point of delivery. As further explained by FPL witness Cohen, an applicant for service that meets these thresholds will be required to advance the total estimated costs to extend service subject to refund minus the CIAC amount, minimizing the risk held by the general body of customers.

Q. Please explain why FPL is proposing this new CIAC tariff requirement.

A. An applicant's load is the primary driver of the total cost to extend service – typically, the higher the load the higher the total costs to extend service. Additionally, the cost to extend service is dependent on the applicant's proximity to existing facilities, as well as whether it requires primary service or secondary service. Installation of these facilities even for a single customer can be costly, ranging into the tens of millions of dollars.

As shown in the simplified examples above, the general body of customers bear the interim risk that the projected load and estimated annual revenue used to calculate the

applicant's CIAC amount will, in fact, materialize over the four-year period. If FPL does not fully recover its investment from the applicant because the projected load did not materialize, the burden for these costs would be placed on FPL's other customers. The purpose of the new CIAC tariff requirement is to better protect the general body of customers from the risks associated with the cost incurred to install new or upgraded facilities to serve significantly large new or incremental loads. The CIAC calculation under the new tariff requirement is also consistent with the calculation of the CIAC amount in Rule 25-6.064, Florida Administrative Code.

Q. How were the 15 MW and $25 million thresholds for the proposed CIAC tariff requirement determined?

A. The 15 MW and $25 million thresholds were set with the intent that the tariff would apply only to applicants of substantial size, such that enhanced risk mitigation is appropriate. By way of scale, and to better understand the size of applicant that the tariff affects, it would take approximately 10,000 homes to equate to 15 MW of added electrical load. Applicants of this size, and above, are uncommon and require unique upgrades and investments to the T&D grid that customers of a smaller size do not. For example, applicants with 15 MW of new or incremental load require significant capital investment in new T&D facilities and upgrades, and often involve the need to construct feeders, substations, and/or transmission lines. These are costly facility expenses that can exceed $25 million in grid investment, representing a substantial financial undertaking. Given the magnitude of the cost to be incurred to serve a single applicant of this size, and having that single applicant as the responsible party for the full payment of those service costs, there is a significant risk to the general body of customers if the

forecasted load used to calculate the CIAC does not materialize. If such a situation were to occur, costs in the near term would be borne by the general body of customers. For that reason, FPL submits these thresholds are reasonable and appropriate to reflect and mitigate the inherent risk the general body of customers must otherwise bear for the large costs they would be required to front to extend service to applicants of this magnitude in absence of the proposed new CIAC tariff requirement further discussed by FPL witness Cohen.

XI. OTHER TARIFF MODIFICATIONS

Q. Are there any other tariff modifications that your testimony is supporting?

A. Yes. My testimony also supports changes to two tariff provisions (Tariff Sheet No. 6.030.1, Section 4.7 and Tariff Sheet No. 6.040, Section 5.3) related to the costs of temporarily relocating FPL facilities to accommodate existing customers' electrical installations, as well as the associated disconnection and reconnection of service to enable such installations. Existing customer installations requiring FPL facility relocation are becoming more common and often include scheduled maintenance work such as painting exterior structure walls, roofing, and siding, and other customer work. To perform these relocations in the field, FPL must send a truck to a customer's premise with trained personnel, necessitating that the Company incur time, travel, and vehicle expenses to support the temporary relocation. Currently, there are no applicable tariff provisions that address the treatment of these costs. As such, the costs are currently borne by the general body of FPL's customers, nearly all of whom are not requesting or benefitting from the installation requiring the temporary relocation. FPL is

proposing changes to ensure that the customer who is causing FPL to incur additional temporary relocation expenses pays for those expenses.

Q. Does this conclude your direct testimony?

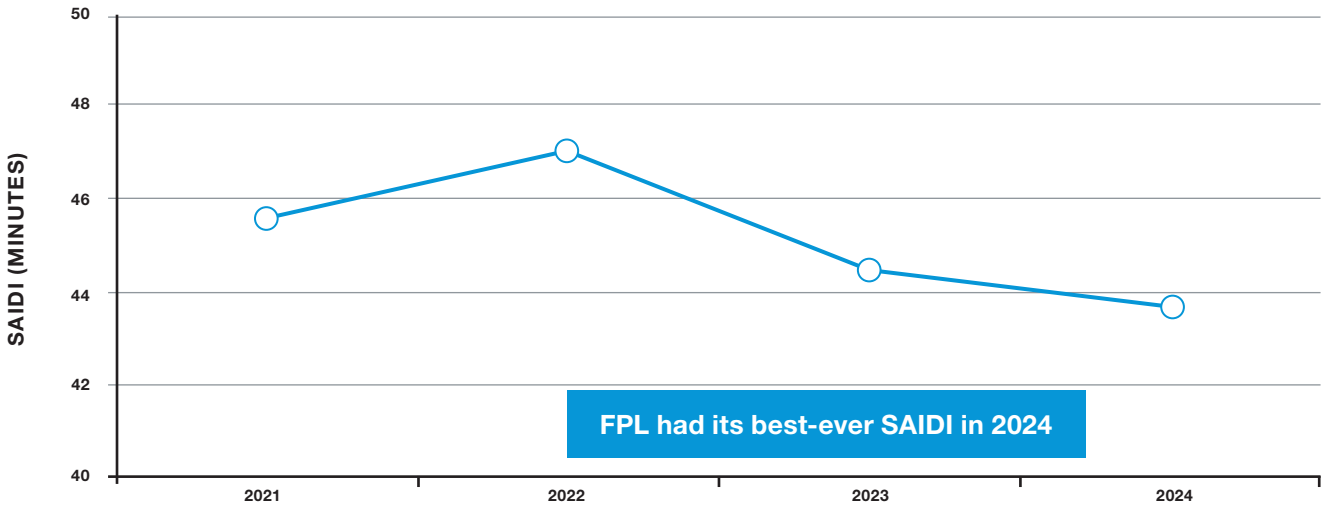
A. Yes.

Florida Power & Light Company

MFRs CO-SPONSORED BY EDUARDO DE VARONA

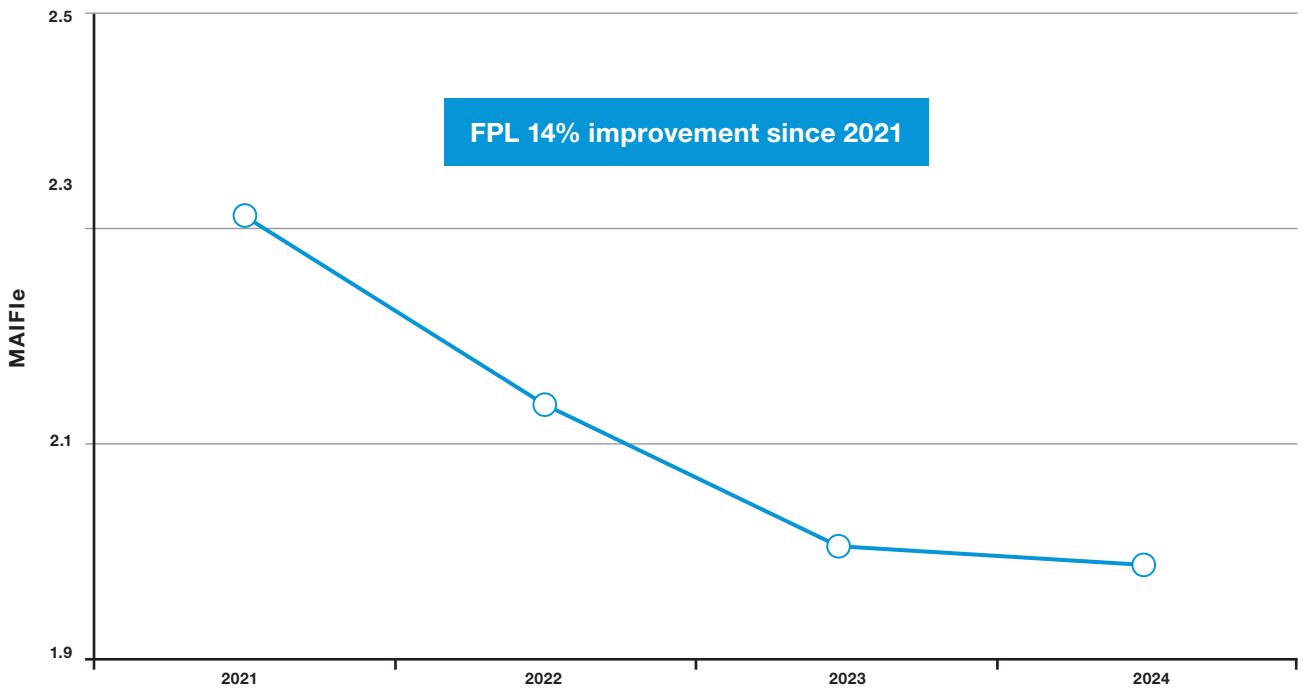
MFR	Period	Title
CO-SPONSOR:		
B-15	2025 Prior Year 2026 Projected Test Year 2027 Projected Test Year	PROPERTY HELD FOR FUTURE USE - 13 MONTH AVERAGE
B-24	2025 Prior Year 2026 Projected Test Year 2027 Projected Test Year	LEASING ARRANGEMENTS
C-15	2024 Historic Year 2026 Projected Test Year 2027 Projected Test Year	INDUSTRY ASSOCIATION DUES
C-16	2024 Historic Year	OUTSIDE PROFESSIONAL SERVICES
C-34	2024 Historic Year 2027 Projected Test Year	STATISTICAL INFORMATION
E-07	2026 Projected Test Year 2027 Projected Test Year	DEVELOPMENT OF SERVICE CHARGES
E-13b	2026 Projected Test Year 2027 Projected Test Year	REVENUES BY RATE SCHEDULE - SERVICE CHARGES (ACCOUNT 451)

FPL FPSC T&D SAIDI 2021-2024



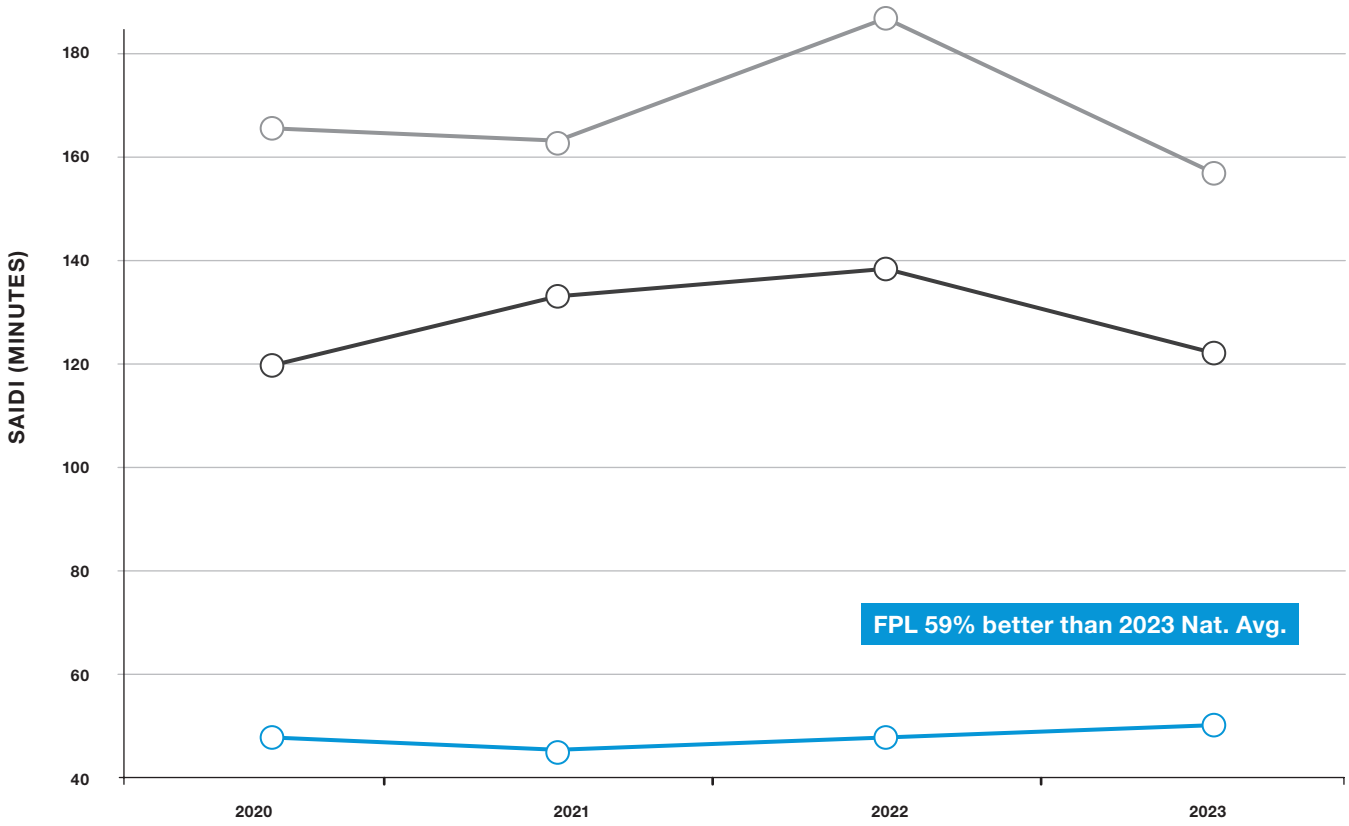
FPL maintained excellent T&D reliability for our customers

FPL FPSC Distribution MAIFIe 2021-2024



FPL customers are experiencing fewer momentary outages

National & Regional Distribution SAIDI Benchmarking 2020-2023



FPL has maintained excellent overall reliability for our customers

FPL Distribution **Distribution National Avg.** **Southeast Region IOUs**

FPL Distribution– Calculated using IEEE 2.5 beta methodology.

Distribution National Avg. –. Based on PA Consulting's most recent reliability benchmarking analysis (2023 results), with data from approximately 100 investor-owned utilities (IOU's), with the vast majority utilizing IEEE 2.5 beta methodology.

Southeast Region IOUs – Data source is PA Consulting. IOUs in the Southeast Region, excluding FPL.

AFS Devices are Significantly Reducing FPL's Customer Interruptions

With AFS – Avoided ~1.9 Million non-storm related customer interruptions in 2024