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FPL's Response to OPC's Fourth Set of
Interrogatories Nos. 20-39, 45, 47, 50,
53-54, 56-60, 62-63

(Nos. 28, 47, and 54 have attachments)

QUESTION:

Please provide a map (kmz or equivalent format) that shows and identifies the feeders that have the highest prioritization, as discussed in Interrogatory No. 29.

RESPONSE:

No responsive documents. Please refer to FPL's response to OPC's Fourth Set of Interrogatories No. 29.

QUESTION:

Please provide all documents comprising or related to cost benefit analyses discussed in Interrogatory 38(c)

RESPONSE:

See FPL's objections served on May 18, 2022. Please also see FPL's response to OPC's 4th Set of Interrogatories No. 38(c).

QUESTION:

Please provide training documentation and design specifications for selection of field transformers based on winter loading

RESPONSE:

Please see the responsive document attached.

QUESTION:

Please provide the documents identified in and used to respond to Interrogatory No. 45.

RESPONSE:

Please see the responsive document attached, which includes a purchase order depicting the approximate hourly equipment rental rate.

QUESTION:

Please provide all files (kmz or equivalent format) showing the location for proposed access road improvements discussed in Interrogatory No. 45(k).

RESPONSE:

FPL does not have a kmz or equivalent format file showing locations of the proposed transmission access road improvements. Please see the attached responsive document showing the images and locations of the proposed access road improvements.

QUESTION:

Please provide maps (kmz or equivalent format) for the following feeders showing the main line as well as laterals to be undergrounded. Include lateral identification number on the maps.

- a. Scottsmoor 105061
- b. Hillsboro 404732
- c. Loxahatchee 407666
- d. Imagination 704264
- e. Cutler 802037

RESPONSE:

Please see the responsive confidential documents attached which depict the requested feeder and associated laterals. However, these maps do not contain lateral identification numbers.

QUESTION:

Please provide any documents referenced in or used to respond to Interrogatory No. 49, including preliminary plans for corrective action (relocation, berms, raising control house, etc.).

RESPONSE:

Please see the responsive documents attached, including 3 confidential and 1 non-confidential attachments.

- “Construction Plans - Gracewood Flood Wall - CONFIDENTIAL”
- “Construction Plans - Lewis Flood Wall - CONFIDENTIAL”
- “Construction Plans - Chambers Substation Floodwall - CONFIDENTIAL
- “2023 Flood Mitigation Scope of Work”

QUESTION:

Please provide maps (kmz or equivalent format) depicting the elevation of each substation referenced in response to Interrogatory No. 50, and FPL's projected elevation of the flood water, as discussed in Interrogatory No. 50(d).

RESPONSE:

Please see the responsive confidential document attached.

QUESTION:

Please provide all documents identified in Interrogatory No. 54.

RESPONSE:

Please see FPL's response to OPC's Fourth Set of Interrogatories No. 54.

QUESTION:

Please provide all documents identified in Interrogatory No. 56.

RESPONSE:

Please see the attached responsive documents which addresses extensive efforts by FPL to manage costs in recent storms.

QUESTION:

Please provide all documents identified in Interrogatory No. 59.

RESPONSE:

No responsive documents.

QUESTION:

Please provide all documents identified in Interrogatory No. 60.

RESPONSE:

No responsive documents.

QUESTION:

Distribution Pole Inspections & Replacements

- a. Provide the actual number of poles inspected in the last 3 years.
- b. Provide the failure rate of poles inspected in the last 3 years.
- c. Are the inspection criteria for pole replacement as defined in National Electric Safety Code (NESC) Table 261-1 based on extreme wind loading (Rule 250C) or based on ice and wind loading (Rule 250B) for the loading criteria?
 - i. Why was this criterion selected by FPL?
- d. For the last three years, provide the following for poles that failed inspection:
 - i. Remedy (pole replacement, truss, etc.).
 - ii. Total cost by remedy used.
 - iii. Number of poles remedied per year separated by remedy used.
- e. For the next three years, provide the detailed budget analysis that was used to derive the table on page 18 of 63 in Exhibit MJ-1 to the Petition for Approval of the FPL 2023-2032 Storm Protection Plan, ("FPL's SPP").

RESPONSE:

- a. For FPL, the number of distribution poles inspected in the last 3 years is below.

2019	149,783
2020	147,003
2021	151,114

- b. For FPL, the failure rate for distribution poles inspected in the last 3 years is below.

2019	3.62%
2020	4.55%
2021	4.57%

- c. For FPL, inspection Criteria used from NESC Table 261-1 is based on Rule 250B.
- i. Pole inspections are mandated by the Public Service Commission since 2006 and FPL's Distribution Pole Inspection program is a continuation of the eight-year pole inspection program ordered by the Commission through its Order No. PSC-06-0144-PAA-EI in the Docket No. 060078-EI. The criteria was selected based on the NESC requirements.
- d. Please see responses below for each of the subparts.
- i. The remedy type for FPL distribution poles that have failed inspection fall into the category of reinforce (truss) or replace.
- ii. Please see table below for total cost by remedy used.

	2019	2020	2021
Number of poles replaced	2,377	2,108	3,118
Cost to replace poles	\$19.1M	\$17.0M	\$23.2M
Number of poles reinforced (trussing)	2,728	2,986	3,308
Cost to inspect and reinforce poles ⁽¹⁾	\$7.6M	\$7.5M	\$8M

⁽¹⁾For the requested period, inspections and re-enforcements are conducted at the same time as part of the distribution pole inspection program, thus costs are not segregated between inspection and re-enforcement activities.

- iii. For FPL, the number of distribution poles remedied in the last 3 years is below:

	FPL Trusses Completed	FPL Replacements Completed
2019	2,728	2,377
2020	2,986	2,108
2021	3,308	3,118

- e. As explained in FPL's 2023-2032 Storm Protection Plan filed on April 11, 2022, the Distribution Pole Inspection targets 1/8 of the system annually. With approximately 1.4 million distribution poles as of year-end 2021, including the distribution poles in the former Gulf service area, FPL plans to inspect approximately 180,000 poles annually during the current 8-year cycle which began in 2022. The projected increase in costs for this program in the years 2023-2025 is based on historical trends observed within labor and material costs. Please see Appendix C of FPL's 2023-2032 Storm Protection Plan for estimated cost for the program for the ten-year period.

QUESTION:

Transmission Pole Inspections

- a. How many wood transmission poles remain in the legacy Gulf Power territory?
- b. Provide the average age of the wood transmission poles in Gulf Power's territory.
- c. How many wood transmission poles remain in the legacy FPL territory?
- d. Provide the average age of the wood transmission poles in FPL's legacy territory.
- e. For the last three years provide the following for poles that failed inspection:
 - i. Remedy (metal transmission pole, lattice steel, concrete).
 - ii. Total cost by remedy used.
 - iii. Number of poles remedied per year separated by remedy used.

RESPONSE:

- a. Approximately 4,720 wooden transmission structures (which can be either single or multi-pole) remained in the legacy Gulf Power territory as of January 1, 2022.
- b. 30.7 years is the average age of the remaining wooden transmission poles in legacy Gulf Power's territory as of May 2022.
- c. Approximately 467 wooden transmission structures (which can be either single or multi-pole) remained in the legacy FPL territory as of January 1, 2022.
- d. 39.6 years is the average age of the remaining wooden transmission poles in FPL's legacy territory as of May 2022.
- e. For the poles that failed inspection in the last three years-
 - i. In both the legacy FPL and the legacy Gulf territories, transmission structures failing inspections over the last three years, in general, have been remediated by replacing the structures with either concrete or galvanized, tubular steel poles.

- ii. As stated in subpart (e)(i) of this response, transmission structures that fail inspections are replaced. Please see table below for the total cost for replacing all items (e.g., structures, all attachments, insulators, guys, cross-braces, cross-arms, bolts, etc.) identified for replacement in the transmission inspection program.

	2019	2020	2021
FPL	\$49.9M	\$27.4M	\$33.0M
Gulf	\$2.6M	\$452K	\$1.8M

- iii. As stated in subpart (e)(i) of this response, transmission structures that fail inspections are replace. Below is the number of transmission structures replaced by year:

	2019	2020	2021
FPL	368	328	213
Gulf	33	6	7

QUESTION:

Distribution Feeder Hardening Program

- a. Describe how fault indicators and Supervisory Control and Data Acquisition (SCADA) reduce the number of outages.
- b. Describe why SCADA and fault indicator devices are not already employed based on common utility practices.
- c. How many faulted circuit indicators does FPL have in service in its current system?
- d. What is the expected useful life of a faulted circuit indicator?
- e. How many faulted circuit indicators does Gulf Power have in its legacy service area?
- f. Provide a budget for the number of faulted circuit indicators to be installed in the next three-year period.
- g. Describe the priority scheme to be used for the deployment of faulted circuit indicators.
- h. Describe the communication method to be used with the faulted circuit indicators (manual read, radio mesh, cellular, etc.).
- i. Describe the improvement gained, if any, for using communication from a faulted circuit indicator rather than data from an outage management system (OMS) system that leverages existing advanced metering infrastructure (AMI) meters for possible fault locating.
- j. Describe the improvement gained, if any, for using communication from faulted circuit indicators over using the fault current levels from existing relays to pinpoint fault locations.
- k. Since deployment of automated faulted circuit indicators is a new program for FPL, the restoration reduction in Appendix A of FPL's SPP will not be applicable to this program. Describe FPL's analysis of this new program in reducing outage restoration time.
 - i. Provide a cost/benefit analysis of this program.

RESPONSE:

- a. Fault indicators and SCADA are components of a smart grid system that provide communication and control technology in the electric grid to provide visibility for operations and performance metrics. While these items do not reduce the number of outages initially, they are instrumental in reducing outage times when those outages occur. Among many of the benefits associated with SCADA, the system allows for the remote monitoring and control of field devices, automated operations, self-healing networks and the collection of critical information from these smart devices on the grid that can be used to identify and prevent equipment issues and performance metrics that have the potential to prevent outages before they occur through the use of predictive analytics over time.
- b. SCADA and fault indicator devices have been deployed across both the FPL electric system and the former Gulf Power service areas. SCADA and fault indicator devices have been a part of former Gulf's Storm Hardening program since 2010, which is when the company began implement their Distribution SCADA program along with other smart grid initiatives. This program is just a carry-over of that Commission approved program, however, there are currently no costs associated with SCADA deployment in the 2023-2032 SPP budget for either the former FPL service area or the former Gulf service area.
- c. In the former FPL service area, there are approximately 33,000 faulted circuit indicators, 30,800 of which communicate through SCADA.
- d. Fault circuit indicators are recorded within utility account 365.00 (Overhead Conductors & Devices), which includes other assets such as sensors, aerial cables, overhead conductors, switches, etc. FPL does not specifically track the lives of fault indicators separate and apart from all other assets recorded in this account. However, FPL's current approved depreciation rate for all assets recorded in Account 365 is based on an average service life of 55 years.
- e. In the former Gulf service area, there are approximately 1,040 faulted circuit indicators, 133 of which communicate through SCADA.
- f. For the former Gulf Power service area, the SPP budget for Fault indicators for the next 3 years is \$2.4 million. For FPL, these devices are part of smart grid deployment, which is not in the SPP and is recovered through base rate.
- g. The deployment scheme for faulted circuit indicators consists of identifying critical locations on circuits that will allow for a fast response as to which phase or portion of a circuit is faulted. Typically, this will be on underground locations, junctions with multiple pull offs, or areas where it may be difficult to patrol a line.
- h. Fault circuit indicators have the ability to use all communication means such as those listed in the question, primarily cellular and mesh networks. Most also have visual identifiers for personnel in the field to manually read.

- i. Faulted circuit indicators that have the ability to communicate through SCADA add another layer of critical information to the outage management system (OMS) and along with outage information for advanced metering infrastructure (AMI) work together to pinpoint outage areas and fault locations following an outage on the system. FCI data along with smart grid device information has the potential to locate faults and reduce outage time by eliminating areas that need to be patrolled, directing line crews to specific areas following an outage event.
- j. Please see response to subpart (h) of this question. Fault circuit indicators work in conjunction with other devices such as existing relays to pinpoint the fault and eliminate other parts of an electrical feeder following an outage event. All of this information works together to provide operators within the control centers information that is crucial in the dispatching of resources to reduce outage times when outage events occur.
- k. The Faulted Circuit Indicator program is not a new program for FPL. Please see section IV(C) in the FPL's 2023-2032 SPP which provides that the Distribution Automation initiative is a carryover from the former Gulf Power service area that was previously approved by the Commission as part of Gulf's 2020 Storm Protection Plan.
 - i. See FPL's objections served on May 18, 2022.

QUESTION:

Distribution Feeder Hardening Program

- a. Describe in detail the type of distribution SCADA device(s) to be used.
- b. Describe the purpose of the Distribution Supervisory Control and Data Acquisition (DSCADA) devices.
- c. Describe the annual budget for deployment of DSCADA.
- d. Will the deployment of these devices be limited to the 700 feeders remaining on FPL's system to be hardened and the 300 feeders remaining on Gulf Power's system (page 27 of 63 of FPL's SPP)?
 - i. If not, provide the budgets for deployment for the 10 years prior on feeders that were previously hardened.
 - ii. If existing feeders were previously hardened and performed well as documented by FPL, explain why these hardened feeders need the addition of DSCADA for extreme weather events.
- e. Provide the priority assigned to the deployment of DSCADA on each circuit within FPL's territory.
- f. Describe the communication means to be used for DSCADA.
- g. Does the SPP include installation of new communication systems to allow deployment of DSCADA?
 - i. If so, describe the system(s) and the associated costs to be included for the next 10 years.
- h. Does the new DSCADA device(s) reduce the frequency of outages?
- i. Provide FPL's analysis on the operability of the DSCADA equipment after a major weather event.
 - i. If no analysis was made, please state as such.

- j. Since the DSCADA is a new program for FPL, the restoration reduction in Appendix A will not be applicable to this program. Provide FPL's analysis of this new program in reducing outage restoration time.
- i. Provide a cost/benefit analysis of this program.

RESPONSE:

- a. The distribution SCADA as described in the FPL's 2023-2032 SPP is only applicable to the former Gulf Power service area. This program is a carryover of the Storm Hardening Program from Gulf's 2020-2029 SPP approved by Commission Order No. PSC-2020-0293-AS-EI. The types of SCADA devices to be implemented in the former Gulf service area as part of the storm hardening initiatives, and as described Section IV(C) of the FPL's 2023-2032 SPP as the Distribution Automation initiative, include smart recloser devices and FCI. Reclosers provide reclosing functions for temporary faults, sectionalizing functions for permanent faults, and in many cases provide distribution automation functions such as self-healing circuits. All of these are designed to eliminate outages, reduce the number of customers impacted by an outage, and reduce outage times when an event occurs especially during extreme weather events. The other devices that have been deployed by Gulf Power historically as part of their program is the faulted circuit indicators as described in detail as part of the response to FPL's response to OPC's 4th set of Interrogatory No. 22.
- b. Distribution Supervisory Control and Data Acquisition (DSCADA) is a generic term that basically describes the communication framework and system that enables smart devices to communicate, which allows for the flow of information from field devices (typically smart devices) back to the control center. A DSCADA system provides operators in the control center with real time visibility into the performance of the system, which includes load information, switch positions, and outage information, and allows system operators to remotely take action when necessary.
- c. FPL's 2023-2032 SPP does not contain any cost for implementing DSCADA. Please see FPL's response to OPC's 4th Set of Interrogatories No. 22 (b).
- d. The deployment of DSCADA devices is limited to the feeders in the former Gulf Power service area as previously approved by the Commission in Gulf's 2020-2029 SPP.
 - i. Not Applicable
 - ii. As approved previously by the Commission in Gulf's 2020-2029 SPP, the deployment of DSCADA devices under the FPL's 2023-2032 SPP is limited to the feeders in the former Gulf Power service area that have not been hardened.

- e. The deployment of DSCADA devices under FPL's 2023-2032 SPP is limited to the feeders in the former Gulf Power service area that have not been hardened as previously approved by the Commission in Gulf's 2020-2029 SPP.
- f. DSCADA can be used with multiple communication means depending on the area of deployment and current system availability. The DSCADA system currently used in the former Gulf Power service area is a cellular based system.
- g. The SPP does not include the deployment of a new communication system or cost associated with a new communication system for DSCADA.
- h. New DSCADA devices are typically devices that have the capabilities of reducing the frequency of outages that may be caused by temporary faults. They do limit the number of customers that may be impacted by a permanent fault, so, in that way they do reduce the frequency of outages for many customers. DSCADA devices are often the key components associated with a self-healing network scheme that certainly reduce the frequency of outages for customers by isolating and re-energizing customers outside the faulted section of line. Long-term DSCADA devices provide valuable system performance information that has the potential to be used in data analysis, which in turn can be used to identify preventative maintenance opportunities that can ultimately reduce the frequency of outages.
- i. DSCADA equipment is not part of FPL's 2023-2032 Storm Protection Plan outside of the field equipment to be installed within the former Gulf Power service area as part of the previously approved Gulf 2020-2029 SPP. There are also no costs in the SPPCRC for DSCADA systems within either company. With that said, part of FPL's storm restoration process both during and following a major weather event is the tracking and performance of the DSCADA enabled field devices. One key aspect of the performance is tracking system performance to determine the number of customer outages avoided by proper operation of the devices and communication system. As an example, during Hurricane Isaias and Tropical Storm Eta in 2020, smart devices successfully avoided more than 158,000 customer outages. The utilization of advance technology such as smart grid and DSCADA technologies is utilized to facilitate damage assessments for impacted areas to provide better, faster, and more efficient support during restoration. The impact to communication facilities or to the actual DSCADA enabled field devices is also tracked in order to ensure any needed repairs are completed as part of the overall restoration effort as the system is returned to normal.
- j. The DSCADA program is a carryover program from the Gulf Power 2020-2029 SPP previously approved by Commission Order No. PSC-2020-0293-AS-EI. It is not a new program for FPL, and there are no projects or cost for the former FPL service area associated with current SPP filing.

QUESTION:

Previous Distribution Feeder Hardening Programs excluded FPL's distribution automation initiatives, as stated in FPL's SPP, p. 27 of 63.

- a. Identify any memos, reports, and analyses that led FPL to exclude this program from the previous SPP.
- b. Identify any memos, reports, and analyses that led FPL to include this program in the current SPP.
- c. Provide the actual cost for distribution automation for FPL's system for the last three years.
- d. Provide a detailed description

RESPONSE:

- a. No responsive documents. Distribution Automation was not included in FPL's previous 2020-2029 SPP and is only included in 2023-2032 SPP as a carryover within the former Gulf Power service area as previously approved by the Commission as a part of Gulf's 2020-2029 SPP in Docket No. 20200070-EI.
- b. No responsive documents. Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 24(a).
- c. The Distribution Automation initiative was not included in the former FPL service area as part of the FPL's 2020-2029 Storm Protection plan or the 2023-2032 Storm Protection Plan. As a result, the Storm Protection Plan cost for the Distribution Automation initiative in the former FPL service area is zero dollars. Please refer to FPL's Annual Reliability Report filed on March 1, 2022, for a description of FPL's Distribution Automation/Smart Grid program description and budget. However, this program is not included in FPL's 2023-2032 Storm Protection Plan as it is recovered through base rates. FPL's Annual Reliability Report can be accessed on the Commission website at:
<http://www.psc.state.fl.us/ElectricNaturalGas/ElectricDistributionReliability>
- d. Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 24(c). FPL has not employed a distribution automation initiative as part of the Storm Protection Plan. Please refer to FPL's Annual Reliability Report filed on March 1, 2022, for a description of FPL's Distribution Automation/Smart Grid program description and budget. However, this program is not included in FPL's 2023-2032 Storm Protection Plan, instead it is recovered through base rates.

QUESTION:

FPL's Distribution Feeder Hardening Program proposes to harden 250 feeders from 2023-2025 and only 50 feeders annually from 2026-2030.

- a. Will all feeders (700 on FPL and 300 on Gulf Power) be hardened by 2030?
- b. Explain the reason for not hardening some of the feeders.
- c. List the feeders to be hardened in order of priority, i.e., highest priority to lowest priority.
- d. Describe the priority methodology to be used for hardening the remaining feeders.

RESPONSE:

- a. Yes, FPL is targeting the hardening of approximately 700 feeders remaining in the former FPL service area and approximately 300 feeders remaining in the former Gulf service area to be hardened or placed underground by 2030.
- b. Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 25(a).
- c. Please refer to FPL's Appendix E filed in FPL's 2023-2032 Storm Protection Plan filed on April 11, 2022 (Docket No. 20220051-EI) for Distribution Feeder Hardening projects in 2023. Rule 25-6.030 only requires project level details for year 1 of the SPP (2023), not future years. Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 25(d) for a priority methodology.
- d. Please see Section IV(C)(5) "Criteria used to Select and Prioritize the Program" of FPL's 2023-2032 Storm Protection Plan ("SPP") filed on April 11, 2022 (Docket No. 20220051-EI).

QUESTION:

Lateral Undergrounding Program

- a. Currently FPL's standard service installation for new services is overhead service (<https://www.fpl.com/reliability/underground-conversions/faq.html>) and customers pay extra for underground service. If a new home is on a lateral to be undergrounded, explain if undergrounding the new service would be borne by the customer.
 - i. If borne by the customer, the SPP would convert the overhead service to underground. Explain the increased cost to the customer for this conversion after the overhead service is built.
- b. For new subdivisions, based on FPL's website (<https://www.fpl.com/reliability/underground-conversions/faq.html>), the standard service installation would be overhead service. If undergrounding laterals is good for reliability, explain why overhead service for new subdivisions makes sense in light of the SPP.
- c. In Mr. Jarro's opinion, should new services be initially installed underground or overhead based on his experience with the SPP?

RESPONSE:

For the purpose of this response, the following explanation is limited solely to laterals converted from overhead to underground as part of the SPP. The hypothetical situation proposed in OPC Fourth Set of Interrogatories No. 26 would only apply to a single new home (and request for new service) along a lateral that was previously converted from overhead to underground as part of the SPP. Subject to the foregoing, FPL responds as follows:

- a. FPL's policy is to comply with all current rules and regulations documented within our electric tariff in effect at the time. Under the current tariff, FPL's standard new service installation for a new single home is overhead service. In the event that the new homeowner requests underground service, the customer is responsible for the cost differential between the overhead and underground service. If the new homeowner elects to receive the standard overhead service and the overhead lateral is subsequently converted to underground as part of the SPP, the homeowner would be treated the same as all similarly situated customers fed from the lateral and the cost to convert the service to underground would be included as part of the SPP underground project. If the new homeowner elects to receive underground service (and pays for the cost differential per the tariff) and the overhead lateral is subsequently converted to underground, there would be no need to convert the new homeowner's service to underground, which would incrementally reduce the total costs for the SPP underground project. This approach is consistent with all customers (individual, developments, municipalities, and etc.) that voluntarily elect and pay to have their feeders, laterals, or services converted to underground outside of the SPP. Finally, if service is requested for a new home that is

constructed along a lateral that was previously converted to underground prior to the construction of the home, our current electric tariff denotes the applicable service charge that applies to a new underground service fed from an underground service point.

- b. The premise to OPC Fourth Set of Interrogatories No. 26(b) is flawed in that it asserts the purpose of converting laterals to underground as part of the SPP is to improve reliability. Although converting overhead laterals to underground improves reliability, the primary purpose of the Lateral Hardening Program included in FPL's 2023-2032 SPP is to achieve the statutory objectives codified in Section 366.96, F.S., "to strengthen electric utility infrastructure to withstand extreme weather conditions by promoting ... the undergrounding of certain electrical distribution lines" and "for each electric utility to mitigate restoration costs and outage times to utility customers when developing transmission and distribution storm protection plans." See Sections 366.96(1)(c)-(e), F.S. The approach to new service installations under the current tariff is to consider our "usual and customary" installation for new subdivisions as overhead service with any differential costs borne by customers who request underground service. Our current tariff does not facilitate the objectives of the Lateral Hardening Program in the SPP.
- c. Based on his experience with the SPP and the underground pilots, FPL witness Jarro believes that underground services are more resilient to extreme weather events and new services should initially be installed as underground services where practical and cost effective. However, FPL's current tariff regarding the installation of new services does not contemplate the objectives of the Lateral Hardening Program in the SPP. See also FPL's responses to subparts (a) and (b) above.

QUESTION:

Distribution Lateral Hardening Program

- a. Based on the number of laterals hardened in the pilot project, state the following:
 - i. Provide the average length of a lateral.
 - ii. Provide the average number of customers on a lateral.
 - iii. Provide the minimum number of customers on the laterals that would be undergrounded.
 - iv. For laterals with fewer than 10 customers in pilot project, answer the following:
 1. What was the actual cost to underground these laterals with fewer than 10 customers?
 2. List and describe the outage data for these specific laterals.
 3. Provide the number of outages caused by vegetation for these laterals with fewer than 10 customers.
 - v. How many laterals were primarily in the front of homes?
 1. What was the actual cost to underground these laterals in the front of homes?
 2. List and describe the outage data for these specific laterals.
 3. Provide the number of outages caused by vegetation for these laterals in front of homes.

RESPONSE:

As part of the 2023 SPP, FPL is proposing to continue the Distribution Lateral Hardening Program as a permanent SPP program to provide the benefits of underground lateral hardening throughout its system, including in the former Gulf service area. Therefore, for purposes of this response, FPL is assuming that the term “pilot” as used in OPC’s Fourth Set of Interrogatories No. 28 refers to the Lateral Hardening (Undergrounding) – Distribution Program that was approved as a pilot through 2022 by Order No. PSC-2020-0293-AS-EI.

- a. For the underground pilot approved by Order No. PSC-2020-0293-AS-EI, please see responses below.
 - i. 0.41 Miles is the average length of a lateral completed for the pilot during the period 2019-2021.
 - ii. 35 customers is the average number of customers on a lateral completed for the pilot during the period 2019-2021.
 - iii. Rather than selecting individual “stand-alone” laterals, FPL will apply the Distribution Lateral Hardening Program to all the laterals on a feeder. On average, there are approximately 20-30 overhead laterals on a feeder. In some cases, we will underground laterals serving as few as 1 customer (these can consist of a single span of conductor). These will be evaluated along with all other laterals in the vicinity for the best approach given all design considerations mentioned in the SPP and included in FPL’s response to OPC’s 4th Set of Interrogatories No. 28.
 - iv. Please see response below.
 - 1. Please refer to FPL’s responsive document in OPC’s 4th Set of Production of Document, No. 16. The majority of our smaller lateral conversions either (a) do not have specific costs assigned to them because the associated costs were booked to or included as part of larger parent project that were tied in with other lateral conversions, or (2) their associated costs were included in work done on other laterals as part of a parent project. In these cases, we do not have a line-item cost for only the single lateral because it was part of a larger parent project. The average cost associated specifically to laterals with less than 10 customers on Exhibit MJ-1 (FPL Actual Storm Protection Plan Work Completed in 2021) filed on April 1, 2022 (Docket No. 20220010-EI) is approximately \$151,000 per lateral, although the majority of these laterals fall into the two categories listed above.
 - 2. Please refer to FPL’s responsive document in OPC’s 4th Set of Production of Document, No. 16.
 - 3. Please refer to FPL’s responsive document in OPC’s 4th Set of Production of Document, No. 16.

- v. FPL does not have a data for the location of the lateral (front of versus rear of) laterals. Each lateral would have to be individually reviewed to determine if it was front or rear of prior to project construction.
 - 1. Not available per response to subpart (v) above.
 - 2. Please refer to FPL's responsive document in OPC's 4th Set of Production of Document, No. 16.
 - 3. Not available per response to subpart (v) above.

QUESTION:

The Undergrounding Pilot

- a. Identify and describe the written protocols for the pilot program.
- b. State the hypothesis to be tested by the pilot program.
- c. Identify and describe any reports or studies from the pilot program.
- d. Describe how FPL tested undergrounding the worst performing laterals on a feeder rather than all laterals on a feeder.
- e. Regarding maps for all laterals undergrounded during the pilot program,
 - i. Indicate the feeder servicing each lateral.
 - ii. Indicate the state of feeder hardening.
 - iii. Indicate each lateral that was hardened instead of undergrounded.
- f. Provide a list of permits required for undergrounding distribution lines.
 - i. Are separate permits required for each lateral?
- g. Provide a list of permits required for feeder hardening.
- h. Provide a list of permits required for overhead lateral hardening.

RESPONSE:

As part of the 2023 SPP, FPL is proposing to continue the Distribution Lateral Hardening Program as a permanent SPP program to provide the benefits of underground lateral hardening throughout its system, including in the former Gulf service area. Therefore, for purposes of this response, FPL is assuming that the term “pilot” as used in OPC’s Fourth Set of Interrogatories No. 28 refers to the laterals that were converted to underground as part the three-year Storm Secure Underground Program Pilot, which was initiated in 2018, and the Lateral Hardening (Undergrounding) – Distribution Program that was approved as a pilot through 2022 by Order No. PSC-2020-0293-AS-EI.

- a. The Stipulation and Settlement Agreement approved by Commission Order No. PSC-2020-0293-AS-EI provides as follows:

“The Parties agree that with regard to FPL’s Distribution Lateral Hardening-Undergrounding Program, FPL should continue this Program as a pilot through 2022 (“Continued Pilot”). The priority for undergrounding in this Continued Pilot will be targeted for feeders that have the most number of laterals that experienced an outage during Hurricanes Matthew and/or Irma and that have a history of vegetation outages or overall reliability issues, as further described on page 26 of FPL’s SPP (Exhibit MJ-1, page 30 of 48). The Parties agree that the record supports a Commission finding that the total number of laterals identified in Appendix C to FPL’s SPP (Exhibit MJ-1, Appendix C, page 2 of 2) for the years 2020-2022 should be approved. Further, as part of this Continued Pilot, FPL will collect information and data to establish protocols for determining when a lateral for a feeder being evaluated for undergrounding in FPL’s system should be overhead hardened as opposed to being placed underground, and FPL will use such protocols in future SPP work. The Parties retain all rights to assert or challenge the reasonableness of FPL’s projected costs and prudence of FPL’s actual costs on individual projects under this program in the SPPCRC. For Distribution Lateral Hardening –Undergrounding Program activities for the year 2023, FPL shall file an SPP update in 2022 in order to seek recovery of costs for such 2023 activities in 2023. The Parties further agree that their consent to this Continued Pilot program under the terms of this Agreement will not be binding upon or have any precedential value on any future lateral undergrounding program or projects that FPL may propose in future SPPs or otherwise.”

Consistent with the 2020 SPP Settlement approved by Commission Order No. PSC-2020-0293-AS-EI, FPL has established protocols as part of the Distribution Lateral Hardening Program for evaluating when a lateral may be overhead hardened as opposed to being placed underground. The protocols for consideration are as follows: (a) low or no vegetation-related outages experienced over the most recent 10 years; (b) terrain or conditions observed in the field that make undergrounding technically difficult, such as swamps, wetlands, forests, farms, and areas prone to extreme flooding; (c) no CIF customers served by the lateral; (d) inability to obtain easements/agreements necessary to underground the lateral; (e) space restrictions in areas congested by facilities, structures, or otherwise in use by property owners and/or third parties; and (f) number of customers served by the lateral. These factors and conditions will be applied to each individual lateral on a feeder to determine if, and when, a lateral should be overhead hardened as opposed to being placed underground. If one or more of these factors are present, FPL will make a determination whether the lateral should be overhead hardened or placed underground based on the conditions at the time.

- b. See response to subpart (a). See also pages 29-32 of Exhibit MJ-1 (FPL’s 2023-2032 Storm Protection Plan) for the lessons learned from the pilot. The pilot program tested the effectiveness of hardening laterals to protect against the impact of hurricanes and other major storms.

- c. FPL experienced no outages to any laterals that were undergrounded as part of the Pilot during Tropical Storm Eta's double landfall in Florida in 2020, despite outages to more than 420,000 customers throughout FPL's service area. This was the most impactful storm in FPL's service territory since the inception of the Distribution Lateral Hardening program, and the results demonstrate that the program was a significant benefit to the customers served from the more than 330 completed underground lateral projects at that time of the event. Additionally, no outages to any lateral undergrounded through the Distribution Lateral Hardening Program experienced an outage during Hurricane Isaias. Please refer to FPL's docket for Evaluation of Hurricane Isaias and Tropical Storm Eta Storm Costs in Docket No. 20210178. Please see FPL's response to OPC's 4th set of Production of Documents No. 18.

Please refer to Section IV(D)(a) of FPL's 2023-2032 Storm Protection Plan, which describes lessons learned from the pilot program.

- d. The premise of OPC Fourth Set of Interrogatories No. 28(d) is flawed in that it incorrectly presumes the undergrounding pilot selected and prioritized individual laterals to be converted from overhead to underground based on worst performing laterals. To be clear, FPL selected/prioritized laterals for conversion to underground based on the overall feeder performance methodology approved by the Commission in Order No. PSC-2020-0293-AS-EI. Rather than selecting individual "stand-alone" laterals, FPL applied its Distribution Lateral Hardening Program to all laterals on a feeder such that when a hardened feeder that has experienced an outage is restored, all associated laterals would also be restored (unless the lateral was damaged). See pages 29-32 of Exhibit MJ-1 (FPL's 2023-2032 Storm Protection Plan) for a description of the lessons learned and benefits of designing and constructing at the feeder level.

During the pilot program, FPL tested undergrounding the worst performing laterals as well as undergrounding all laterals on a feeder that met the program criteria. The pilot found that there are benefits to undergrounding an entire feeder over doing just one or a few laterals at a time. The major benefits to undergrounding an entire feeder lie within the opportunities to design and engineer the optimal solution for multiple circuits at once. Overhead laterals are radial lines that have one point of connection back to a feeder line. Underground laterals are "looped" systems that are fed from two points. In a radial system, any disruption occurring will cause result in loss of power for the entire line and corresponding customers. A loop system provides better service continuity than radial systems by having two fully separate connections. To accommodate this second route of service back to a source feeder, additional overhead lateral circuits can be incorporated within the optimal path allowing for multiple laterals to be converted on the same project while minimizing overall cable footage.

Additionally, overhead laterals on FPL's system are typically inaccessible to trucks and built in the "rear-of" buildings and residences. The new underground laterals are designed and built in the "front-of" residences and accessible to trucks. When the new underground line is moved to the "front of" the property, opportunities exist to serve customers on the other side of the street which were previously fed from a separate overhead lateral. When designing all laterals on an entire feeder circuit at the same time, all of these elements can be considered to minimize primary and secondary cable footage, number of transformers needed, and overall design the most effective and reliable underground system. By undergrounding an entire feeder at once, construction resources and work plans can be managed more efficiently by limiting travel between jobs day by day. Customer and community outreach efforts can also be optimized with the broader approach, allowing FPL to hold community meetings and engage agencies in the larger plans. In contrast with the individual lateral approach, we may only convert one block of a neighborhood at a time, creating more questions from the customers about why one street was selected but not another. We also reduce the impact to the customer long term. With the feeder approach, we can convert all lateral lines in a given neighborhood or area. This allows us to complete the area and then move on, rather than continually returning back to a neighborhood year by year to convert one lateral at a time.

- e. See FPL's objections served on May 18, 2022. FPL does not have maps containing the requested information for laterals completed during the pilot program. Refer to attachment included with this response which lists all of FPL and Gulf's completed lateral projects.
- i. Please see attachment included with this response. Also, please refer to FPL's 2023-2032 Storm Protection Plan, Appendix E (FPL 2023 Project Level Detail), specifically the tab titled "D Lateral Hardening" which lists the Feeder number for every project as part of the Distribution Lateral Hardening Program. Please refer to FPL's Exhibit MJ-1 in Docket (FPL Actual Storm Protection Plan Work Completed in 2021) and Exhibit MJ-4 (FPL Actual/Estimated Storm Protection Plan Work to be Completed in 2022) in Docket No. 20220010-EI, specifically, the tab titled "D Lateral Hardening" which lists the feeder number for every project as part of the Distribution Lateral Hardening Program.

- ii. Please see attachment included with this response. Please also refer to Section IV(C) of FPL's 2023-2032 Storm Protection Plan for further details. As of year-end 2022, there are approximately 700 feeders remaining in the former FPL service area and approximately 300 feeders remaining in the former Gulf service area to be hardened or placed underground. Under the 2023-2032 Storm Protection Plan, FPL is targeting to complete approximately 250 feeder projects annual during 2023-2025 and approximately 50 feeder projects annual during 2026-2030. Please also refer to FPL's Exhibit MJ-1 (FPL Actual Storm Protection Plan Work Completed in 2021) in Docket No. 20220010-EI, specifically the tab titled "D Feeder Hardening" which identifies the most recent projects that have been completed in the Distribution Feeder Hardening Program.
 - iii. The following laterals have been hardened instead of undergrounded: 87365019004; 87365129101; 87365009009.
- f. Local city, county, and sometimes state agencies require various construction and right of way permits depending on project scope and location. Specialty permits are sometimes required from various other agencies, for example:
- Florida Department of Transportation (FDOT)
 - Florida Department of Environmental Protection (FDEP)
 - Army Corps of Engineers (ACOE)
 - Florida East Coast Railway (FEC)
 - Miami-Dade County Department of Environmental Resources Management (DERM)
 - South Florida Water Management District (SFWMD)
 - Lake Worth Drainage District
 - Melbourne Tillman Water Control
- i. Permit requirements are different based on the requirements of the different agencies that have jurisdiction over the area where work is to be performed. Some agencies require multiple permits for each scope of work (geographic and time interval based), others will allow bundling of work and only require single permit. Stated otherwise, some jurisdictional agencies may require permits for each lateral, while others may allow multiple laterals or projects under a single permit.
- g. Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 29(f).
- h. Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 29(f).

QUESTION:

Regarding the new Management Region criterion for selection of Distribution Lateral Undergrounding based on worst performing circuits (FPL's SPP, page 36 of 63), state the following:

- a. Criteria include significant transit for out of state crews. Explain how this criterion does not favor investments for hardening in South Florida compared to customers in the Panhandle of Florida.
- b. List the feeders that have prioritization based on the Management Region.
- c. Identify Provide a map (kmz or similar) that shows the feeders having the highest prioritization.

RESPONSE:

- a. The Management Region selection criteria is incremental to our current selection/prioritization methodology, which will continue to prioritize laterals across all regions of Florida without exception, including the panhandle.

As stated in Section IV(D)(4) of FPL's 2023-2032 Storm Protection Plan, the criteria "significant transit for out of state crews" is only one of the factors that FPL will use to prioritize under the new Management Region selection criteria. Other factors considered under the new Management Region selection criteria include areas of highest risk of hurricane impacts and highest concentration of customers. The selection and prioritization of Management Regions will be based on all three factors combined.

If the "significant transit for out of state crews" factor was viewed in isolation, it would result in additional targeted investments for FPL's Dade, Broward, and East Regions. For example, if FPL brought crews from out of state to assist in restoration, it would take them approximately one full additional day of travel from the north Florida border to Miami, Florida, as well as an additional day of travel while returning to their home location – all of which would be compensated time inclusive of fuel, meals, & lodging. During evacuations, gridlocks are common on Florida's highways which can also result in even longer delays. This increase in travel time would result in 1) additional costs to complete storm recovery and 2) additional delays in restoration while waiting on crew arrival.

FPL further notes that the greatest concentration of customers for FPL is located in the southern peninsula of Florida, which is a factor considered under the new Management Region selection criteria. However, FPL will also consider the southern peninsula's history of numerous and significant hurricanes, which is also a factor considered under the new Management Region selection criteria.

Ultimately, these investments achieve the legislative objectives codified in Section 366.96, F.S., “to strengthen electric utility infrastructure to withstand extreme weather conditions by promoting the overhead hardening of electrical transmission and distribution facilities, the undergrounding of certain electrical distribution lines, and vegetation management” and “for each electric utility to mitigate restoration costs and outage times to utility customers when developing transmission and distribution storm protection plans.”

Importantly, however, FPL has continued to prioritize its storm hardening measures and SPP program, including lateral undergrounding, in all regions across Florida, including in FPL’s Northwest Region (Florida’s Panhandle). For instance, in the Panhandle of Florida, FPL (formerly Gulf Power) completed 1 lateral project in 2021. For the calendar year 2022, 10 lateral projects are slated for execution as detailed in FPL’s Exhibit MJ-4 (FPL Actual/Estimated Storm Protection Plan to be Completed in 2022) filed on May 2, 2022 (Docket No. 20220010-EI). In 2023-2024, as shown in our project level details (Appendix E), FPL has identified 184 lateral projects in the Panhandle Region of Florida for construction. This growth in the number of projects in the region is an example of the commitment FPL has made to continue completing projects in the Panhandle as well as all other areas of the state, regardless of the incremental plan to accelerate work in any particular management region.

- b. As proposed in the 2023-2032 SPP, FPL will add the Management Region selection criteria to its current prioritization criteria starting in 2025. FPL has not yet identified the feeders that will be targeted using the Management Region approach.
- c. See response to subpart (b) above. FPL has not yet selected any feeders using this new Management Region selection criteria.

QUESTION:

Transmission Hardening Program

- a. Regarding page 32 of 63 of FPL's SPP, please update the comparison of costs and benefits for the Transmission Hardening Program rather than the Distribution Lateral Hardening Program.
- b. Provide the number of transmission poles replaced by this program for each of the last 3 years.
- c. Provide the total cost associated with replacement of the transmission poles for each of the last 3 years.
- d. What was the total cost to replace transmission poles?
 - i. What was the total cost to replace the 100 poles after Hurricane Wilma?
 - ii. What was the total cost to replace the 5 poles after Hurricane Irma?
 - iii. How does this cost compare to replacing transmission poles through the Transmission Hardening Program?

RESPONSE:

- a. The "Comparison of Costs and Benefits" and "Cost Estimates" sections were provided for the Transmission Hardening Program and the Distribution Lateral Hardening Program in FPL's 2023-2032 Storm Protection Plan filed on April 11, 2022 (Docket No. 20220051-EI). The information in each of these sections do not require updating as they are accurate.

The "Comparison of Costs and Benefits" section for the Transmission Hardening Program is located in the correct location, between the "Cost Estimates" and "Criteria used to Select and Prioritize the Program."

The Distribution Lateral Hardening Program's "Cost Estimates" is located in the correct location. However, through an inadvertent error in the final preparation of the SPP Plan prior to filing, the "Comparison of Costs and Benefits" section for the Distribution Lateral Hardening Program was incorrectly inserted into the Transmission Hardening Program.

- b. Please refer to the table showing the number of transmission structures (which may be single or multi-pole structures) replaced by the SPP Transmission Hardening Program from 2019-2021.

	2019	2020	2021
FPL	1,075	942	587
Gulf	102	62	272
Total	1,177	1,004	859

- c. Please refer to the table below for total cost associated with replacement of the transmission structures (which may be single or multi-pole structures) for each of the last 3 years.

	2019	2020	2021
FPL	\$81.1M	\$86.0M	\$52.9M
Gulf	\$6.9M	\$3.6M	\$17.4M
Total	\$88.0	\$89.6M	\$70.3M

- d. The total estimated costs for the Transmission Hardening Program, including the costs to replace wood transmission poles with steel or concrete structures, are provided in Appendix C of the 2023-2032 Storm Protection. FPL does not have the estimated costs to only replace the wood transmission poles with steel or concrete poles separated from the total estimated costs for the Transmission Hardening Program.
- i. During storm restoration work, FPL does not track the cost for replacing a failed transmission pole separately from associated storm restoration work. Therefore, FPL does not have the costs to replace the hundred failed transmission structures associated with Hurricane Wilma separately identified from the related storm restoration work.
 - ii. During storm restoration work, FPL does not track the cost for replacing a failed transmission pole separately from associated storm restoration work. Therefore, FPL does not have the costs to replace the five failed transmission structures associated with Hurricane Irma separately identified from the related storm restoration work.
 - iii. See responses to subparts (d), (d)(i), and (d)(ii) above. However, FPL believes it is more efficient to replace transmissions structures through FPL's Transmission Hardening Program rather than attempting to replace transmission structures as part of a response to an extreme weather event. These efficiencies include, but are not limited to the following:

- Scheduling and coordinating crews, including opportunities to perform work on multiple transmission line sections within the same transmission corridor.
- Working multiple structures consecutively would lower cost associated with mobilizing materials, resources, and equipment between work locations.
- Lower cost from replacing structures in a planned environment rather than storm restoration.
- Lower cost for replacing the transmission structure one time rather than possibly multiple visits to the site during storm restoration.

QUESTION:

Regarding the Transmission Hardening Program, Mr. Jarro stated on page 13 of his testimony "[t]he 2023 SPP also continues the initiative from the former Gulf's 2020 SPP to review substation relay vaults."

- a. Explain the term "relay vaults."
- b. Indicate where in the 2023 SPP this program is included and provide details as to the purpose, cost, and benefits.

RESPONSE:

- a. A substation relay vault is a building facility located on the substation property which encloses electronic and other equipment for the substation.
- b. Strengthening a substation relay vault is included in the Transmission Hardening Program. See pages 37, 39 of Exhibit MJ-1 (FPL 2023-2032 Storm Protection Plan). As stated in the 2023-2032 SPP and direct testimony of FPL witness Jarro, FPL is proposing to continue to review substation relay vault construction standards for possible replacement and strengthening to better withstand an extreme weather event. The propose of this initiative is protect the electronic and other equipment inside the substation relay vaults by improving the resiliency against extreme wind loads and flooding. The benefits of this program include improving restoration time and lowering storm restoration costs. This is a continuation of the initiative from Gulf's 2020 SPP approved in Order No. PSC-2020-0293-AS-EI. However, because FPL is only proposing to review substation relay vault construction standards, there currently are no planned projects or estimated costs at this time.

QUESTION:

Regarding vegetation management,

- a. Provide outage data for vegetation-caused outages from 2014 to the present.
- b. Has FPL implemented a hazard tree program, and is the cost of this program imbedded in the vegetation management program?
 - i. Provide separate costs for the hazard tree program.

RESPONSE:

- a. Please see reliability metrics related to vegetation caused outages for FPL and Gulf.

FPL	2014	2015	2016	2017	2018	2019	2020	2021
SAIDI	12.9	12.8	10.5	9.9	8.2	8.9	9.4	8.6
SAIFI	0.12	0.13	0.09	0.10	0.08	0.08	0.08	0.07

Gulf	2014	2015	2016	2017	2018	2019	2020	2021
SAIDI	12.2	19.0	16.0	30.5	17.1	14.1	12.5	8.1
SAIFI	0.12	0.16	0.16	0.23	0.21	0.19	0.17	0.13

- b. FPL has a hazard tree program as a part of the Transmission Vegetation Management program.
 - i. FPL does not have costs separated out for the hazard tree program.

QUESTION:

Vegetation Management Program

- a. Other vegetation management costs may include hot spot trimming, and other trimming and clearing required from storm damage. Are these vegetation management costs contained in FPL's SPP?
 - i. If so, provide separate estimate information for these activities.
 - ii. If not, describe safeguards to prevent vegetation management costs from being captured in both rate base O&M charges and SPPCRC charges.
- b. Describe FPL's vegetation management protocol regarding the following:
 - i. Removal of overhanging tree limbs.
 - ii. Use of growth retardants.
 - iii. Management of vines on poles.
- c. Describe any cost sharing between FPL and joint use communication attachées regarding vegetation management.
- d. Does FPL trim service drops to homes? i. If so, what is the clearance distance used for overhead services?
- e. Does FPL trim for triplex secondary cables between poles?
 - i. If so, what is the clearance distance used for overhead secondary?
- f. Historically, for the last 3 three years, how many miles of three-phase mainline are trimmed each year and at what cost?
- g. Historically, for the last 3 years, how many miles of laterals are trimmed and at what cost?

RESPONSE:

- a. No. Vegetation costs associated with storm damage is not included with the SPP.
 - i. Not applicable.

- ii. Per the 2021 rate case settlement, all O&M vegetation costs are now contained within the SPPCRC and are not in base O&M. Furthermore, vegetation cost associated with storm damage will be recovered through the storm reserve. All non-storm O&M vegetation costs are assigned to SPPCRC through a unique business area in SAP, and all storm damage costs are assigned to a separate storm account.
- b. FPL emphasizes that clearance is not a pre-determined distance from a conductor. Inspection of each individual tree/vegetation will dictate, after thorough examination by the vendor of its form, growth rate and proximity to facilities, where pruning cuts will be made by the vendor to comply with the A-300 standards. The suggested ranges set forth below are not intended to be one-size-fits-all. In the judgment of the vendor, some species may allow A-300 standards to be met with less than 8 feet of clearance, while other species may require more than 12 feet of clearance to provide safety and reliability on primary lines. The following guidelines are general trim clearances for overhead distribution voltages, that apply to overhang, which are to be established at the time of vendor trimming:

Multi-phase Primary: A minimum of 15 feet of clear airspace shall be obtained above the highest primary conductor.

Single-phase Primary: A minimum of 15 ft clear airspace shall be obtained above primary.

Exceptions to the above specifications include:

- Remove all dead, dying, or damaged limbs above the minimum clear airspace that will effect reliability or cause damage to the conductor if they fall.
 - Species with known weak-wooded characteristics presenting in a size that in the judgment of the trimmer will result in damage to the conductor if the vegetation will fall.
 - Areas may require exceptions below the minimum airspace set forth above, such as canopy roads or specimen trees, if the customer is advised and accepts the exception.
 - Trees characterized as stable species with well-established healthy leads or branches above the primary at a distance that does not present a risk to safety, and reliability of the conductor within the minimum clear airspace. In such cases, the vendor should clear as much as possible without compromising the solid lead.
- c. None, there are no cost sharing between FPL and joint use communication attachers regarding overhead services.

- d. Typically, FPL will coordinate a service disconnection / reconnection with a customer for the customer to hire a qualified line clearing professional to maintain their trees. From time-to-time FPL will trim trees around a customer's service drop for safety and reliability. When service drops to homes are cleared, the distance obtained is generally between 2-4 feet.
- e. FPL does not trim for triplex secondary cables between poles as a part of the FPL's Vegetation Management cycle. When trimmed as a reactive measure, FPL obtains clearance distance of 2-6 feet for overhead secondary at the time of trim.
- f. Please see table below. The information is also provided in as part of the Initiative No. 1- Vegetation Management Cycle in FPL's Annual Storm Protection Plan report.

	2019	2020	2021
Feeder Miles	11,454	12,270	12,463
Lateral Miles	3,822	2,999	2,933
Cost (\$ million)	\$60.4	\$60.7	\$62.63

- g. Please see FPL's response to subpart (f) of this response.

QUESTION:

Regarding the Vegetation Management Program,

- a. Provide the annual cost for the Right Tree Right Place program for the last three years.
- b. List the employees engaged in the Right Tree Right Place program by job title or function and the total number of employees engaged.
- c. How do the employees engaged on the Right Tree Right Place program separate their time and expenses from other work not included in FPL's SPP?

RESPONSE:

- a. FPL's Right Tree Right Place (RTRP) program is not a separately budgeted program. It is a partnership between FPL and its customers.
- b. All vegetation management employees are engaged with the RTRP program. There is no job title or job function specifically related to the RTRP program.
- c. There is no specific funding for RTRP initiative. This initiative is more designed as a part of customer messaging and interactions. Costs for marketing materials for the RTRP are not included in the SPPCRC.

QUESTION:

Regarding Transmission Vegetation Management

- a. How many miles of transmission right-of-way require bush hogging or other similar mowing techniques?
- b. Does FPL use growth inhibitors with its right-of-way clearing?
- c. How many miles of transmission line are trimmed each year?
- d. Describe how "other vegetation management costs" (see FPL's SPP, p. 44 of 63), such as removals, debris cleanup, etc. are captured in FPL's SPP or in base rates.
- e. Provide the annual costs for "other vegetation management costs" for the last three years.
- f. Describe the budgets for "other vegetation management costs" for the first three years of the SPP.
- g. Is the Right Tree Right Place program part of "other vegetation management costs"?
 - i. If not, how are these costs captured?

RESPONSE:

- a. Approximately 11,000 miles require mowing annually.
- b. FPL does not use growth inhibitors with its right of way clearing.
- c. FPL maintains 100% of the transmission lines each year and performs additional maintenance on a prescribed basis.
- d. The "other vegetation management costs" as described in FPL's 2023-2032 SPP are recovered through the SPPCRC.
- e. Please see table below for "other vegetation management costs" for the FPL's Transmission Vegetation Management program

Actuals \$	Actual	Actual	Actual
Other Vegetation Management Cost	\$1.2M	\$1.0M	\$0.9M

- f. As described in Section IV(G)(3) of FPL's 2023-2032 SPP, other vegetation management costs include costs associated with day-to-day restoration activities (e.g., summer afternoon thunderstorms), removals, debris cleanup, and support (e.g., arborists, supervision, back-office support). Costs associated with vegetation management are generally operating expenses. For the budgets for the first three years of the SPP, please refer to the subpart (e) of this response.
- g. Please see FPL's response to OPC's 4th Set of Interrogatories No. 34 (a).

QUESTION:

Explain in detail the decision to build the St. Augustine Substation and South Daytona Substation in areas subject to flooding and storm surges.

- a. Was FPL the sole party responsible for selecting the sites for these substations?

RESPONSE:

St. Augustine Substation and South Daytona Substation were built in 1927 and 1960, respectively. These stations were built prior to the existence of flood maps which were first issued in 1973.

- a. To the best of our knowledge, FPL management at the time (95 years ago for St. Augustine and 62 years ago for South Daytona Substations) was responsible for selecting the sites for these substations.

QUESTION:

For each substation that FPL stated must have flood mitigation improvements, answer the following:

- a. State whether FPL had the sole discretion to purchase the land for use as a substation.
- b. Identify any documents that show the land for each substation was not subject to flooding at the time the decision was made to build or upgrade the existing stations.

RESPONSE:

- a. To the best of our knowledge, FPL management had the sole discretion to purchase the land for use as a substation with the exception of Gracewood and Chambers substations. Gracewood and Chambers were acquired in 2018 when FPL purchased the City of Vero Beach's electric facilities.
- b. Please see table below.

Substation	Year Built	Major Upgrades¹	Description
St. Augustine	1927	1969	Station was built prior to the existence of flood maps which were first issued in 1973
Opa Locka	1941	N/A	Station was built prior to the existence of flood maps which were first issued in 1973
South Daytona	1960	N/A	Station was built prior to the existence of flood maps which were first issued in 1973
Lewis	1972	N/A	Station was built prior to the existence of flood maps which were first issued in 1973
Aventura	1974	N/A	To the best of our knowledge station was built to FPL criteria at the time and local building code as applicable
Pine Ridge	1977	N/A	To the best of our knowledge station was built to FPL criteria at the time and the local building code as applicable
Dumfoundling	1982	N/A	To the best of our knowledge station was built to FPL criteria at the time and the local building code as applicable
Corkscrew	2002	N/A	To the best of our knowledge station was built to ASCE 24-98 Flood Resistant Design and Construction, FPL Criteria (100-year, 3-day event flooding less than Relay Vault floor), and the local building code as applicable

Chambers	1973	N/A	Substation purchased from the City of Vero Beach in 2018
Gracewood	1978	N/A	Substation purchased from the City of Vero Beach in 2018

¹Major Upgrades defined as voltage conversion or ampacity upgrade where the majority of the station equipment was replaced in one year

QUESTION:

For the Substation Storm Surge/Flood Mitigation Program,

- a. Provide the estimated reduction in cost for storm restoration. If no estimate has been made, state such.
- b. State whether this program was in place at the time of FPL's 3rd Supplemental Amended Response to Staff's 1st Data Request No. 29 contained in Appendix A for FPL's 2023 SPP.
- c. Provide any cost benefit analysis prepared by FPL for this program.

RESPONSE:

- a. FPL has not conducted an analysis of cost savings for the mitigation of flooding for these projects in the Substation Storm Surge/Flood Mitigation Program. FPL notes that substations are a critical link between power plants (source of power) and the customer. An outage associated with distribution substations can impact up to several thousands of customers, and an outage associated with a transmission substation can result in an outage affecting tens of thousands of customers. Flooding and the need to proactively de-energize substations located in areas susceptible to storm surge and flooding can result in significant customer outages. The mitigation of damage and rapid restoration of the substation is critical to FPL being able to restore service to customers.
- b. No. FPL's Substation Storm Surge/Flood Mitigation program was included in FPL's 2020-2029 Storm Protection Plan (Docket No. 20200071-EI) filed on April 10, 2020 and included in the 2020 SPP Settlement approved by Commission Order No. PSC-2020-0293-AS-EI. As explained in FPL's 2023-2032 Storm Protection Plan filed on April 11, 2022 (Docket No. 20220051-EI), the program is intended "To prevent/mitigate future substation equipment damage and customer outages due to storm surge and flooding, FPL's Substation Storm Surge/Flood Mitigation Program has identified certain substations located in areas throughout FPL's service area that are susceptible to storm surge or flooding during extreme weather events."
- c. FPL did not perform a traditional cost/benefit analysis for each major component of FPL's SPP because it is not required by Rule 25-6.030 F.A.C., or Section 366.96, F.S. Rather, Rule 25-6.030(3)(d)(4), F.A.C., requires the SPP to include a comparison of the estimated costs and estimated benefits for each SPP program, which is included in Section IV(H)(4) of FPL's 2023-2032 Storm Protection Plan filed on April 11, 2022 (Docket No. 20220051-EI).

QUESTION:

For the last 10 years, for each substation slated for modification by the Substation Storm Surge/Flood Mitigation Program, state the following:

- a. Provide the dates each of the substations had to be de-energized due to high water.
- b. For each date of de-energization, provide the duration that the substation was de-energized.
- c. Provide the number of customers served by each substation at the time of de-energization.

RESPONSE:

- a. Dates and durations when the substations were de-energized are as follows.
 - 10/7/2016 at 12:53pm – St. Augustine Substation de-energized for 25.7 hours
 - 9/11/2017 at 1:08am – St. Augustine Substation de-energized for 7.8 hours
 - 9/11/2017 at 2:02am – South Daytona Substation de-energized for 4.9 hours
- b. Please see subpart (a) of this response.
- c. Number of customer accounts at the time of de-energization are included below. These customer accounts refers to residential, commercial, and/or industrial accounts. Furthermore, critical infrastructure facilities (CIF) customers (i.e., medical facilities, 911 centers, water treatment plant) are also served by these substations.
 - St. Augustine customer accounts in 2016 - 6,558
 - St. Augustine customer accounts in 2017 – 6,574
 - South Daytona customer accounts in 2017 – 11,054

QUESTION:

Transmission Access Enhancement Program

- a. Describe how vegetation management is conducted in areas without access roads, bridges and/or culverts.
- b. Identify and describe any studies or analysis by FPL to purchase the necessary equipment to access the areas in question rather building bridges and roads.
- c. What is the cost for track vehicles necessary to work in rugged transmission right of ways?
- d. What is the cost for large tire vehicles to work in rugged transmission right of ways?
- e. What is the cost for floating equipment necessary for restoring power in rugged transmission right of ways?
- f. What is the cost for setting poles using helicopters if roads are not available?
- g. For the roads in the transmission right of way, who has responsibility to maintain the roads?
 - i. Why has FPL not maintained the roads that were originally installed to build the transmission line that now need a road to access improvements?
 - ii. Provide FPL's actual cost for transmission access maintenance for each of the last 10 years.
 - iii. Provide Gulf Power's actual cost for transmission access maintenance for each of the last 10 years.
- h. Provide and explain your analysis of cost savings for extreme weather event restoration assuming improved access to transmission rights-of-way.
- i. Provide an analysis of restoration cost savings for the application of the proposed program.
- j. Provide an analysis of costs and benefits for this program.
- k. Identify the location(s) for proposed access road improvements.

RESPONSE:

- a. Vegetation management is scheduled and conducted during drier times of the year in transmission rights of ways without access or limited access roads, bridges and/or culverts. The peak of the Atlantic Hurricane Season coincides with Florida's wet season (when increased rainfall will exacerbate the inaccessibility of many of these low-lying and wetland areas) and are frequently exacerbated by rainfall associated with an extreme weather event(s). Vegetation management is conducted from a starting ingress point into the transmission right of way and continues until completion or until reaching a point without further access. If there is no further access, vegetation management then egresses the transmission right of way, goes to a different entry point and repeats the process. Vegetation management leverages specialty equipment including matting, track equipment, floating equipment and heavy pulling equipment for assisting accessing into transmission rights of way areas.
- b. FPL has purchased tracked transmission crane and a tracked transmission bucket truck. However, FPL has not performed studies or analysis about purchasing additional equipment necessary to access the areas in question rather than building bridges and access roads. FPL service area encompasses 43 counties over 35,550 square miles. Please refer to FPL's 2023-2032 Storm Protection Plan filed on April 11, 2022 (Docket No. 20220051-EI), Section IV(K). Specialized equipment may have limited availability during storm events and external resources may not be able to utilize them, resulting in potential delays to restoration of transmission structures and equipment.
- c. Actual cost for rental of track equipment necessary for working in rugged transmission right of ways will vary depending on factors including, but not limited to: availability and location of equipment at the time of need but in general the below table shows the approximately hourly rates of track equipment necessary for rugged transmission rights of ways:

Equipment	Approximate Hourly Equipment Rental Rate ⁽¹⁾
Transmission Track Bucket Truck	\$200
Transmission Track Pressure Digger	\$140
Track Crane	\$150
Dozer	\$160

¹Approximate hourly rental rate includes cost of trailer for transporting track equipment

- d. FPL has not been able to identify large tire vehicles on the market capable of working in rugged transmission right of ways while meeting the necessary technical specifications (e.g., loading and reach) to perform the transmission job. FPL has looked into large tire equipment used in other industries, but has not been able to meet the previously discussed technical specifications. As a result, FPL does not have the cost of large tire equipment capable of working rugged transmission right of ways.

- e. FPL leverages floating equipment, such as barges, for transmission circuits crossing river. These rights of ways are different working conditions than transmission right of ways that require access enhancement. As a result, FPL does not have the cost for floating equipment capable of working rugged transmission right of ways.
- f. FPL has not recently utilized helicopters to set poles in transmission right of ways. As a result, FPL does not have the cost for using helicopters for digging holes or setting transmission poles if roads are not available.
- g. FPL is responsible for maintaining bridge, culvert and road facilities it owns within a transmission right of way.
 - i. FPL continues to maintain existing access roads for transmission structures. As explained in FPL's 2023-2032 Storm Protection Plan filed on April 11, 2022 (Docket No. 20220051-EI), Section IV(K), the "Transmission Access Enhancement Program is designed to ensure that the company has access to its transmission facilities for restoration activities following an extreme weather event." However, several transmission lines leveraged roadless construction methods when originally built.
 - ii. FPL has actual cost for transmission access for the 7 years. Please find summarized below the actual cost for transmission access from 2015-2021

2015	2016	2017	2018	2019	2020	2021
\$240,397	\$258,034	\$572	\$18,499	\$334,198	\$143,235	\$240,397

- iii. The majority of transmission right of ways in the Gulf Power Area were originally developed with a roadless construction methods and do not have access roads. As a result, the cost for Gulf Power is \$0 during this timeframe.
- h. FPL did not perform a traditional cost/benefit analysis for the Transmission Access Enhancement Program of FPL's SPP because it is not required by Rule 25-6.030 F.A.C., or Section 366.96, F.S. Rather, Rule 25-6.030(3)(d)(4), F.A.C., requires the SPP to include a comparison of the estimated costs and estimated benefits for each SPP program, which is included in Section IV(K) of FPL's 2023-2032 Storm Protection Plan Filed on April 11, 2022 (Docket No. 20220051-EI).
 - i. Please refer subpart (h) of this response.
 - j. Please refer to subpart (h) of this response.

- k. The following locations are proposed for transmission access enhancements currently estimated to start in 2023:

County	Transmission Right of Way
Clay	DUVAL-SPRINGBANK
Flagler	FLAGLER BEACH-KORONA
Brevard	FLORATAM-NORRIS
Palm Beach	GOLF SUBSTATION
Broward	STIRLING-PLAYLAND
Homestead	FARMLIFE-MCGREGOR
Columbia	RAVEN-SIANI

QUESTION:

Regarding FPL's SPP, Appendix E: FPL 2023 Project Level Detail, Distribution Lateral Hardening Program-Capital Expenditures, provide the requested information for the following feeders: Scottsmoor 105061; Hillsboro 404732; Loxahatchee 407666; Imagination 704264; Cutler 802037.

- a. For each feeder listed above, provide information consistent with the selection criteria noted on page 35 of 63 FPL's SPP.
 - i. Provide outage data for each feeder during Hurricanes Matthew, Irma, and Michael.
 - ii. Provide outage data for each lateral on each feeder during the recent Hurricanes Matthew, Irma, and Michael (indicate lateral identification on maps).
 - iii. Total number of lateral outages experienced over the most recent 10 years.
 - iv. Total number of customers on each lateral.
 - v. Total number of transformer outages experienced over the most recent 10 years.
 - vi. Number of vegetation-related outages experienced over the most recent 10 years.

RESPONSE:

Please see Attachment 1 to this response.

QUESTION:

For the last 10 years, for each substation slated for modification by the substation flood mitigation program, list the following:

- a. Provide the dates each of the substation had to be de-energized due to high water.
- b. For each date of de-energization, provide the duration that the substation was de-energized.
- c. Provide the number of customers served by each substation at the time of de-energization.
- d. Describe the elevation of the substation and FPL's projected elevation of the flood water

RESPONSE:

- a. Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 39.
- b. Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 39.
- c. Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 39.
- d. Please see table below.

Sites	Existing Average Grade	2022 Elevation of Flood Protection	Expected Flood Elevation
St. Augustine	4.5 ft	10.0 ft	8-9 ft
Opa Locka	Approx. 9 ft	N/A-- Drainage Improvements ~11 ft	10 ft-- post improvements
S. Daytona	5.4 ft	10 ft	7.8 ft
Lewis	6.4 ft	11.4 ft	8 ft
Aventura	4 ft	N/A--Drainage Improvements 4.4 ft	4.4 ft -- post improvements
Pine Ridge	9.2 ft	11.2 ft	11.2 ft
Dumfoundling	4.4 ft	9 ft	6.4 ft

Florida Power & Light Company

Docket No. 20220051-EI

OPC's Fourth Set of Interrogatories

Interrogatory No. 50

Page 2 of 2

Corkscrew	19.18 ft	22.5 ft	20 ft
Chambers	Approx. 6 ft	10.5 ft	7.9 ft
Gracewood	Approx. 5 ft	10 ft	7.1 ft

QUESTION:

In preparing your SPP, what measures have you implemented, or do you intend to implement, in order to drive efficiencies in the costs to be incurred under the SPPCRC?

RESPONSE:

The programs in FPL's 2023-2032 Storm Protection Plan ("SPP") benefits customers, as they will result in reduced time of restoration and cost during extreme weather events. As part of its storm hardening efforts, FPL has a history, continues to, and seeks to continue to implement program efficiencies.

FPL ranks best-in-class among all major U.S. utilities based on its low operating and maintenance (O&M) costs per kWh of retail sales. FPL's innovative and relentless day-to-day focus on driving costs out of the business saves customers compared to an average performing utility

As explained in FPL's 2020-2029 SPP and continued in the 2023-2032 SPP, Section IV(D)(4), the Distribution Lateral Hardening Program's implementation of the feeder approach will maximize the efficiency of crews by completing the hardening work along a single feeder before moving the crews and equipment to another job site. Additionally, FPL's additional selection methodology of prioritizing specific Management Regions in 2025 is intended to further improve efficiency by specifically targeting areas that present the highest risk of hurricane impacts. Lastly, Section IV(D)(1)(a), details the lessons learned from the pilot and examples of efficiency in the implementation of current/future projects.

As explained in FPL's 2023-2032 SPP, Section IV(F)(1)(b), the Distribution Vegetation Management Program will use advance analytics from a variety of sources to develop predictive analytics that may be used to complement FPL's vegetation maintenance cycles on feeders. The use of advance predictive analytics has the potential benefit of further reducing vegetation-related outages during extreme weather events.

As explained in FPL's 2023-2032 SPP, Section IV(A)(1)(a), the Distribution Inspection Program petitioned and received approval from the Commission (Order No. PSC-14-0594-PAA-EI) to exempt certain poles from the loading assessment during the next eight year cycle that had less than 80% of full load. Furthermore, Chromium Copper Arsenate ("CCA") poles will only be excavated if they are older than 28 years.

While not the only factor in designing a project, efficiencies are a consideration in the engineering process. For example, in the Distribution Feeder Hardening Program, FPL utilizes multiple options to harden feeders, including:

- Installing stronger poles
- Installing intermediate poles and shortening spans
- Employing additional storm guying and bracing
- Installing different framing configurations and replacing insulators for improved lightning protection
- Undergrounding sections of the feeder for crossing across limited access right of ways (i.e., interstate highways, turnpikes, expressways)

These options are not mutually exclusive. Design recommendations take into consideration issues such as hardening, mitigation (minimizing damage), and restoration (improving the efficiency of restoration in the event of failure). Since multiple factors can contribute to losing power after a storm, utilizing this multi-faceted approach helps to reduce the amount of work required to restore power to a damaged circuit.

Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 28(f), which describes requirements of the agency having jurisdiction will sometimes allow bundling of work permit as part of the feeder approach to the Distribution Lateral Hardening Program.

Please refer to FPL's response to OPC's 4th Set of Interrogatories, No. 28(d) which describe the design and engineering benefits of undergrounding multiple circuits at once as part of the feeder approach to the Distribution Lateral Hardening Program.

QUESTION:

Describe how the O&M efficiency measures you announced or discussed in public or private to investors or to analysts apply to O&M expenditures that you intend expect to make under the SPP. Please identify the documents describing such measures and explaining how they apply to SPP programs and projects.

RESPONSE:

FPL has a rigorous and long-standing company-wide O&M efficiency process specifically focused on driving costs out of the business, and generating, improving, and evaluating productivity and efficiency through the implementation of new technologies and automation of manual processes. This applies to all Company O&M processes and expenditures, including SPP programs and projects. Please see Attachment 1 to this response, which includes slides from FPL's June 2019 presentation to investors. Please also see Attachment 2 to this response which includes the transcript of FPL's First Quarter 2022 Earnings Conference Call, during which FPL detailed its company-wide O&M efficiency measures. Refer to paragraph 2 of page 16. Additionally, please see FPL's response to OPC's Third Set of Interrogatories No. 16.

Due in part to FPL's company-wide O&M efficiency measures, FPL's actual 2020 typical 1,000 kWh customer bill was 30% lower than the national average, while FPL's SAIDI (system average interruption index) was 62% better than the national average, as shown in Attachment 3, which includes part of FPL's presentation at the November 2021 Edison Electric Institute (EEI) Conference.

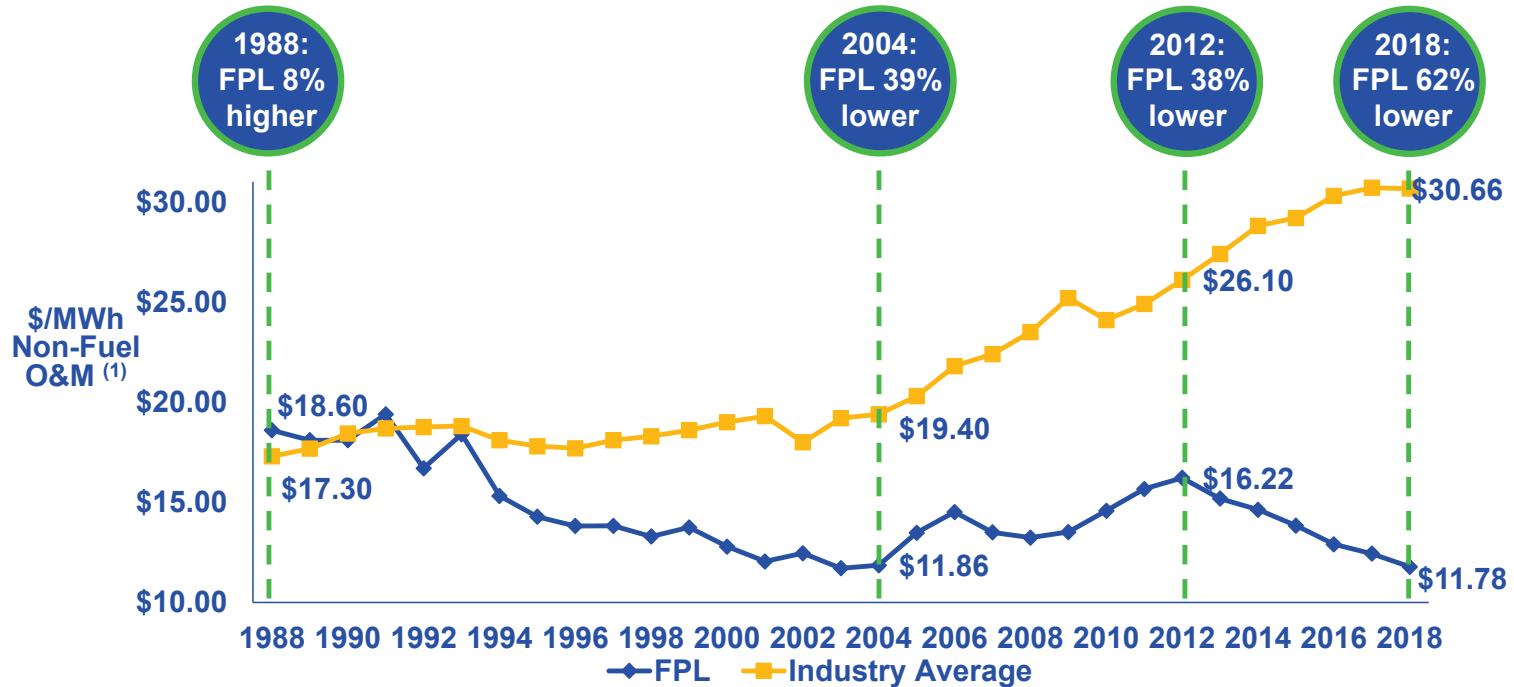


INVESTOR CONFERENCE **2019**



Through our idea-driven culture, FPL is improving productivity in real terms

A 30-year Evolution of FPL Operational Excellence



FPL is 3x more efficient on a customer per employee basis than it was in 1988



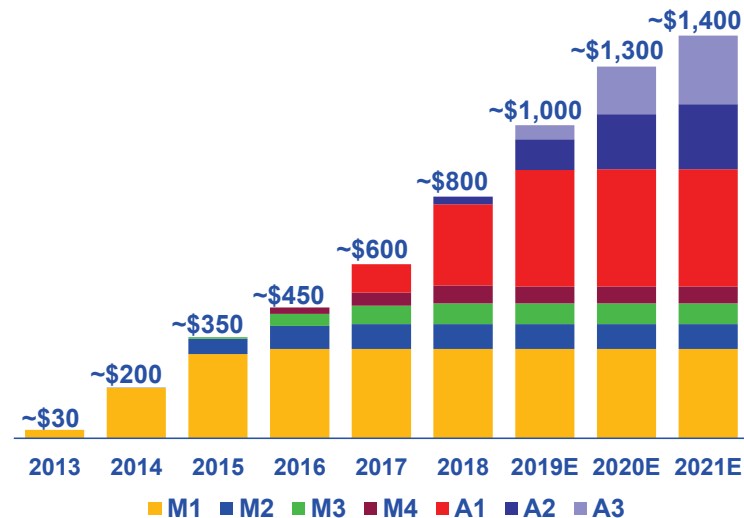
NextEra Energy's better O&M productivity since 2012 is largely the result of Project Momentum and Project Accelerate

Momentum and Accelerate Summary

Annual Run Rate Savings

(\$ MM)

- Annual bottoms-up, employee-generated idea process for reducing costs and increasing revenues
- Over the course of 2013 to 2019:
 - 18,000+ ideas submitted
 - 11,000+ ideas evaluated
 - ~5,600 ideas approved and implemented



Projects Momentum & Accelerate are comprehensive, multi-year efforts to maintain our strong cost position across all businesses

(1) FIRST QUARTER 2022 EARNINGS CONFERENCE CALL

Jessica Geoffroy:

Thank you, _____.

Good morning everyone, and thank you for joining our first quarter 2022 combined earnings conference call for NextEra Energy and NextEra Energy Partners.

With me this morning are John Ketchum, President and Chief Executive Officer of NextEra Energy, Kirk Crews, Executive Vice President and Chief Financial Officer of NextEra Energy, Rebecca Kujawa, President and Chief Executive Officer of NextEra Energy Resources, and Mark Hickson, Executive Vice President of NextEra Energy, all of whom are also officers of NextEra Energy Partners, as well as Eric Silagy, Chairman, President and Chief Executive Officer of Florida Power & Light Company.

Kirk will provide an overview of our results and our executive team will then be available to answer your questions.

(2) SAFE HARBOR STATEMENT AND NON-GAAP FINANCIAL INFORMATION

We will be making forward-looking statements during this call based on current expectations and assumptions which are subject to risks and uncertainties. Actual results could differ materially from our forward-looking statements if any of our key assumptions are incorrect or because of other

factors discussed in today's earnings news release, in the comments made during this conference call, in the risk factors section of the accompanying presentation, or in our latest reports and filings with the Securities and Exchange Commission, each of which can be found on our websites www.NextEraEnergy.com and www.NextEraEnergyPartners.com. We do not undertake any duty to update any forward-looking statements.

Today's presentation also includes references to non-GAAP financial measures. You should refer to the information contained in the slides accompanying today's presentation for definitional information and reconciliations of historical non-GAAP measures to the closest GAAP financial measure. As a reminder, Florida Power & Light completed the regulatory integration of Gulf Power under its 2021 base rate settlement agreement and began serving customers under unified rates on January 1, 2022. As a result, Gulf Power will no longer continue as a separate reporting segment within Florida Power & Light and NextEra Energy. For 2022 and beyond, FPL has one reporting segment and therefore 2021 financial results and other operational metrics have been restated for comparative purposes.

With that, I will turn the call over to Kirk.

Kirk Crews:

(3) NEXTERA ENERGY OPENING REMARKS

Thank you, Jessica, and good morning everyone.

NextEra Energy delivered strong first quarter results and is off to a solid start to meet its overall objectives for the year. Adjusted earnings per share increased by 10.4% year-over-year, reflecting successful performance across all of our underlying businesses. During the quarter, we were honored that NextEra Energy was again ranked No. 1 in its sector on Fortune magazine's "World's Most Admired Companies" list for the 15th time in 16 years. Our culture of commitment to excellence in everything we do and our core values are what allow our team of approximately 15,000 employees to continue delivering best-in-class value to our customers and shareholders while helping build a sustainable energy era that is affordable and clean.

FPL increased net income by approximately \$98 million from the prior-year comparable period which was driven by continued investment in the business for the benefit of our customers. During the quarter, FPL successfully placed in service approximately 450 megawatts of additional cost-effective solar projects that are recovered through base rates as part of its new four-year settlement agreement, which as a reminder became

effective on January 1st of this year. As a result, FPL has now completed, on time and within budget, all of its planned solar build with 2022 in-service dates. FPL now owns and operates more than 3,600 megawatts of solar, which is the largest solar portfolio of any utility in the country. FPL's modernization investments since 2001 have saved customers more than \$12 billion in fuel costs, and its customers have benefitted from a 45% improvement in reliability over the last decade. FPL's other major capital investments are progressing well, including the North Florida Resiliency Connection and the highly efficient approximately 1,200-megawatt Dania Beach Clean Energy Center, both of which are scheduled for completion later this year. By executing on smart capital investments such as these and running the business efficiently, FPL continues to deliver its best-in-class customer value proposition of clean energy, low bills, high reliability and outstanding customer service.

At Energy Resources, adjusted earnings per share increased by nearly 7% year-over-year, primarily driven by favorable performance in our existing wind portfolio. In terms of new origination, Energy Resources had another strong quarter of renewables and storage origination, adding approximately 1,770 net megawatts to our backlog since the last call bringing our backlog to approximately 17,700 megawatts. Included in these

additions is approximately 1,200 net megawatts of wind projects, which is the second largest quarter of wind origination in our history. In the midst of inflationary pressures and uncertainty in the solar supply chain, which I will discuss further in a few moments, our continued origination success in this environment is a testament to the strength of Energy Resources' competitive advantages and the ongoing demand from our customers for low-cost renewables and storage.

At this early point in the year, we are very pleased with our team's execution and progress at both FPL and Energy Resources.

(4) FPL – FIRST QUARTER 2022 RESULTS

Now let's look at the detailed results, beginning with FPL.

For the first quarter of 2022, FPL reported net income of \$875 million, or 44 cents per share, an increase of 5 cents year-over-year.

(5) FPL – FIRST QUARTER 2022 DRIVERS

Regulatory capital employed growth of approximately 11.3% was a significant driver of FPL's EPS growth versus the prior-year comparable quarter. FPL's capital expenditures were approximately \$2.2 billion for the quarter. We expect our full-year 2022 capital investments at FPL to be between \$7.9 billion and \$8.3 billion.

FPL's reported ROE for regulatory purposes will be approximately 11.6% for the 12 months ending March 2022. Under our rate agreement, we record reserve amortization entries to achieve a predetermined regulatory ROE for each trailing twelve-month period – in this case the 11.6% that I previously mentioned. While we initially expected to earn below our targeted ROE in the early part of 2022, a combination of warm weather, operational efficiencies and outstanding execution by the team resulted in us achieving our targeted 11.6% ROE while using \$124 million of reserve amortization available under our current settlement agreement during the first quarter.

(6) FPL DEVELOPMENT HIGHLIGHTS

Turning to our development and planning efforts, FPL recently filed its annual Ten-Year Site Plan that presents our recommended generation resource plan through 2031. The recommended Ten-Year Site Plan includes roughly 9,500 megawatts of new solar capacity across our service territory over the next ten years, which would result in nearly 20% of FPL's forecasted energy delivery in 2031 coming from solar generation. This planned solar buildout includes nearly 1,200 megawatts of base rate solar projects, inclusive of the approximately 450 megawatts placed in service during the first quarter, that we plan to build over the next two years. In

addition, it includes approximately 1,800 megawatts under the SoBRA mechanism of our settlement agreement, approximately 1,800 megawatts of SolarTogether community solar projects that we expect to construct over the next four years, as well as roughly 4,700 megawatts of additional solar after 2025 that is subject to approval by the Florida Public Service Commission. FPL continues to deliver what is one of the largest-ever solar expansions in the U.S.

Compared to current levels, the recommended plan projects an approximately 65% increase in zero-carbon-emissions electricity produced by the FPL system over the next decade, largely as a result of FPL's continued rapid expansion of solar energy through the execution of its "30-by-30" plan, which we now expect to complete by 2025, and the solar additions that I previously mentioned. This projected increase in zero-carbon-emissions generation is significant for a utility system of our size, especially when considering that our total amount of energy delivered in 2031 is expected to be nearly 10 percentage points higher through customer growth and increased adoption of electric vehicles.

Our green hydrogen pilot program plans are also reiterated in the site plan. As we've previously discussed, we intend to build an approximately 25-megawatt electrolysis system at our Okeechobee Clean Energy Center

that will be powered entirely by solar energy from a nearby site. The pilot is designed to test, in practice, the concept of replacing natural gas with green hydrogen as fuel for combined cycle unit use. The pilot project is expected to guide the way for future use of hydrogen as a fuel source across FPL's fleet of highly efficient combined cycle units, thus lowering or eliminating carbon emissions from FPL's fleet in the future. This pilot project is projected to go into service in late 2023.

Notably, our as-filed Ten-Year Site Plan recommends a total expected deployment of approximately 3,200 megawatts of new battery storage capacity by 2031. Included in this total is approximately 1,400 megawatts of incremental battery storage to enhance readiness and reliability for our customers during potential extreme weather events. We also plan to make other smart capital investments for winterization efforts designed to support potential increased customer load during extreme winter temperature conditions, while also providing additional day-to-day reliability benefits for customers. A hallmark of our culture is taking every opportunity to learn from events that happen in our industry, not just those that directly affect FPL, to ensure we continue to deliver the best possible value to our customers. Our planned, targeted investments for winterization

were identified as a result of our detailed assessment of our fleet following Winter Storm Uri last year that affected Texas and much of the south.

We will provide additional detail on these programs and our other capital initiatives at our June investor conference.

(7) FPL – FLORIDA ECONOMY & CUSTOMER CHARACTERISTICS

The Florida economy remains healthy and Florida's population continues to grow at one of the fastest rates in the U.S.

Florida's job market continues to show healthy results, with more than 700,000 new private sector jobs added over the last year, and Florida's labor force participation rate is up nearly 2% year-over-year. Other positive economic data across the state include the continued strength of Florida's real estate market, with the three-month moving average for new housing permits up nearly 20% year-over-year.

FPL's average number of customers increased by more than 91,000, or 1.6%, versus the comparable prior-year quarter, driven by continued solid underlying population growth.

FPL's first quarter retail sales increased 2.6% from the prior-year comparable period, and we estimate that approximately 0.7% of this increase can be attributed to weather-related usage per customer. On a

weather-normalized basis, first quarter retail sales increased 1.9%, with strong continued customer growth contributing favorably.

(8) ENERGY RESOURCES – FIRST QUARTER 2022 RESULTS

Energy Resources reported a first quarter 2022 GAAP loss of approximately \$1.5 billion, or 76 cents per share. Adjusted earnings for the first quarter were \$628 million, or 32 cents per share, up 2 cents versus the prior-year comparable period. The effect of the mark-to-market on non-qualifying hedges, which is excluded from adjusted earnings, was the primary driver of the difference between Energy Resources' first quarter GAAP and adjusted earnings results. As a reminder, this quarter's GAAP results were also impacted by the write-off of our remaining investment in Mountain Valley Pipeline, which we have excluded from adjusted earnings.

(9) ENERGY RESOURCES—ADJUSTED EPS CONTRIBUTION DRIVERS

Contributions from new investments were roughly flat year-over-year, while our existing generation and storage assets added 5 cents per share due to favorable wind resource and the absence of Winter Storm Uri impacts. The contribution from our customer supply and trading business decreased by 2 cents per share and NextEra Energy Transmission increased results by 1 cent per share year-over-year. The comparative

contribution from our gas infrastructure business decreased results by 2 cents per share following favorable performance in the first quarter of last year during Winter Storm Uri.

All other impacts were roughly flat versus 2021.

(10) ENERGY RESOURCES – DEVELOPMENT HIGHLIGHTS

As I mentioned earlier, Energy Resources had another strong quarter of origination, which is reflective of our ability to continue leveraging our competitive advantages to deliver clean energy solutions to meet the ongoing market demand for renewables. Since the last call, we added approximately 1,200 net megawatts of new wind projects for 2022, 2023 and 2024 commercial operations dates to our backlog. Our backlog additions also include approximately 440 megawatts of solar projects and approximately 130 megawatts of battery storage projects. With more than two and a half years remaining before the end of 2024, we have now signed more than 85 percent of the megawatts needed to realize the midpoint of our 2021 to 2024 development expectations range.

Earlier this month, the U.S. Department of Commerce initiated a review of an anti-dumping and countervailing duties circumvention claim on solar cells and panels supplied from four Southeast Asian countries, which in recent years sourced over 80% of all solar panel imports into the United

States. As we recently highlighted, we are disappointed by the Commerce Department's decision to conduct this investigation. We believe the Commerce Department already settled this issue when it concluded in 2012 that the process of converting solar wafers into electricity-producing solar cells is technologically sophisticated and the most capital intensive part of the solar panel manufacturing process, and when that occurs outside of China, the cells are not subject to the 2012 anti-dumping and countervailing duties applicable to Chinese solar cell imports. The Commerce Department's later rulings in 2014, 2020 and 2021 are consistent with this and have been relied upon by the solar industry as it continued to invest billions of dollars in new solar generating facilities in the United States over this period. In light of these four prior rulings, the reliance on them by the industry and the substantial, technologically-sophisticated processing that occurs in the Southeast Asian countries, we believe it will be difficult for the Commerce Department to conclude under its circumvention standards that circumvention of the 2012 tariffs is actually occurring.

If the Commerce Department were to find circumvention in the current investigation, we believe it would be unwinding a decade of consistent trade practice across the past three administrations, including

the current administration just last year. We believe such a decision would create significant price uncertainty as additional tariffs on panels from the four Southeast Asian countries would likely remain unknown until close to 2025, as final tariff amounts are not determined for about two years after the year of importation. This price uncertainty would likely result in the unintended consequence of U.S. solar panel supply once again being sourced significantly from China, because the tariffs applicable to imports from China are more certain based on 10 years of assessed duty history.

U.S. solar panel assemblers are, for the most part, sold out of solar panels through 2024 and, even at full capacity, are only capable of serving 10 to 20% of the U.S. solar panel demand in the first place. It should also be noted that nearly all of the large domestic solar panel assemblers in the U.S. do not support the efforts behind the circumvention claim or the Commerce Department's decision to investigate, as they also primarily rely on imported cells from Southeast Asia to produce their panels in the United States. And all of the uncertainty from the investigation is occurring at a time when natural gas, coal and oil prices have increased dramatically, leaving solar and storage as one of the few ways to alleviate inflationary pressures on electricity prices. For these reasons, among others, we are optimistic that the investigation will ultimately be resolved favorably and the

Commerce Department will conclude not to impose additional anti-dumping and countervailing duties on cells and panels sourced from these Southeast Asian countries.

We believe that NextEra Energy is as well positioned as any company in the industry to manage these issues. However, given that a number of suppliers are not expected to ship panels to the U.S. until the Commerce Department makes a preliminary determination as late as August, we continue to expect some of our solar and storage projects may be adversely impacted by this delay. We are working closely with our suppliers and customers to assess the potential impacts of this investigation and are optimistic about our ability to arrive at acceptable mitigation measures. Based on what we know today, we believe that approximately 2.1 to 2.8 gigawatts of our expected 2022 solar and storage build may shift from 2022 to 2023. Despite the delay, given our competitive advantages, including the strength of our supplier relationships and contracts, we remain comfortable with our current development expectations for wind, solar and storage which are to build roughly 23 to 30 gigawatts over the four-year period from 2021 through the end of 2024.

We run a diversified business at Energy Resources that includes multiple renewable energy technologies and provides a natural hedge

against temporary disruptions like the one our industry is currently experiencing. In fact, in light of the uncertainty in the solar supply chain, we believe renewable demand will likely temporarily shift in part from solar to wind, and we believe Energy Resources has terrific competitive advantages in wind development.

The accompanying slide provides additional details.

Finally, during the quarter NextEra Energy Transmission, along with its partners, completed the construction of the East-West Tie Transmission Line Project. The 450-kilometer, 230-kilovolt transmission line runs from Wawa to Thunder Bay, Ontario and is expected to address long-standing regional transmission constraints, thereby increasing much-needed access to energy to support new economic growth in the region for years to come.

(11) NEXTERA ENERGY – FIRST QUARTER 2022 RESULTS

Turning now to the consolidated results for NextEra Energy, for the first quarter of 2022, GAAP net losses attributable to NextEra Energy were \$451 million, or 23 cents per share. NextEra Energy's 2022 first quarter adjusted earnings and adjusted EPS were approximately \$1.46 billion and 74 cents per share, respectively. Adjusted earnings from the Corporate & Other segment were roughly flat year-over-year.

(12) NEXTERA ENERGY EXPECTATIONS

Our long-term financial expectations which we increased and extended earlier this year through 2025 remain unchanged. For 2022, NextEra Energy expects adjusted earnings per share to be in a range of \$2.75 to \$2.85. For 2023 through 2025, NextEra Energy expects to grow roughly 6 percent to 8 percent off the expected 2022 adjusted earnings per share range. NextEra Energy is in a strong position to meet its financial expectations through 2025, and we will be disappointed if we are not able to deliver financial results at or near the top end of our adjusted earnings expectations ranges in each of 2022, 2023, 2024 and 2025, while at the same time maintaining our strong balance sheet and credit ratings.

A big part of NextEra Energy's culture is a focus on continuous improvement and productivity. To that end, we are currently wrapping up our company-wide productivity initiative to reimagine everything that we do, which we call Project Velocity. Project Velocity built upon the success of Project Momentum and Project Accelerate, which were launched in 2013 and 2017, respectively. The employee-generated ideas implemented through Project Momentum and Project Accelerate are projected to deliver more than \$1.8 billion in average annual run-rate savings versus our cost projections just ten years ago. In fact, the ideas generated this year in

Project Velocity alone are expected to reach roughly \$400 million in additional run-rate efficiencies in the next few years, representing the largest identified O&M cost savings in the history of these programs. This result is another example of the strength of our culture and team and highlights our continued focus on productivity and our team's willingness to embrace innovation and leverage technology.

From 2021 to 2025, we also continue to expect that our average annual growth in operating cash flow will be at or above our adjusted EPS compound annual growth rate range. We also continue to expect to grow our dividends per share at roughly 10 percent per year through at least 2024, off a 2022 base. As always, our expectations assume normal weather and operating conditions.

(13) NEXTERA ENERGY PARTNERS – OPENING REMARKS

Let me now turn to NextEra Energy Partners, which delivered solid first quarter results, with year-over-year growth in adjusted EBITDA of more than 16% driven primarily by contributions from the approximately 2,400 net megawatts of renewables and storage added during 2021. Yesterday, the NEP Board declared a quarterly distribution of 73.25 cents per common unit, or \$2.93 per common unit on an annualized basis, up approximately

15% from a year earlier. Inclusive of this increase, NEP has grown its LP distribution per unit by more than 290% since the IPO.

Further building upon that strength, NextEra Energy Partners today is announcing that it has entered into an agreement with Energy Resources to acquire an approximately 67% interest in an approximately 230-megawatt, 4-hour battery storage facility in California that is fully contracted with an investment grade counterparty for 15 years. The acquisition will further diversify NextEra Energy Partners' existing portfolio with the addition of another battery storage project and is an excellent complement to NextEra Energy Partners' existing operations.

NextEra Energy Partners expects to acquire the project interest for approximately \$191 million, subject to closing adjustments, which is expected to be funded with existing debt capacity. NextEra Energy Partners' share of the asset's tax equity financing is estimated to be approximately \$80 million at the time of closing. The acquisition is expected to contribute adjusted EBITDA of approximately \$30 to \$35 million and cash available for distribution of approximately \$13 to \$18 million, each on a five-year average annual run-rate basis beginning December 31, 2022. The transaction is expected to close later this year, upon the project reaching its commercial operations date, and supports NextEra Energy

Partners' projected adjusted EBITDA and cash available for distribution growth in 2022.

Finally, NextEra Energy Partners recently closed on a transaction to sell an approximately 156-mile gas pipeline from its existing portfolio for a total consideration of approximately \$203 million to a third party. The sale price of the pipeline represents an attractive and accretive EBITDA multiple and further enhances the renewable energy profile of NextEra Energy Partners. We are pleased with this transaction and look forward to redeploying the proceeds into accretive renewable energy assets, like the battery storage acquisition from Energy Resources that I just mentioned, to support NextEra Energy Partners' long-term distribution growth expectations.

(14) NEP – FIRST QUARTER 2022 DRIVERS

Turning to the detailed results, NextEra Energy Partners' first quarter adjusted EBITDA was \$412 million and cash available for distribution was \$169 million. New projects, which primarily reflect the asset acquisitions that closed in the second half of 2021, contributed approximately \$75 million of adjusted EBITDA and \$25 million of cash available for distribution. The adjusted EBITDA and cash available for distribution contribution from existing projects declined \$9 million and \$29 million,

respectively, versus the prior year comparable quarter. Favorable performance at existing projects drove an increase in adjusted EBITDA contribution of approximately \$46 million year-over-year, which was more than offset by the absence of approximately \$55 million in benefits realized during last February's Winter Storm Uri. Excluding the positive impact of Winter Storm Uri from last year's first quarter results, this quarter's adjusted EBITDA and cash available for distribution were up nearly 38% and 31%, respectively, year-over-year.

Cash available for distribution was also impacted by the timing of PAYGO payments. Wind resource for the first quarter of 2022 was 108% of the long-term average versus 98% in the first quarter of 2021.

Additional details are shown on the accompanying slide.

(15) NEXTERA ENERGY PARTNERS EXPECTATIONS

NextEra Energy Partners continues to expect run-rate contributions for adjusted EBITDA and cash available for distribution from its forecasted portfolio at December 31, 2022 to be in the ranges of \$1.775 billion to \$1.975 billion and \$675 million to \$765 million, respectively. As a reminder, year-end 2022 run-rate projections reflect calendar-year 2023 contributions from the forecasted portfolio at year-end 2022 and include the impact of IDR fees, which we treat as an operating expense. As always, our

expectations are subject to our usual caveats including normal weather and operating conditions.

From a base of our fourth quarter 2021 distribution per common unit at an annualized rate of \$2.83, we continue to see 12 to 15 percent growth per year in LP distributions as being a reasonable range of expectations through at least 2024. We do not expect the recent solar supply chain disruption to impact our ability to deliver on these expectations. We expect the annualized rate of the fourth quarter 2022 distribution that is payable in February of 2023 to be in a range of \$3.17 to \$3.25 per common unit. We also continue to expect to achieve our 2022 distribution growth of 12 to 15 percent while maintaining a trailing twelve-month payout ratio in the low-80 percent range.

(16) NextEra Energy and NextEra Energy Partners - Logo

In summary, both NextEra Energy and NextEra Energy Partners are benefiting from our history of strong execution that has positioned us well to capitalize on the terrific growth opportunities available to us across our businesses. We look forward to sharing more detail with you on our growth plans for both NextEra Energy and NextEra Energy Partners at our investor conference in New York on June 14th.

Before taking your questions I'd like to turn the call over to John Ketchum.

John Ketchum:

Thank you, Kirk, and good morning everyone.

I am excited for the opportunity to talk to you in my new role. Since we announced our planned leadership succession in January, we have heard from many of our shareholders and industry analysts. Several of you have asked whether you should expect any changes in strategy under a new CEO. The short answer is that I expect our strategy to be consistent with how we have grown the company over the past several decades, but that we will continue to adapt and evolve our strategy to meet increasing customer expectations, to leverage new technologies, and to lead the decarbonization of the U.S. economy. Now is the time for our company, our industry and our country to embrace low-cost renewable energy like never before. We need to create more jobs—not less—and combat the impacts of higher inflation, higher oil and natural gas prices and rising electricity demand by supporting—not stymying—solar and storage development.

Our strategy going forward is to double down on our core businesses. At FPL, we expect one of the highest population growth rates of any state in the nation to continue. In fact, at our current rate of organic customer

growth, FPL would add a customer base the size of Gulf Power roughly every five years. FPL's undergrounding program is just getting started, and we have visibility to billions of dollars in capital investment for the next several decades to continue hardening and strengthening the grid as we deliver industry-leading reliability to our customers. And we are also just getting started at decarbonizing the generation fleet at FPL, as only about five percent of our generation at FPL is currently produced by renewable energy. I believe that FPL already is the best utility in the nation. And yet we see significant cost reduction and incremental capital investment opportunities at FPL over the next several decades that can further improve our industry-leading customer value proposition by delivering clean, low-cost energy solutions for Florida customers.

Our strategy also entails doubling down on our core at Energy Resources. We intend to build more wind, more solar and more battery storage than anybody else in this country, year in and year out, regardless of the headwinds or tailwinds in any given year. We believe that we have the competitive advantages to win under any market conditions. And with recent technological advancements in green hydrogen and other forms of long-term storage, we see a total addressable market in this country for renewables, storage and transmission of around \$8 trillion through 2050.

We have said this before, and we believe it is never more true than it is today: the opportunity set for renewable energy in this country continues to expand rapidly, and we believe Energy Resources is in a terrific position for continued industry leadership and for long-term growth for shareholders.

Both FPL and Energy Resources have multiple ways to grow, and each business continues to push the other to be even better. As FPL grows, both businesses learn what drives customer value in Florida. As Energy Resources grows, both businesses learn what drives customer value in other markets across the country. Operational excellence is a competitive advantage for us across both businesses. So is development and construction expertise. So is supply chain management. So is financial discipline. Both businesses are constantly implementing new technologies. Both businesses are constantly finding ways to do things more efficiently and to improve our cost position. As Kirk mentioned, this year our employees generated about 900 individual ideas translating into roughly \$400 million in additional run-rate O&M savings across the enterprise through Project Velocity, our best performance ever, after ten years of pursuing O&M improvement in this employee-driven annual exercise.

Our strategy at NextEra Energy is to continue to do what we have done well, only better – and bigger, as new market opportunities present themselves.

Our strategy at NextEra Energy Partners is much the same. The partnership will double down on what we have done well since our IPO in 2014. We expect to continue delivering LP distribution growth that is already best-in-class. We plan to continue to pursue growth in three ways—by acquiring assets from Energy Resources, by acquiring assets from third parties, and by additional organic capital investments in the assets we own as the portfolio grows over time. Yet as at NextEra Energy, it is the future of the partnership, and its long-term growth visibility, that is most exciting to us. Simply put: We believe that what is good for NextEra Energy tends to be good for NextEra Energy Partners and that what is good for decarbonization of the U.S. economy is going to be terrific for shareholders of NextEra Energy as well as for unitholders of NextEra Energy Partners.

We will have more to share about our long-term growth prospects at both companies at our investor conference in June. I'd like to close by once again thanking our team. In addition to the 900 Project Velocity ideas I mentioned earlier, last week we held our annual team competition for the

highest quality and innovation award at our company, followed by our employee expo in which 56 teams were featured. I can tell you that, as impressive as our track record has been over the last 30-plus years, our future is even brighter. Our team continues to impress with their creativity, analytical abilities, innovation, customer focus, and the will to win. I truly believe that we have the best team in the industry. I believe this team can extend our long-term track record of outperformance. And I believe this is the team that can—and will—lead the decarbonization of the entire U.S. economy.

Thank you for your continued support of our company and I now look forward to taking your questions.

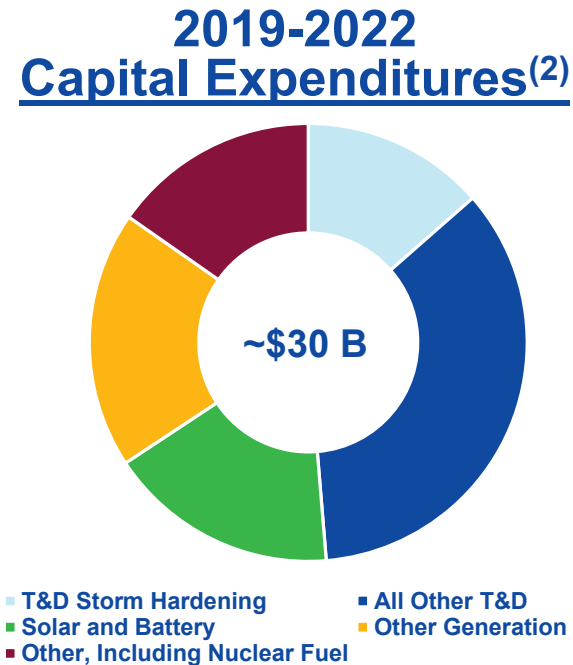
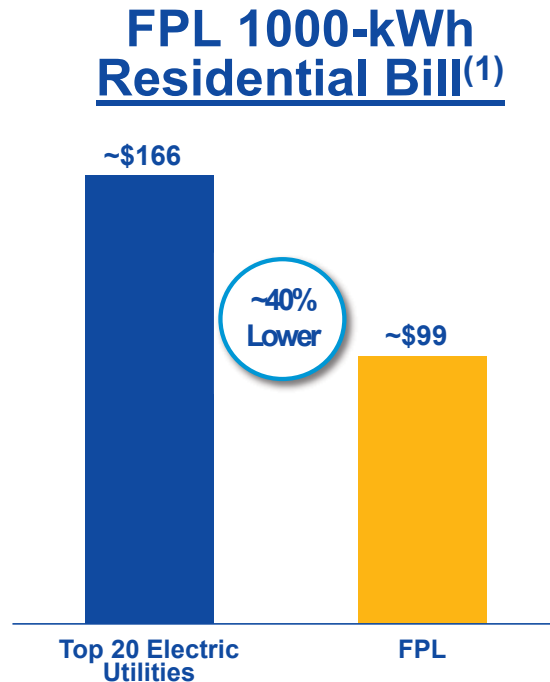
(17) Question and Answer Session – Logo

Edison Electric Institute Conference

November 2021



FPL, including Gulf Power, has significant investment opportunities across its system that are expected to generate customer savings and further enhance reliability



Smart investments help FPL deliver sustainable energy while maintaining our best-in-class customer value proposition

- 1) Top twenty are based on 2019 EIA reported number of customers, and rates effective January 2021; residential bill data is for FPL, excluding Gulf Power
2) Combined FPL and Gulf Power estimated capital expenditures



FPL, including Gulf Power, has significant investment opportunities across its system that are expected to generate customer savings and further enhance reliability

FPL 2019 – 2022 Capital Expenditures⁽¹⁾

Opportunity	Status	Projected Investment ⁽²⁾	Recovery Mechanism
Dania Beach Clean Energy Center	Expected COD in 2022	~\$900 MM ⁽³⁾	Base rates
SolarTogether	Investments through 2025	~\$2.7 B	Base rates w/ participant contributions as offset
Additional solar investments	Site control; early-stage development	~\$2.0 B	Base rates
Battery storage	Various battery storage projects	~\$420 MM	Base rates
North Florida Resiliency Connection	Expected in-service 2022	~\$600 MM	Base rates
500 kV transmission project ⁽⁴⁾	Ongoing	~\$1.0 - \$1.5 B	Base rates
Transmission & distribution storm hardening	Investments from 2019 – 2022	~\$4.0 B	Storm protection plan cost recovery clause / base rates
All other transmission & distribution	Investments from 2019 – 2022	~\$8.0 - \$9.0 B	Base rates
Maintenance of existing assets, nuclear fuel, and other	Ongoing	~\$9.0 - \$10.0 B	Base rates

Total projected capital deployment of ~\$30 B from 2019 through 2022, with 2022 being our largest capital plan in FPL history

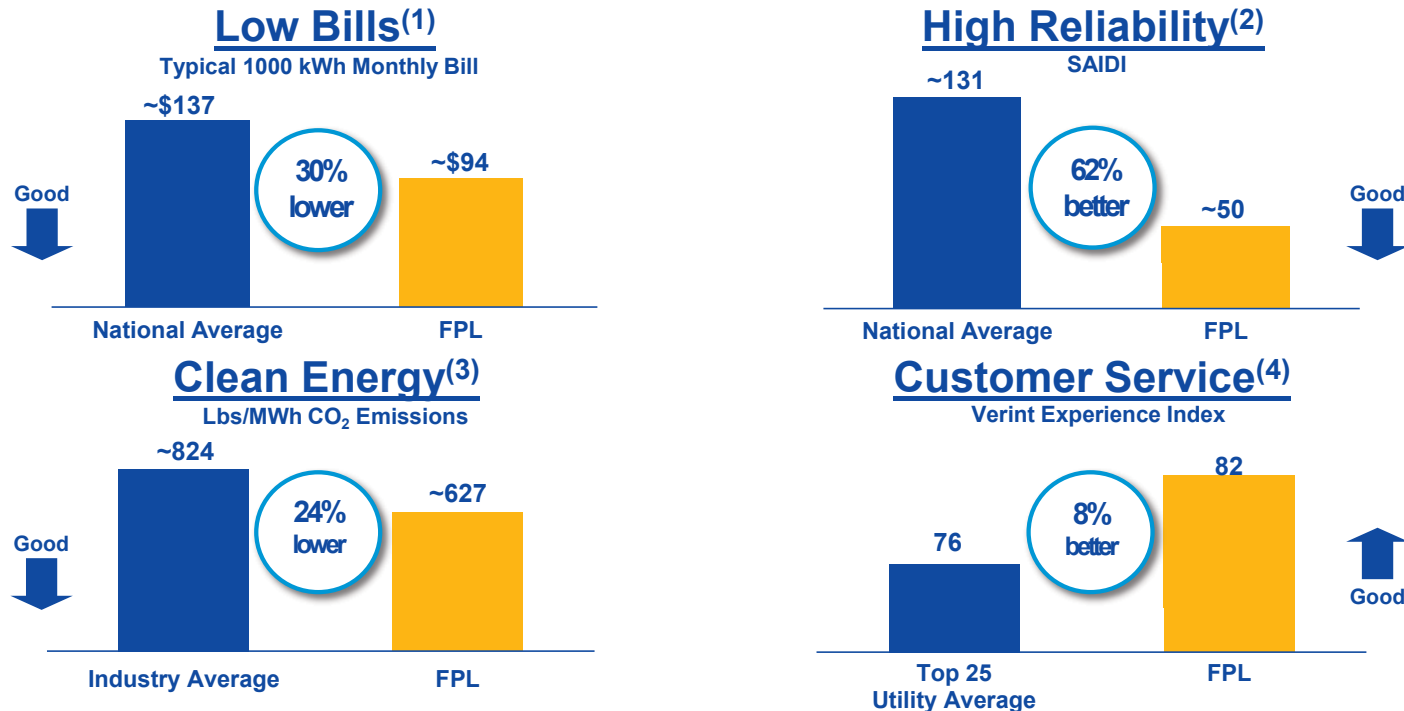
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- 1) Includes major capital initiatives for Gulf Power, which legally merged with FPL on January 1, 2021
- 2) Includes amount invested in 2019 through 2022, unless otherwise noted; projected investment includes AFUDC
- 3) Reflects total investment for Dania Beach Clean Energy Center including investment made pre-2019
- 4) Replacement of 500 kV foundations and structures across the service territory



FPL provides its customers a best-in-class value proposition of low bills, high reliability, clean energy solutions and excellent customer service

Supporting Our Customers



- 1) Based on 2020 average typical 1,000 kWh monthly residential bill excluding franchise fees and includes gross receipts tax; National Average Source: Edison Electric Institute Typical Bills and Average Rate report for July 2020
- 2) System average interruption duration index (SAIDI) for 2020 as reported to the FPSC; Industry information from the 2019 EEI Report is based on 2018 data (T&D), National Average includes FPL
- 3) 2020 CO₂ emissions rate (Lbs/MWh); Industry average from DOE's Energy Information Administration
- 4) CSAT score in Verint Experience Index among top 25 U.S. electricity providers with most residential customers according to US EIA

QUESTION:

Are the type of storm restoration costs that are included in or considered in your cost and benefit comparisons required by Rule 25-6.030, Florida Administrative Code subject to your company-wide cost control or efficiency measure(s)? If yes, please identify all documents describing how such measures apply to storm restoration costs.

RESPONSE:

FPL has a history of operational excellence in preparing for and responding to storm restoration. FPL takes actions and practices to minimize the costs of restoration while balancing the need to restore power to customers in an expedite manner. FPL has submitted testimonies to the Commission in which it has detailed the extensive efforts FPL takes to manage costs in recent storms (Docket No. 20210178-EI and No. 20200172-EI) such as: FPL's pre-storm negotiation of vendor rates at market prices, FPL's practice of bringing in and releasing resources to mitigate costs wherever possible, and the overall efficiencies employed by FPL in the execution of its well planned and storm-tested processes.

QUESTION:

How do you reconcile representations to investors about growth in capital spending related to SPP programs and projects with the rate impacts of such programs and projects?

RESPONSE:

Please see FPL's response to OPCs Fourth Set of Interrogatories No.58 and No. 59. FPL does not provide projected rates to investors that are broken down by specific rate drivers, including capital spending related to SPP programs and projects. Additionally, FPL does not specifically isolate the rate impact of SPP programs when setting the budget, but FPL does evaluate rate impacts in total for customers based on the budget as a whole.

QUESTION:

How are projected rate impacts from FPL's SPP projects and programs factored into the projected SPP spending plans that you share with investors?

RESPONSE:

FPL does not provide projected rates to investors that are broken down by specific rate drivers, including capital spending related to SPP programs and projects. The projected SPP spending plans go through the same rigorous and long-standing processes utilized in the development of FPL's O&M and capital expenditures budgets which support high reliability and low customer bills. As shown in Attachment 3 to FPL's Response to OPC's Fourth Set of Interrogatories No. 54, FPL's actual 2020 typical 1,000 kWh customer bill was 30% lower than the national average, while its SAIDI (system average interruption index) was 62% better than the national average.

QUESTION:

Please identify and describe all documents demonstrating how you considered the rate impacts of the programs and projects included in your pending SPP.

RESPONSE:

The SPP spending plans go through the same rigorous and long-standing processes utilized in the development of FPL's O&M and capital expenditures budgets. FPL does not take into consideration the rate impact of SPP programs when developing the budget, but FPL does evaluate rate impacts in total for customers based on the budget as a whole. Using the assumptions and Planning Process Guidelines, the FPL business units develop their objectives and goals, key initiatives and assumptions, as well as a preliminary funds request to support those business objectives, with the objective of providing a value proposition for the customers.

QUESTION:

Please identify and describe all documents that demonstrate or show that the company has considered or determined an upper limit to the amount of capital expenditures that could be placed upon customers through the SPP and the SPPCRC.

RESPONSE:

The SPP spending plans go through the same rigorous and long-standing processes utilized in the development of FPL's O&M and capital expenditures budgets. FPL does not specifically establish an upper limit to the amount of capital expenditures in budgeting for the SPP. Using the assumptions and Planning Process Guidelines, the FPL business units develop their objectives and goals, key initiatives and assumptions, as well as a preliminary funds request to support those business objectives, with the objective of providing a value proposition for the customers.

QUESTION:

Since you began developing your SPP in 2020 (or 2019, if before 2020) please identify and describe each instance where you expressly decided not to deploy capital for an SPP Program or project because it would have had too great an impact on your customers' rates in any single year.

RESPONSE:

Please see FPL's objections filed on May 18, 2022. Subject to and without waiver of said objections, there has not been an instance where FPL decided to not deploy capital for a Commission-approved Storm Protection Plan program or project because it would have had too great an impact on customer rates in any single year. FPL implements its Storm Protection Plan programs and projects, including capital expenditures, consistent with the Storm Protection Plan as approved by the Commission.

QUESTION:

Please describe precisely how your comparison of the cost of each discrete program or project to the benefits to be achieved by implementing that program or project ("cost/benefit") is applied in your decision making on whether to implement the project or program. As a part of your description, please indicate each cost/benefit numerical threshold that dictates whether you propose a project or program for Commission approval, (e.g., what objective test is applied, if any, to determine that the benefits of a program or project do not sufficiently offset the costs of the program or projects, such that it is not proposed for cost recovery from customers?).

RESPONSE:

See FPL's objections served on May 18, 2022. Subject to and without waiver of said objection, FPL responds as follows:

FPL did not perform a traditional cost/benefit analysis for each major component of FPL's SPP because it is not required by Rule 25-6.030 F.A.C., or Section 366.96, F.S. Rather, Rule 25-6.030(3)(d)(4), F.A.C., requires the SPP to include a comparison of the estimated costs and estimated benefits for each SPP program, which is included in Section IV of FPL's 2023-2032 Storm Protection Plan Filed on April 11, 2022 (Docket No. 20220051-EI). See subsection (4) under each program included in Section IV of FPL's 2023-2032 Storm Protection Plan for a description of the comparison of the costs and benefits for each SPP program.

As explained in FPL's 2023-2032 SPP, Section II(A), the SPP is largely a continuation of FPL's existing Commission approved storm hardening programs and initiatives, which have already demonstrated that they provide increased transmission and distribution infrastructure resiliency, reduced restoration time, and reduced restoration costs when FPL's system is impacted by severe weather events.

FPL's Substation Storm Surge/Flood Mitigation Program was included in FPL's 2020-2029 SPP (Docket No. 20200071-EI) and settlement approved by Commission Order PSC-2020-0293-AS-EI on August 28, 2020.

As further explained in FPL's 2023-2032 SPP Section II(B), FPL is proposing three new programs to implement: Distribution Winterization Program, Transmission Winterization Program, Transmission Access Enhancement Program. These new SPP winterization programs will help mitigate the potential for power outages due to extreme cold weather events similar to the power outages that occurred in Texas during February 2021 as a result of Winter Storm Uri. The new Transmission Access Enhancement Program will help ensure that FPL and its contractors have reasonable access to FPL's transmission facilities for repair and restoration activities following an extreme weather event.