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# **Public Service Commission**

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# -M-E-M-O-R-A-N-D-U-M-

- **DATE:** September 26, 2022
- **TO:** Office of Commission Clerk (Teitzman)
- **FROM:** Division of Engineering (Buys, King, Knoblauch, Ramos) 7B Office of the General Counsel (Trierweiler, Imig)
- **RE:** Docket No. 20220050-EI Review of Storm Protection Plan, pursuant to Rule 25-6.030, F.A.C., Duke Energy Florida, LLC.
- AGENDA: 10/04/22 Regular Agenda Post Hearing Decision Participation is Limited to Commissioners and Staff
- COMMISSIONERS ASSIGNED: All Commissioners
- PREHEARING OFFICER: La Rosa
- CRITICAL DATES: October 8, 2022 180-day Statutory Deadline Per 366.96(5), Florida Statutes.
- **SPECIAL INSTRUCTIONS:** Please place Dockets Nos. 20220048-EI, 20220049-EI, 20220050-EI, and 20220051-EI in consecutive order on the Agenda.



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# **Case Background**

Section 366.96, Florida Statutes (F.S.), requires each investor-owned electric utility (IOU) to file a transmission and distribution storm protection plan (SPP) that covers the immediate 10-year planning period. The plans are required to be filed with the Florida Public Service Commission (FPSC or Commission) at least every three years and must explain the systematic approach the utility will follow to achieve the objectives of reducing restoration costs and outage times associated with extreme weather events and enhancing reliability. No later than 180 days after a utility files a plan, that contains all the elements required by Commission rule, the Commission must determine whether it is in the public interest to approve, approve with modification, or deny the plan. Section 366.96(7), F.S., states that once a utility's SPP has been approved, proceeding with actions to implement the plan shall not constitute or be evidence of imprudence. Further, this section requires the Commission conduct an annual proceeding, referred to as the storm protection plan cost recovery clause (SPPCRC), to determine the utility's prudently incurred SPP costs.

Duke Energy Florida, LLC (DEF) filed its first SPP on April 10, 2020 in Docket No. 20200069-EI. The Office of Public Counsel (OPC), Walmart, Inc. (Walmart), Florida Industrial Power Users Group (FIPUG) and White Springs Agricultural Chemical, Inc. d/b/a/ PCS Phosphate (PCS) were granted intervention. This matter was set for an administrative hearing; however, prior to the hearing DEF entered into a Settlement Agreement with OPC, PCS, and Walmart.<sup>1</sup> An administrative hearing was held on August 10, 2020 for the Commission to hear oral argument from the parties in support of the Settlement Agreement, to admit testimony and documentary evidence into the record, and to consider the Settlement Agreement. The Commission approved the Settlement Agreement by Order No. PSC-2020-0293-AS-EI, issued August 28, 2020, in Docket No. 20200069-EI.

Key provisions of the 2020 Settlement are:

- DEF will file its updated SPP for the period 2023-2032, and that DEF will not materially expand the scope of the programs and associated expenditures it seeks to recover for the years 2020-2022 beyond those that are included in the estimates provided in specific documents, and as modified in the filing made on July 24, 2020, in the SPPCRC docket.
- DEF will base its requests for cost recovery through the SPPCRC for the years 2023, 2024 and 2025 on the SPP update to be filed in 2022.

On January 1, 2021, DEF filed a petition for limited proceeding to approve another settlement agreement which included general base rate increases (2021 Settlement Agreement). On June 4, 2021, by Order No. PSC-2021-0202-AS-EI, the Commission approved the 2021 Settlement Agreement between DEF, OPC, FIPUG, PCS Phosphate, and Nucor Steel Florida, Inc. Two scrivener's errors were corrected by an amendatory order, Order No. PSC-2021-0202A-AS-EI, issued on June 28, 2021. Paragraph 4 of the 2021 Settlement Agreement states:

<sup>&</sup>lt;sup>1</sup> FIPUG took no position on the Joint Motion for Expedited Approval of a Stipulation and Settlement Agreement.

The Parties agree that DEF has properly removed all costs associated with the Storm Protection Plan ("SPP") from the costs included in DEF's MFRs, attached hereto as Exhibit 1, as all such costs spent on approved SPP programs are properly recoverable through the SPP Cost Recovery Clause 9 "SPPCRC."

On April 11, 2022, DEF filed its proposed SPP for Commission approval which covers the period of 2023-2032 and included the same ten programs as its 2020 SPP. A description of the ten programs is provided in Attachment A. FIPUG, Nucor, OPC, PCS Phosphate, and Walmart were granted intervention in this docket. An administrative hearing was held on August 2-4, 2022.<sup>2</sup> Post hearing briefs were filed on September 6, 2022. OPC, FIPUG, Nucor, and PCS (Joint Parties) filed a joint brief which included a procedural matter which is addressed below.

#### Procedural Matter

On pages 28-37 of their post-hearing brief, the Joint Parties unilaterally inserted a "post-hearing legal issue" that was not listed in the Prehearing Order.<sup>3</sup> The Joint Parties argue in this post-hearing issue that the Commission should reverse a prehearing ruling, set forth in Order No. PSC-2022-0292-PCO-EI, where the Prehearing Officer granted motions to strike portions of the prefiled testimony of OPC witness Lane Kollen. In staff's opinion this legal argument does not raise a new substantive issue. The lack of legal relevance of witness Kollen's testimony was addressed in detail by the Prehearing Officer in Order No. PSC-2022-0292-PCO-EI. OPC requested reconsideration of that Order, which was denied by the full Commission. Because the evidentiary concerns relating to the testimony of witness Kollen have twice been addressed on the merits, staff believes it is appropriate to discuss the Joint Parties' "post-hearing legal issue" here only as it raises procedural concerns. For the reasons set forth below, staff believes there is no procedural error that that Commission must consider at this time.

"The fundamental requirements of due process are satisfied by reasonable notice and a reasonable opportunity to be heard." *Florida Public Service Commission v. Triple "A" Enterprises, Inc.,* 387 So. 2d 940, 943 (Fla. 1980). At the administrative hearing held on August 2-4, 2022, in accordance with sections 120.569 and 120.57, F.S., all parties, including the Joint Parties, were given full opportunity to present argument on all relevant issues in the case and to conduct cross-examination of all witnesses on the case's relevant issues both in the case in chief and in the proffered portions of the hearing. (TR 44).

Neither OPC nor any other party to this proceeding was precluded from making any legal arguments regarding rule interpretation by the exclusion of the testimony. The only effect of the Commission's action in striking the testimony was to exclude expert testimony on the ultimate legal issues, which are the sole province of the tribunal.

Many portions of Witness Kollen's testimony were not stricken. Those portions were moved into the record as though read, and exhibits LK 1 through LK 3 were admitted into evidence. (TR 824-853). OPC separately proffered the portions of Witness Kollen's testimony subject to the order granting the motion to strike and the proffered testimony was also moved into the record as

<sup>&</sup>lt;sup>2</sup> DEF's docket was consolidate with the SPP dockets for TECO (20220048-EI); FPUC (20220049-EI) and FPL (20220051-EI) for hearing purposes only.

<sup>&</sup>lt;sup>3</sup> Order No. PSC-2022-0291-PHO-EI, issued August 1, 2022.

though read. (TR 854-886). On August 3, 2022, Witness Kollen provided a summary and was subject to cross-examination on both the testimony that was not stricken and the proffered testimony that had been stricken. Counsel for OPC also made its legal arguments about the rule interpretation at that time. (TR 802-808). Although the Commission ultimately decided to strike the OPC Witness testimony, OPC was provided an opportunity to make its legal argument at the administrative hearing (TR 798-810), and in its motion for reconsideration. OPC made its arguments again in its post-hearing brief.

The Joint Parties also argue that a Commission Final Order applying Rule 25-6.030, F.A.C., in a manner not consistent with their argument "could be seen as the agency interpreting its [statutory] mandate without an effective or complete delegation of authority." (Joint Parties BR 36) The cases cited by the Joint Parties in support on this argument all address judicial review of the constitutionality of statutes.<sup>4</sup> As an agency, the Commission has no jurisdiction to declare a statute unconstitutional. Moreover, following the passage of Article V, Section 21, of the Florida Constitution, the Commission's interpretation of a statute will not be relevant to a court vested with jurisdiction to consider that constitutional question.

For these reasons, staff does not agree with the Joint Parties' arguments that the actions taken with respect to witness Kollen's testimony were procedurally infirmed or negatively impacted the fairness of the proceeding.

There are 8 issues addressed below for the Commission to consider.<sup>5</sup> The Commission has jurisdiction in this matter pursuant to Section 366.96, and Chapter 120, F.S.

<sup>&</sup>lt;sup>4</sup> Post-Hearing Brief at 23 (*citing Askew v. Cross Key Waterways*, 372 So. 2d 913 (Fla. 1978); *Microtel, Inc. v. Florida Pub. Serv. Comm'n*, 464 So. 2d 1189, 1191 (Fla. 1985); *Microtel, Inc. v. Florida Pub. Serv. Comm'n*, 483 So. 2d 415 (Fla. 1986)).

<sup>&</sup>lt;sup>5</sup> DEF's issues are 1C-6C, 10C, and 11C. Issues 7-9 are FPL only issues.

## Discussion of Issues

**Issue 1C:** Does DEF's Storm Protection Plan contain all of the elements required by Rule 25-6.030, Florida Administrative Code?

**Recommendation:** Yes, DEF appears to have met the criteria and intent of the SPP Rule with its filing and the Commission has adequate information in order to satisfy its statutory requirements. (Imig, Trierweiler, Knoblauch)

#### Position of the Parties

**DEF:** Yes, DEF's 2023-2032 Storm Protection Plan includes all of the elements required by Rule 25-6.030, Florida Administrative Code.

**JOINT PARTIES:** No. DEF provided verifiable program costs; however, claimed benefits information was not properly presented for determination of plan approval, modification, or rejection. Societal benefits in the form of restoration cost avoidance are highly subjective estimates of customer value of avoided outages and should not be used for plan approval determinations. DEF also improperly seeks to include fictitious "capital cost savings" in its cost-effectiveness analysis. DEF failed its burden of proving cost-effectiveness of proposed SPP programs.<sup>6</sup>

**WALMART:** No. Walmart adopts the position of OPC

# PARTIES' ARGUMENTS

#### DEF

DEF argued its proposed 2023 SPP meets all filing requirements of Rule 25-6.030, F.A.C., and that DEF has shown by a preponderance of the evidence that its SPP is in the public interest because the SPP meets the Legislature's intended goals of reducing restoration costs and outage times to customers. (DEF BR 6) DEF stated that its proposed Plan is expected to reduce average annual storm restoration costs by over \$50 million, while reducing average annual customer minutes of interruption by close to 400 million minutes. (DEF BR 6) DEF argued that all of its SPP programs reduce restoration costs and outage times and should be approved without modification. (DEF BR 17)

#### JOINT PARTIES

The Joint Parties argued that DEF's SPP provided an analysis of costs and benefits. However, the Joint Parties argue that DEF "superficially addressed" the key elements for program's costs and benefits. The Joint Parties argued DEF's SPP relies on highly inflated and unsubstantiated societal benefits. (Joint Parties BR 4)

#### WALMART

Walmart adopted the position of OPC. (Walmart BR 3)

<sup>&</sup>lt;sup>6</sup> All positions on Issues 1C-6C, and 10C are subject to the agreement to allow costs shown at TR 685 of Kevin Mara's amended Direct Testimony in the table with the notation "Does not comply with 25-6.030," for the recovery periods 2023 and 2024.

#### ANALYSIS

#### **History**

The first utility storm hardening programs were filed for Commission approval in 2007 and were reviewed by the Commission at least every three years thereafter. In 2019, the Florida Legislature emphasized the importance of storm hardening when it enacted Section 366.96, F.S., entitled "Storm Protection Plan Cost Recovery."<sup>7</sup> Subsection 366.96(3), F.S., requires each IOU to file a transmission and distribution SPP for the Commission's review and directs the Commission to hold an annual proceeding to determine the IOUs' prudently incurred costs to implement the plan and allow recovery of those costs through the SPPCRC.

The Commission promulgated two Rules, 25-6.030, F.A.C., Storm Protection Plan, and 25-6.031, F.A.C., Storm Protection Cost Recovery, to implement and administer Section 366.96, F.S. The full text of Section 366.96, F.S., and Rule 25-6.030, F.A.C., are provided as Attachment B. In 2020, DEF's first storm protection plan, which was primarily an extension of the Utility's existing storm hardening plan, was approved.

#### Issue

The primary issue raised by the Joint Parties is that the information that DEF provided to demonstrate its comparison of costs and benefits was flawed. The Joint Parties argued DEF's SPP included "fictitious capital costs savings" in its analysis and referred the Commission to its arguments for Issue 2 and 5 for further argument. (Joint Parties BR 4). It appears the Joint Parties' arguments in Issue 1 are about the methodology of DEF's SPP. For the reasons set forth below, Staff believes DEF provided adequate information for the Commission to evaluate DEF's SPP.

#### <u>Law</u>

Section 366.96(4), F.S., provides:

In its review of each transmission and distribution storm protection plan filed pursuant to this section, the commission shall consider:

(a) The extent to which the plan is expected to reduce restoration costs and outage times associated with extreme weather events and enhance reliability, including whether the plan prioritizes areas of lower reliability performance.

(b) The extent to which storm protection of transmission and distribution infrastructure is feasible, reasonable, or practical in certain areas of the utility's service territory, including, but not limited to, flood zones and rural areas.

(c) The estimated costs and benefits to the utility and its customers of making the improvements proposed in the plan.

(d) The estimated annual rate impact resulting from implementation of the plan during the first 3 years addressed in the plan.

<sup>&</sup>lt;sup>7</sup> Subsection 366.96(1), F.S., provides that it is in the state of Florida's interest to strengthen electric utility infrastructure to withstand extreme weather conditions by promoting the overhead hardening of electrical transmission and distribution facilities and the undergrounding of certain electrical distribution lines and vegetation management, and that it is in the state's interest for each utility to mitigate restoration costs and outage times to utility customers when developing transmission and distribution storm protection plans.

The statute further articulates that the Commission must use the public interest standard when considering a SPP. See § 366.96(5), stating that the Commission shall determine whether it is in the public interest to approve, modify, or deny the plan. Accordingly, Rule 25-6.030, F.A.C., requires utilities to file certain minimum information in order for the Commission to determine if it is in the public interest to approve, approve with modifications, or deny a utility's storm protection plan. In other words, Rule 25-6.030, F.A.C., is a filing requirement rule, not a standard for the Commission's decision. As such, the rule allows the utilities to have the flexibility to submit and manage their hardening plans while simultaneously requiring a utility file the information necessary for the Commission to make a determination about whether it is in the public interest to approve a plan, approve a plan with modifications, or deny a plan.

Rule 25-6.030(3), F.A.C., Storm Protection Plan, identifies the specific information to be included in each IOU's SPP.<sup>8</sup> Rule 25-6.030(3)(d), F.A.C., requires, in relevant part, a comparison of costs and benefits:

A description of each proposed storm protection program that includes:

1. A description of how each proposed storm protection program is designed to enhance the utility's existing transmission and distribution facilities including an estimate of the resulting reduction in outage times and restoration costs due to extreme weather conditions;

2. If applicable, the actual or estimated start and completion dates of the program;

3. A cost estimate including capital and operating expenses;

4. A comparison of the costs identified in subparagraph (3)(d)3. and the benefits identified in subparagraph (3)(d)1.

Neither Section 366.96, F.S., nor Rule 25-6030, F.A.C., explicitly require a cost-effectiveness evaluation or quantitative cost-benefit analysis.

#### Staff Analysis

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Rule 25-6.030(3)(d), F.A.C., requires "...a comparison of the costs identified in subparagraph (3)(d)3. and the benefits identified in 3(d)1." The Joint Parties argued that DEF's data was insufficient for the Commission to make a determination on outage times and reduction of costs.<sup>9</sup> (Joint Parties BR 4) Staff disagrees.

While the nature of cost data is objective, benefits in the context of storm hardening specifically, may require various forms description and analysis to ascertain. Staff believes that utility should have the flexibility to use a methodology that it believes most clearly demonstrates the benefits of a SPP. The Joint Parties' argument, however, does not take into account the real world nature of storm hardening. It is not a traditional utility function required for day-to-day service. Rather, creating a SPP is an activity that goes above and beyond the basic "sufficient, adequate, and efficient" standard of service to strengthen existing utility infrastructure to withstand potential

<sup>&</sup>lt;sup>8</sup> Specific elements of Rule 25-6.030, F.A.C., such as areas for prioritization and rate impacts, are discussed in more detail in Issues 2C through 6C.

<sup>&</sup>lt;sup>9</sup> Thus, Staff's recommended denials/recommended revisions to DEF's SPP in Issues 6C and 10C are not based on any defect in filing requirements under Rule 25-6.030, F.A.C.

extreme weather conditions. Section 366.03, F.S. This means that storm hardening costs may or may not produce actual financial benefits that exceeds costs during a given time, depending on a particular utility's circumstances.<sup>10</sup>

This is why Section 366.96(4)(a), F.S., provides the flexibility for IOUs to submit and manage their hardening plans so long as the plans include projects that effectively "reduce restoration costs and outage times associated with extreme weather events and enhance reliability" for customers. For these reasons, staff believes that a utility should have the option to submit what it deems is its most accurate data or analysis of costs or benefits for the Commission's consideration.

In this case, DEF's SPP met the filing requirements Rule 25-6.030, F.A.C., because DEF provided adequate information to analyze the costs and benefits of its SPP. DEF provided sufficient program cost information for the Commission to make a determination concerning DEF's SPP's potential to reduce outages or restoration time, as well as to effectively evaluate the resulting rate impact from the SPP. DEF's SPP is anticipated to reduce storm restoration costs by over \$50 million on average per year and reduce customer minutes of interruption by close to 400 million minutes on average per year. (DEF BR 6) Additionally, the reduction in restoration costs and outage times for each proposed program was provided in DEF's SPP. For example, DEF's Feeder Hardening Program is expected to reduce restoration costs by \$15 to \$18 million annually and reduce customer minutes of interruption by approximately 111 to 139 million minutes annually once the program is complete. (EXH 3, P 9) This information allows the Commission to evaluate the potential of the SPP to mitigate outages and reduce restoration costs. For these reasons, staff believes that DEF's SPP provides the Commission with adequate information necessary to make a public interest determination pursuant to Section 366.96, F.S.

#### CONCLUSION

Staff recommends that DEF met the filing requirements required by Rule 25-6.030, F.A.C., and that the Commission has adequate information necessary to make a public interest determination pursuant to Section 366.96, F.S.

<sup>&</sup>lt;sup>10</sup> Consider the following example: a utility spends \$10 million to convert wooden poles to concrete poles. Based on the assumption that a Category 3 hurricane would strike the area every three years, the projected benefits are \$15 million over 30 years for a net savings to customers of \$5 million. However, if the utility does not experience extreme weather in these locations for a period of time (as was the case for the period 2005 through 2017) there are no monetized benefits to the general body of customers. The customers may nonetheless be receiving qualitative benefits (the system is better prepared for when extreme weather does occur) that are consistent with the public interest requirements of Section 366.96, F.S.

**Issue 2C:** To what extent is DEF's Storm Protection Plan expected to reduce restoration costs and outage times associated with extreme weather events and enhance reliability?

**Recommendation:** DEF utilized the Guidehouse model to support its 2023 SPP program evaluation and prioritization. The results of this model demonstrate that DEF's SPP is projected to reduce restoration costs and outage times associated with extreme weather events. (Knoblauch)

#### Position of the Parties

**DEF:** As detailed in Exhibit No. 4, after full deployment of DEF's 2023 SPP, DEF projects an average, annual reduction in outage times of approximately 399.4 million customer minutes of interruption, as well as average, annual reduction in restoration costs of approximately \$56.5 million. Program-specific reductions in outage times and restoration costs are shown on Exhibit No. 3.

**JOINT PARTIES:** Some core proposed programs related to transmission, distribution and lateral hardening and/or undergrounding will have a better impact on reducing outage times and lowering restoration costs than will other programs. Several programs are routine maintenance and not do not qualify as storm hardening functions and thus are not SPP-eligible. Staging-related storm restoration costs will not be reduced, forcing customers to continue bearing such costs in pursuit of diminishing returns of ever faster – but cost-ineffective – storm restoration time.

**WALMART:** Walmart adopts the position of OPC.

# PARTIES' ARGUMENTS

#### DEF

# DEF argued that although it disagrees with OPC's interpretation of the SPP Rule, if the Commission were to agree with OPC, the Company's 2023 SPP should still be approved. (DEF BR 16) DEF argued its Self-Optimizing Grid (SOG) Program will reduce storm related outages, as well as restoration costs by allowing the Company the ability to direct resources to an area more efficiently. (DEF BR 17) DEF argued its Underground (UG) Flood Mitigation Program is expected to reduce restoration costs and outage times. Additionally, DEF argued that it disagrees with OPC's claim that the UG Flood Mitigation Program is merely replacement of aging infrastructure and asserted that storm hardening could include the replacement of existing infrastructure. (DEF BR 18)

For the Transmission Structure Hardening Program, DEF argued that this program provides quantifiable reductions in restoration costs and outage times, and is critical to its SPP, including each sub-program. (DEF BR 19-20) These include: (1) Tower Upgrade Sub-program – towers will be upgraded to the latest National Electrical Safety Code (NESC) and internal construction standards and not due to a design flaw; (2) Tower Cathodic Protection Sub-program – will reduce the chances of a tower failing and thus avoiding customer outages; (3) Overhead Ground Wire (OHGW) Sub-program – protecting infrastructure from extreme weather can reduce restoration costs and outage times; and (4) Gang Operated Air Break (GOAB) Switch

Automation Sub-program – will allow customer interruptions to be minimized, making restoration efforts more targeted. (DEF BR 20-22)

DEF argued its Transmission Substation Flood Mitigation Program will mitigate the risk of flood damage to vulnerable substations, which will reduce both restoration costs and outages. Further, DEF argued that its system was built to existing standards at the time of construction, and it continues to assess vulnerable areas by utilizing updated FEMA flood plains and over 200 years of storm data. (DEF BR 23) For its Transmission Loop Radially Fed Substations Program, DEF argued that the program creates a more networked, resilient system that will reduce customer outages and restoration costs. (DEF BR 23-24) DEF argued its Transmission Substation Hardening Program targets assets that are more vulnerable to failure and by speeding up restoration times, it will reduce restoration costs in the form of reduced contractor payments. (DEF BR 24-25) For its SPP, DEF argued that each of its programs contribute to reducing outage times and restoration costs, and even using OPC's description of the SPP Rule, all programs should be included in its 2023 SPP. (DEF BR 25-26)

#### **JOINT PARTIES**

The Joint Parties argued that the statute and rule require that programs reduce both storm restoration costs and outage times. (Joint Parties BR 4) DEF's plan incorporates aging infrastructure and general improvements, which may increase the grid's resiliency, but the Commission should require utilities to conform to narrower objectives as described in the SPP Statute. (Joint Parties BR 6) The Joint Parties argued that six of DEF's programs were in dispute for failing to meet the SPP Rule requirements. (Joint Parties BR 10) Those programs, excluding the Loop Radially-Fed Substation Program which does not start until 2025, were subject to the 2020 SPP Stipulation and the 2021 Stipulation. (Joint Parties BR 10-11) The 2021 Stipulation addresses program cost recovery through the SPPCRC for 2022 and 2023, and the Joint Parties concede that though not expressly discussed, year 2024 would also be encompassed. (Joint Parties BR 12)

The Joint Parties argued that OPC witness Mara testified to several examples of programs that are ineligible for inclusion in DEF's SPP. (Joint Parties BR 13) Specifically, the SOG Program is a sectionalizing program that does not reduce restoration costs or outage times. The Joint Parties argued that while DEF asserted the SOG Program does reduce outages, DEF argued the SOG Program would not reduce restoration costs. Thus, it does not meet the requirements of the SPP Statute and SPP Rule but is instead for "blue sky" reliability purposes, which should be recovered through base rates. (Joint Parties BR 13) For DEF's Transmission Structure Hardening Program, the Joint Parties argued that some of the sub-programs do not meet the SPP Statute and SPP Rule. The sub-programs and reasoning for exclusion are: (1) GOAB Switch Automation Sub-program – does not reduce restoration costs; (2)Tower Upgrade Sub-program – replacement of towers due to age or design flaws, which DEF has an obligation to replace beyond the SPP Statute; (3) Tower Cathodic Protection Sub-program – extends the life of an asset but does not reduce both restoration costs and outage times; and (4) OHGW Sub-program – part of routine maintenance and no evidence that it will reduce restoration costs and outage times. (Joint Parties BR 13-16)

The Joint Parties argued DEF's Transmission Substation Hardening Program is another example of replacing aging infrastructure, and OPC witness Mara testified that it does not reduce restoration costs or outage times. (Joint Parties BR 16) For the Transmission Loop Radial-Fed Substation Program, the Joint Parties argued that looping should be a lower priority compared to hardening transmission poles, and the program also does not reduce restoration costs. (Joint Parties BR 16-17) Further, the Transmission Loop Radial-Fed Substation Program is not currently being implemented and hence, is not covered by the 2021 Stipulation. (Joint Parties BR 17)

#### WALMART

Walmart adopted the position of OPC. (Walmart BR 3)

#### ANALYSIS

Section 366.96(4)(a), F.S., states that when reviewing a utility's transmission and distribution storm protection plan, the Commission shall consider the extent to which the plan is expected to reduce restoration costs and outage times associated with extreme weather events and enhance reliability, including whether the plan prioritizes areas of lower reliability performance. As discussed in Issue 1C, Rule 25-6.030(3)(d)(1), F.A.C, requires a utility to provide a description of how each proposed storm protection program is designed to enhance the utility's existing transmission and distribution facilities including an estimate of the resulting reduction in outage times and restoration costs due to extreme weather conditions.

DEF witness Lloyd testified that a similar process used for its 2020 SPP was also used for its 2023 SPP. (TR 126) DEF started with the same programs from its 2020 SPP, and utilized a model developed by Guidehouse to support its 2023 SPP program evaluation and prioritization. (TR 125-126) The Guidehouse model applied a three-tiered modeling and analysis approach, comprised of:

- Risk Model
- Prioritization / Benefit-Cost Analysis (BCA) Model
- Decision Analysis

#### (EXH 4, P 22)

The inputs to the model incorporated locational risk probabilities, outage data, asset data, and detailed program definitions. This information and others were then used to model the locational impacts of extreme weather conditions and the anticipated reduction in restoration costs and outage times. (EXH 4, P 4) The estimated reductions in outage times and restoration costs were provided in DEF's SPP on a program-level basis. (EXH 3, P 9, 18, 28, 32, 41, 47, 49, 52) For the outage times, witness DEF Lloyd testified that customer minutes of interruption (CMI) were used as a proxy for duration. (TR 127). DEF estimated that once a program is complete, the reduction in CMI for each program will range between approximately 900,000 to 439 million minutes annually, depending on the program. (EXH 3, P 9, 18, 28, 32, 41, 47, 49, 52)

In its brief, the Joint Parties argued that although some of DEF's programs will have an impact on outage times and restoration costs, many of the programs are not storm hardening and do not

meet the requirements of the SPP Rule. (Joint Parties BR 4) OPC's arguments and staff's analysis of the requirements of the SPP Rule are discussed in more detail in Issue 1C. OPC also argued that these programs were merely routine maintenance projects for an electric utility, and they should not be included in the Company's SPP. (Joint Parties BR 4, 6) This argument by OPC will be addressed in Issue 10C. All other intervening parties in this docket adopted the position of or agreed with OPC and, as such, no other argument was raised by an intervening party for this issue.

Staff believes that DEF provided the necessary information to meet the requirements of the SPP Statute and Rule related to this issue. Using the Guidehouse model to incorporate data specific information to its transmission and distribution facilities, the Company estimated the reduction in outage times and restoration costs that would result from the implementation of its proposed SPP programs. Based on the results of the model, DEF demonstrated that its proposed programs may reduce restoration costs and outage times associated with extreme weather events and may enhance reliability.

#### CONCLUSION

DEF utilized the Guidehouse model to support its 2023 SPP program evaluation and prioritization. The results of this model demonstrate that DEF's SPP is projected to reduce restoration costs and outage times associated with extreme weather events.

**Issue 3C:** To what extent does DEF's Storm Protection Plan prioritize areas of lower reliability performance?

**Recommendation:** DEF's SPP appears to prioritize areas of lower reliability performance. (Knoblauch)

# Position of the Parties

**DEF:** The prioritization methodology for each SPP Program includes the "Probability of Damage" from extreme weather events for each major asset component. Historical reliability performance of these assets is correlated with simulated future weather exposure conditions. This technique prioritizes areas of lower reliability performance. This is more fully described in Exhibit No. 3.

**JOINT PARTIES:** DEF has several proposed projects that prioritize areas of lower reliability performance; however, many of these programs and projects either do not qualify as permissible SPP programs or projects and/or are not economically justifiable.

**WALMART:** Walmart adopts the position of OPC.

# PARTIES' ARGUMENTS

#### DEF

DEF did not provide a specific argument for Issue 3C in its brief.

#### JOINT PARTIES

The Joint Parties stated that they did not have a specific concern with DEF's geographic prioritization efforts, and this issue did not factor into the objections raised by the Joint Parties regarding the spending of the SPP. (Joint Parties BR 17)

#### WALMART

Walmart adopted the position of OPC. (Walmart BR 4)

#### ANALYSIS

Section 366.96(4)(a), F.S., states that when reviewing a utility's transmission and distribution storm protection plan, the Commission shall consider the extent to which the plan is expected to reduce restoration costs and outage times associated with extreme weather events and enhance reliability, including whether the plan prioritizes areas of lower reliability performance. Rule 25-6.030(3)(e)1.d, F.A.C., requires a description of the criteria used to select and prioritize proposed SPP projects be provided.

DEF Witness Lloyd testified that a model was used for the Company's program evaluation and prioritization as was used with DEF's prior SPP. (TR 126) The model developed by Guidehouse and used by DEF applied a three-tiered modeling and analysis approach. (EXH 4, P 22)

- Risk Model
- Prioritization / Benefit-Cost Analysis (BCA) Model

• Decision Analysis

For the risk model and prioritization, a range of information at each location was utilized including asset data, historic outage data, risk data, and National Oceanic and Atmospheric Administration (NOAA) weather station data. Using this information, the Guidehouse model estimated the probabilistic failures before and after the storm hardening programs were implemented. (EXH 4, P 26)

The BCA model uses outputs from the risk model and other information to analyze the benefits and costs for each combination of program and location. (EXH 4, P 23) The BCA results were used for prioritization and for the deployment plan of the programs. (EXH 4, P 30) Based on the BCA results, a decision analysis was performed which was a high-level prioritization of projects. However, this high-level prioritization did not account for constraints like work crew availability, site-specific engineering considerations, and other prioritization factors. (EXH 4, P 23) Therefore, utilizing the results of the model, as well as taking into account factors such as multiple projects in the same area, critical customers, operational knowledge, and resource availability, DEF's subject matter experts were able to optimize the deployment plan. (EXH 3, P 9; EXH 3, P 41)

In its brief, the Joint Parties argued that DEF's geographic prioritization did not factor into its objections regarding the SPP spending. (Joint Parties BR 17) OPC witness Mara testified that with unchecked spending on SPP programs, an excessive burden will be placed on the rate payers. Therefore, a higher priority should be placed on equipment that is most vulnerable to extreme storms, such as feeders, laterals, and poles, which provides greater benefit in the early stages of implementation. (TR 686) Witness Mara argued this same point for DEF's transmission system, stating that if the Company put "a higher priority on strengthening the radial taps, the proposed looped transmission lines are not necessary to achieve storm hardening." (TR 711)

In rebuttal, DEF witness Lloyd testified that DEF first prioritized projects in the most vulnerable areas. (TR 1341) Nevertheless, customers who are served by circuits that are less vulnerable can still be impacted by extreme weather events. Witness Lloyd asserted that these types of customers "should have the opportunity for their circuits to be hardened even if the benefits to cost ratio is lower than higher prioritized projects." (TR 1342) Additionally, witness Lloyd testified that the appropriate funding level, which includes the acceptable level of customer bill impact, was an explicit limitation on a program scope. (TR 1340) The analysis of the rate impact and program limitation will be further discussed in Issue 6C.

Staff agrees with the concept presented by witness Mara of targeting the most vulnerable equipment that impacts the greatest number of customers. Laterals typically affect a small number of customers, unlike transmission that can impact thousands. That being said, staff does believe DEF's SPP prioritizes areas of lower reliability performance. DEF described the method and criteria it used to select and prioritize the proposed SPP projects while utilizing its three-tiered modeling and analysis approach. In addition to the results of the Guidehouse model, DEF also relied on its subject matter experts for further analysis and prioritization of the projects. As discussed above, the Joint Parties did not dispute that DEF's proposed projects prioritized areas of lower reliability. Instead, OPC disagreed with inclusion of several of DEF's programs and projects due to cost or qualification as a SPP program. These items are discussed further in

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Issues 6C and 10C. Thus, staff believes that DEF demonstrated its prioritization of SPP projects in areas of lower reliability performance.

#### CONCLUSION

DEF's SPP appears to prioritize areas of lower reliability performance.

**Issue 4C:** To what extent is DEF's Storm Protection Plan regarding transmission and distribution infrastructure feasible, reasonable, or practical in certain areas of the Company's service territory, including, but not limited to, flood zones and rural areas?

**Recommendation:** With the exceptions discussed in Issues 6C and 10C, DEF's SPP appears feasible, reasonable, and practical within the Company's service territory. (Knoblauch)

#### Position of the Parties

**DEF:** DEF's SPP is feasible, reasonable, and practical throughout the Company's service territory. The model used to produce DEF's SPP, detailed in Exhibit No. 3 and Exhibit No. 4, considered the geographic location and characteristics of each asset as part of the analysis of the feasibility and reasonableness of implementing the various SPP Programs at each given location.

**JOINT PARTIES:** A number of programs in flood zones that DEF has proposed for SPP inclusion would, absent the 2021 Stipulation, be more appropriately addressed in a base rate case since they do not harden the system from extreme storm events. Many of these programs fail the Two-Prong test.

**WALMART:** Walmart adopts the position of OPC.

# PARTIES' ARGUMENTS

#### DEF

DEF did not provide a specific argument for Issue 4C in its brief

#### JOINT PARTIES

The Joint Parties argued that the focus of their objections related to the lack of compliance of DEF's 2023 SPP with the SPP Statute and SPP Rule. The Joint Parties argued that the specific language "feasible, reasonable, or practical" is not a statutory test for determining prudence or public interest of a plan but relates to the "physical viability of plan components." (Joint Parties BR 18)

#### WALMART

Walmart adopted the position of OPC. (Walmart BR 4)

#### ANALYSIS

Section 366.96(4)(b), F.S., states that when reviewing a utility's transmission and distribution storm protection plan, the Commission shall consider the extent to which storm protection of transmission and distribution infrastructure is feasible, reasonable, or practical in certain areas of the utility's service territory, including, but not limited to, flood zones and rural areas. Rule 25-6.030(3)(c), F.A.C, requires a utility to provide a description of the utility's service area, including areas prioritized for enhancement and any areas where the utility has determined that enhancement of the utility's existing transmission and distribution facilities would not be feasible, reasonable, or practical. Integral to this description, the utility must include a general map, the number of customers served within each area, and its reasoning for prioritizing certain

areas for enhanced performance and for designating other areas of the system as not feasible, reasonable, or practical.

As a part of its SPP, DEF provided a map of its service territory, which included the number of customers served within each area. (EXH 5) Witness Lloyd testified that the Company did not determine any areas of its service territory in which it would not be feasible, reasonable, or practical to execute SPP projects. (TR 125) Further, witness Lloyd stated that DEF utilized a model to estimate the reduction in storm damage and outage duration for potential project locations. The model could then prioritize work by looking at the probability of damage to specific assets and the consequences of that damage, such as the number and/or type of customers served by a particular asset. The model allowed DEF to prioritize the projects over the life of a program, putting the highest benefit work first. Additionally, the outcome from the model was then evaluated by DEF subject matter experts for further analysis and prioritization. (TR 127)

As mentioned above, the Joint Parties argued that the language "feasible, reasonable, or practical" relates to the physical viability of a plan and is not used for determining prudence or public interest. (Joint Parties BR 18) OPC witness Mara testified that DEF's Underground Flood Mitigation Program appeared to be the replacement of aged assets, rather than flood mitigation. (TR 699) Witness Mara stated that it is more appropriate for the replacement costs of aged assets to be recovered through base rates as to prevent double counting of a unit. (TR 699) Another program that witness Mara identified as problematic was the Substation Flood Mitigation Program. Witness Mara testified that flood maps were issued in 1973; therefore, substations constructed after 1973 should have been designed to account for potential flood waters. (TR 708) Additionally, in instances where a transformer is de-energized due to flooding, the load from that substation Flood Mitigation Program would not reduce outage times or restoration costs. Witness Mara stated that DEF had "not had any outages due to flooding of its substations in recent years." (TR 709)

Absent a provision in DEF's 2021 Settlement Agreement,<sup>11</sup> witness Mara stated that he would recommend excluding the Underground Flood Mitigation Program from the Company's SPP, and would recommend including the Substation Flood Mitigation Program on a limited basis. (TR 700-701, TR 709-710) More specifically, for the Substation Flood Mitigation Program, witness Mara recommended excluding any substation where there is an alternate feed to the substation or for any substation that has not had a history of flooding or where flooding does not present a threat. (TR 709-710) However, witness Mara acknowledged that by excluding these costs, it would likely eliminate the entire 10-year budget for the Substation Flood Mitigation Program. (TR 710) Despite witness Mara's objections, the 2021 Settlement Agreement includes a provision that the costs incurred within DEF's SPP are properly recovered through the

<sup>&</sup>lt;sup>11</sup>Order No. PSC-2021-0202A-AS-EI, issued June 28, 2021, in Docket Nos. 20190110-EI, In re: Petition for limited proceeding for recovery of incremental storm restoration costs related to Hurricane Michael and approval of second implementation stipulation, by Duke Energy Florida, LLC, 20190222-EI, In re: Petition for limited proceeding for recovery of incremental storm restoration costs related to Hurricane Dorian and Tropical Storm Nestor, by Duke Energy Florida, LLC, 20210016-EI, In re: Petition for limited proceeding to approve 2021 settlement agreement, including general base rate increases, by Duke Energy Florida, LLC.

SPPCRC for cost recovery years 2023-2024, and these costs were removed from base rates. (TR 685, 1345) For this reason, witness Mara testified that his recommendations should not be considered for the rate recovery years 2023-2024 where they conflict with the provisions of the settlement agreement. (TR 685)

In his rebuttal testimony, DEF witness Lloyd testified that the focus of the Underground Flood Mitigation Program is to target existing underground distribution facilities in areas that are prone to storm surge during extreme weather events. While the program could include the replacement of aging equipment, that is not the objective of the program. (TR 1350) The Underground Flood Mitigation Program instead is replacing existing conventional switchgears with submersible switchgears, which are designed to withstand potential storm surges and flood waters. (TR 1351) Minimizing asset damage caused by storm surge will result in reduced customer outages and, according to DEF's SPP, expedite restoration after the storm surge has receded. (EXH 3, P 32)

In rebuttal to witness Mara's testimony regarding the Substation Flood Mitigation Program, witness Howe testified that all DEF substations were built to the existing standards in the year that they were installed. Additionally, the program targets substations at the highest risk of flooding using the most current 100-Year Federal Emergency Management Agency (FEMA) flood plain, which is reviewed and updated on a continuous basis. (TR 1276) Therefore, a substation built with an approved design at the time of construction could be "reclassified" in the future where the design is no longer sufficient for that location. OPC witness Howe testified that the model utilized for the Substation Flood Mitigation Program uses historical data to evaluate substations in the flood plain, along with further analytics to determine prudency and cost-effective measures for mitigation. Regarding witness Mara's assertions on substations without a history of flooding, witness Howe testified that witness Mara only examined three-years of flood data, which is not sufficient to prudently plan for the long-term functionality and service of a substation. (TR 1277)

Staff believes DEF has met the requirements of Rule 25-6.030(3)(c), F.A.C., by providing a map of its service area, the number of customers served within each area, and the methodology of prioritizing projects within its programs. While staff agrees with witness Mara that the replacement of aged assets does not always equate to storm hardening, witness Lloyd indicated that the new assets for the Underground Flood Mitigation Program are designed to withstand potential storm surges and flood waters. The implementation of the new assets, which are better equipped to withstand extreme weather events, will mitigate outages and reduce restoration time. For the Substation Flood Mitigation Programs, witness Mara did not present any specific outage or performance data for substations with alternate feeds. He stated that these substations could "likely" be switched to an adjacent substation not experiencing flood conditions; however, witness Mara did not identify any specific substations where this had occurred or could occur in the future. Given the variability of extreme weather events, it is not clear that a scenario as described by witness Mara of an available, unaffected, adjacent substation is reasonable to assume given the limited information.

Additionally, based on witness Howe's testimony, witness Mara only examined a limited amount of flood history data for DEF. Regarding rural customers, witness Lloyd testified at the hearing that when considering projects in low density areas, it is "necessary that those rural customers

still get an opportunity to have hardened assets." (TR 1355-1356) While witness Mara presented testimony on the Underground and Substation Flood Mitigation Programs, his recommendations are superseded by the 2021 Settlement Agreement, which the witness did not dispute. Staff recognizes that the 2021 Settlement Agreement includes a provision that these program costs are properly recovered through the SPPCRC; however, staff believes these programs also meet the requirements of the SPP Rule. In view of the information presented in DEF's SPP and witness testimony, specifically on the Underground and Substation Flood Mitigation Programs, staff believes DEF's SPP is reasonable in certain areas of the Company's service territory, including, but not limited to, flood zones and rural areas.

#### CONCLUSION

With the exceptions discussed in Issues 6C and 10C, DEF's SPP appears feasible, reasonable, and practical within the Company's service territory.

**Issue 5C:** What are the estimated costs and benefits to DEF and its customers of making the improvements proposed in the Storm Protection Plan?

**Recommendation:** The estimated costs of DEF's SPP programs are shown in Table 5C-1. The estimated benefits, characterized by the reduction in CMI, are discussed in Issue 2C. (Knoblauch)

#### Position of the Parties

**DEF:** The estimated benefits are provided in DEF's position on Issue 2C, and the estimated costs are shown on Exhibit No. 3, page 56.

**JOINT PARTIES:** DEF's SPP costs are accepted only for qualification purposes, but no reliable, objective benefits are reasonably and accurately quantified in terms of dollars. None of the DEF programs present benefits that exceed the costs when the cost/benefit analyses are corrected. Programs not economically justified are not prudent, and their costs would be imprudent and unreasonable. These programs should not be allowed in the SPP, subject to the 2021 Stipulation, where applicable.

WALMART: Walmart adopts the position of OPC.

#### PARTIES' ARGUMENTS

#### DEF

DEF argued that based on OPC's assertions, none of the utilities' proposed SPP Programs had benefits that outweighed the costs or were cost-effective. DEF argued that it had provided a benefit/cost analysis, though OPC took issue with the Company's utilization of the Interruption Cost Estimator (ICE) to assign a value to the avoided CMI. OPC witness Kollen had testified that quantifying a societal value of customer interruptions is subjective; however, DEF argued that OPC had insisted that a quantification of the estimated benefits was needed. (DEF BR 15) DEF argued that it did perform a quantification of the benefits, as OPC argued was required by the SPP Rule, and showed its SPP's benefits exceeded the costs. (DEF BR 16)

#### **JOINT PARTIES**

The Joint Parties argued DEF's estimated program benefits were largely assessed based on societal benefits that were converted to dollar amounts using the ICE model. (Joint Parties BR 18-19) The Joint Parties argued that DEF was unable to explain how the ICE model values were determined or if the values were applicable to the Company's service area. Further, the importance of avoided power outages for each individual residential customer will vary drastically depending on the customer's specific circumstances. (Joint Parties BR 19) The Joint Parties argued the ICE quantification provided in DEF's rebuttal testimony were spread across all programs, giving the impression that the programs are cost-effective. (Joint Parties BR 20) Once the estimated storm restoration cost savings are removed, the remaining numerical benefits are made up entirely of ICE-generated societal benefit values, meaning the ICE calculated values give the illusion that the programs are cost-effective. (Joint Parties BR 20-21) The Joint Parties argued that DEF witness Lloyd acknowledged that he could not explain how the ICE values were determined, but that they were conservative estimates. DEF utilized a contractor, Guidehouse, for modeling and the determination of societal benefits. (Joint Parties BR 21) The Joint Parties

argued that there was a "circular nature of the input and verification process" and the ICE model was used to provide the appearance of cost-effective programs. (Joint Parties BR 22) Unless the outage avoidance ICE values are incorporated into the cost/benefit comparison, none of DEF's programs are cost-effective. (Joint Parties BR 23)

#### WALMART

Walmart adopted the position of OPC. (Walmart BR 5)

#### ANALYSIS

Section 366.96(4)(c), F.S., states that when reviewing a utility's transmission and distribution storm protection plan, the Commission shall consider the estimated costs and benefits to the utility and its customers of making the improvements proposed in the plan. Rule 25-6.030(3)(d)4., F.A.C., requires a utility to provide a comparison of the estimated program costs, including capital and operating expenses, and the benefits, as identified and discussed in Issue 2C.

For each SPP program, DEF listed the estimated capital costs and operating expenses, which are summarized in Table 5C-1. The Company compared these costs with the estimated benefits that could be achieved from the completion of its programs. The benefits included the reduction in outage times (CMI reduction), as discussed in Issue 2C. (EXH 3, P 9, 18, 28, 32, 41, 47, 49, 52)

Drogram	2023	2024	2025		
riografii	(millions)	(millions)	(millions)		
Distribution Feeder Hardening	\$163.3	\$147.0	\$171.5		
Distribution Lateral Hardening	\$208.4	\$243.0	\$275.6		
Distribution Self-Optimizing Grid	\$77.3	\$136.7	\$136.7		
Distribution Underground Flood Mitigation	\$1.0	\$1.5	\$1.5		
Transmission Structure Hardening	\$142.5	\$153.6	\$167.7		
Transmission Substation Flood Mitigation	\$3.8	\$3.8	\$3.8		
Transmission Loop Radially Fed Substations	-	-	\$10.3		
Transmission Substation Hardening	\$9.5	\$11.5	\$14.0		
Distribution Vegetation Management	\$47.1	\$48.5	\$49.9		
Transmission Vegetation Management	\$21.8	\$24.9	\$23.2		
Total	\$674.7	\$770.5	\$854.2		

Table 5C-1 DEF's 2023-2025 SPP Program Costs

Source: (EXH 25, P 1)

In its brief, the Joint Parties argued that DEF did determine quantitative benefits in its SPP; however, they were not reliable or objective. (Joint Parties BR 18-20) Additionally, OPC stated that from the cost/benefit analysis presented by DEF, the incremental costs of the SPP programs have costs that exceed the benefits. In such instances, the programs and projects are not economically justified or prudent and should be excluded from the plan. OPC's arguments and staff's analysis on the requirements of a cost-effectiveness analysis are discussed in Issue 1C. Staff believes that DEF provided the necessary information to meet the requirements of the SPP

Rule. As discussed in Issue 2C, DEF estimated the reduction in outage times and restoration costs that could result from the implementation of its proposed SPP programs. The Company also listed in its plan the program costs, including capital and operating expenses. Therefore, the estimated costs and benefits to DEF and its customers as a result of the proposed programs were presented by the Company in its SPP.

#### CONCLUSION

The estimated costs of DEF's SPP programs are shown in Table 5C-1. The estimated benefits, characterized by the reduction in CMI, are discussed in Issue 2C.

*Issue 6C:* What is the estimated annual rate impact resulting from implementation of DEF's Storm Protection Plan during the first 3 years addressed in the plan?

**Recommendation:** The estimated annual rate impact, as provided by DEF, is projected to increase approximately 108 percent the first three years of its Storm Protection Plan. In order to mitigate the rate impact to DEF's customers, staff recommends DEF's Distribution Lateral Hardening Program continue at the 2022 annual spending levels, approximately \$187.3 million per year, beginning in 2023. (Knoblauch)

#### Position of the Parties

#### DEF:

Estimated SPP Rate Impacts			
Residential \$/1,000 kWh	2023	2024	2025
(1) Estimated SPP Rate Impact	\$4.21	\$6.52	\$8.75
(2) Typical Commercial % Increase from prior year Bill	1.0%-1.2%	1.4%-1.6%	1.3%-1.5%
(3) Typical Industrial % Increase from prior year Bill	0.8%-1.2%	1.2%-1.7%	1.1%-1.6%

Estimates the first three years of the SPP Residential Rate factor. Commercial & Industrial % increase incorporates base rate increases set forth in DEF's 2021 Settlement, approved in Order No. PSC-2021-0202A-AS-EI.

**JOINT PARTIES:** The rate impacts are estimated in the proposed Updated Plan. To the extent that they included inappropriate costs or exclude cost savings they are overstated. The Commission should consider these impacts and associated revenue requirements in the context of coming rate increases and adopt the Joint Parties' recommendations.

WALMART: Walmart takes no position, as Walmart has not conducted this analysis.

# PARTIES' ARGUMENTS

#### DEF

DEF argued that it disagreed with OPC's position regarding the spending levels between the 2020 SPP and 2023 SPP. While OPC argued that there was a large increase in spending from the Company's 2020 SPP to its 2023 SPP, DEF asserted that this was not accurate as the plans cannot be compared. (DEF BR 26-27) DEF argued that there were fairly low levels of capital investment in the 2020 Plan because it was still in development and was not fully funded or implemented until year 2022. Moreover, if a capital spending comparison were to be made between the common years for the 2020 SPP and the 2023 SPP, the spending actually decreases. (DEF BR 27) Although the Company recognizes the current economic climate, DEF argued that decreasing the 2023 SPP investment level by an arbitrarily amount would also reduce or delay the benefits realized from the plan. (DEF BR 28) Further, the SPP Statute states that it is in the state's interest to strengthen utility infrastructure. DEF argued the residential rates impact related to the 2023 SPP would be roughly one percent per year, which is similar for the commercial and

industrial customers. (DEF BR 29) Given the risk of extreme weather events to Florida customers, DEF argued the benefits of its SPP should not be delayed. (DEF BR 29-30)

#### JOINT PARTIES

The Joint Parties argued the revenue requirements for the 2023 SPP increase significantly from year to year, which is further compounded when taking into account the base rate increases from the 2021 DEF rate case settlement. (Joint Parties BR 24-25) The Joint Parties argued that DEF supplied its modeling contractor, Guidehouse, with "directional targets" for spending plan options, but the final proposed SPP only considered its own financial objectives rather than customer impacts. (Joint Parties BR 25) Considering the lack of cost-effectiveness and statutory compliance of DEF's programs, the Joint Parties argued the 2023 SPP budget should be held at the 2020 spending levels. (Joint Parties BR 26)

#### WALMART

Walmart did not take a position on this issue as it has not conducted an analysis. (Walmart BR 5)

#### ANALYSIS

Section 366.96(4)(d), F.S., states that when reviewing a utility's transmission and distribution storm protection plan, the Commission shall consider the estimated annual rate impact resulting from implementation of the plan during the first three years addressed in the plan. Rule 25-6.030(3)(h), F.A.C., requires the utilities to provide an estimate of the rate impact for each of the first three years of its SPP for the utility's typical residential, commercial, and industrial customers. In addition, Rule 25-6.030(3)(i), F.A.C., requires that could mitigate the resulting rate impact. This issue will address the annual rate impacts for the first three years of the Company's SPP and deployment alternatives that would mitigate rate impacts to customers.

Figure 6C-1 is a graph of DEF's SPP estimated program costs for 2021 through 2025. As shown on the graph, DEF's Distribution Lateral Hardening Program is the highest cost program and is moving forward at an accelerated pace while its other programs are relatively constant.



Figure 6C-1

Source: EXH 3, EXH 26

DEF provided the estimated rate impacts for each type of customers, which is shown in Table 6C-1. As the shown in the table, the residential rate impact increases approximately 55 percent from 2023 to 2024 and 108 percent from 2023 to 2025.

SFF Estimated Nate impacts (2023-2023)					
Customer Class	2023	2024	2025		
Residential (\$/1,000 kWh)	\$4.21	\$6.52	\$8.75		
Typical Commercial Percent Increase from Prior Year Bill*	1.0%-1.2%	1.4%-1.6%	1.3%-1.5%		
Typical Industrial Percent Increase from Prior Year Bill*	0.8%-1.2%	1.2%-1.7%	1.1%-1.6%		

Table 6C-1 SPP Estimated Rate Impacts (2023-2025)

\*Commercial & Industrial percent increase incorporates base rate increases set forth in DEF's 2021 Settlement, approved in Order No. PSC-2021-0202A-AS-EI. Source: (EXH 3, P 56)

OPC witness Mara compared DEF's 2020-2029 SPP to its current 2023-2032 SPP capital costs and determined there was an increase of more than \$682 million in spending over the 10-year plan. (TR 683) Comparing the costs on a per customer basis, witness Mara calculated the ratio of capital spending to the number of customers had increased more than 10 percent. (TR 684) Witness Mara stated that "the only limit to the magnitude of the SPP budgets was the limitation of resources in terms of engineers and construction personnel realistically available to complete the annual goals of the program." (TR 728) In other words, rather than considering the rate impact to customers, the only limit on spending for DEF's SPP was based on resource availability. As a result, witness Mara proposed a reduction in capital spending of \$2.0 billion. Table 6C-1 is a summary of witness Mara's adjustments.

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witness Mara's Recommended Program Adjustments				
Program	Total 2023- 2032 SPP (millions)	Reductions Proposed by Mara (millions)	Net 2023- 2032 SPP (millions)	Reason for Reduction
Feeder Hardening	\$2,027	(\$500)	\$1,527	Limit impact to customers
Lateral Hardening	\$2,931	(\$700)	\$2,231	Limit impact to customers
Self-Optimizing Grid	\$340	(\$340)	\$0	Does not comply with SPP Rule
Underground Flood Mitigation	\$15	(\$15)	\$0	Does not comply with SPP Rule
Structure Hardening	\$1,603	(\$200)	\$1,403	Does not comply with SPP Rule
Substation Flood Mitigation	\$38	(\$38)	\$0	Does not comply with SPP Rule
Loop Radially Fed Substations	\$82	(\$82)	\$0	Does not comply with SPP Rule
Substation Hardening	\$133	(\$133)	\$0	Does not comply with SPP Rule

 Table 6C-2

 Witness Mara's Recommended Program Adjustments

Source: (TR 685)

However, witness Mara testified that his recommended adjustments and elimination of six programs in their entirety were superseded by a stipulation approved by the Commission in Order No. PSC-2021-0202A-AS-EI. According to the OPC witnesses, the programs or subprograms which witness Mara recommended for exclusion from DEF's SPP for not complying with the SPP Rule, conflict with the provisions of the 2021 Settlement Agreement. As discussed in Issue 1C, staff does not agree with witnesses Kollen and Mara's interpretation of the SPP Rule and does not recommend adjustments due to lack of compliance with the SPP Rule to the six programs.

For the Feeder Hardening Program, witness Mara testified that the program budget for 2023-2032 is \$1.8 billion compared to \$1.5 billion in DEF's 2020 SPP. (TR 691) Witness Mara recommended keeping the Feeder Hardening Program at the same level as the 2020-2029 SPP at \$1.5 billion or essentially capping the annual spending at \$150 million per year. In addition, witness Mara recommended eliminating the costs related to clearance encroachments from the program. (TR 691-692) The witness asserted that DEF has a duty to maintain the appropriate distance from the buildings and other structures; therefore, it is DEF's sole responsibility for correcting encroachment problems. (TR 691)

For the Lateral Hardening Program, witness Mara testified that the program budget for 2023-2032 is \$2.9 billion compared to \$2.2 billion in DEF's 2020-2029 SPP. Witness Mara recommended reducing the budget for the Lateral Undergrounding and the Lateral Overhead Hardening sub-programs, with no change to the pole inspection and pole replacement budget. The 10-year costs for the Undergrounding and Overhead Hardening sub-programs totals \$2.5 billion, which witness Mara recommended reducing to approximately \$1.8 billion. (TR 694) This would cap the annual spending for this program to approximately \$180 million per year. (TR

695) However, his calculation is based on the total program cost for the 10-year period. Staff recommends that making any adjustments based on a 10-year budget is not practical given that the Commission must review a utility's SPP at least every three years as well as conduct annual cost-recovery proceedings.

On rebuttal, DEF witness Lloyd testified that DEF's 2020 SPP and 2023 SPP should not be compared since 2020 and 2021 were transitional years as the Company worked to finish other projects and to ramp up engineering and construction. (TR 1346) As an example, work for the Feeder Hardening Program did not start until 2021, resulting in an appearance of an increase in cost from DEF's 2020 SPP. However, the costs for the 2023 SPP reaches a steady state and are actually a continuation of DEF previously approved plan. (TR 1346-1347) Addressing the clearance encroachments, witness Lloyd testified that the Company requires proper clearances for new pole locations, sizes, and guying, which cannot be met with existing overhead structures in the public right of way. DEF is also required to maintain clearance to other existing public and privately-owned underground facilities. Witness Lloyd stated that "newly installed facilities should remain open to truck access for maintenance purposes and should be in easements or adjacent to roadways as outlined in Rule 25-6.0341 (Location of the Utility's Electric Distribution Facilities)." (TR1347)

Utility facilities are designed and built to serve customers 24/7 and the basic standards of construction and maintenance account for normal weather conditions including some contingencies such as maintenance requirements, vehicle strikes, lightning, etc. As such, the primary purpose of storm hardening is to mitigate outages due to extreme weather which would subsequently reduce restoration time and costs to all ratepayers. Any resulting improvements to day to day reliability are secondary to the goal of storm hardening and would only benefit the customers directly impacted by the project or activity. Since lateral hardening projects are smaller in scale and more focused geographically, the likelihood of the project producing benefits for the general body of ratepayers is limited. Realizing that storm hardening costs may or may not produce actual financial benefits during a given time, the Commission has encouraged utilities to focus on projects that would impact the largest numbers of customers, such as transmission projects, and has relied upon the resulting estimated rate impact to customers as a guide to determine the reasonable level of storm hardening.

Prior to the enactment of Section 366.96, F.S., storm hardening expenditures were recovered from utility customers through base rates. When these prior storm hardening plans were approved, the Commission stated repeatedly that approval of the plan was not approval for cost recovery purposes and that the utility should consider rate impacts as it proactively implemented its plan. (See Order PSC-2019-0312-PAA-EI) These cautionary directives are consistent with the fact that the level of storm hardening is a discretionary activity that requires close attention to the resulting rate impacts. However, Section 366.96(7), F.S., states "[a]fter a utility's transmission and distribution storm protection plan has been approved, proceeding with actions to implement the plan shall not constitute or be evidence of imprudence." Therefore, Commission approval of a storm protection plan is now also an approval of the level of storm protection activity. Such approval also has a direct and more frequent impact on rates due to the annual cost recovery mechanism. Unlike other costs, such as fuel costs, the level of storm hardening and the

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associated costs are discretionary. There are no mandates as to the activity level of an SPP program which is within DEF's control.

In addition, Rule 25-6.030(3)(i), F.A.C., requires the utilities to provide a description of any alternatives that could mitigate the rate impact for each of the first three years of the SPP. DEF reported that it has not identified any reasonable implementation alternatives that could mitigate the resulting rate impact. (TR 129) However, DEF's Distribution Lateral Hardening Program would directly affect a much smaller number of customers when compared to other types of programs, such as transmission projects, and accounts for the majority of the projected increase in SPP costs. Therefore, staff agrees with OPC that reducing the rate impact on customers is appropriate at this time. For these reasons, staff recommends that DEF's Distribution Lateral Hardening Program continue at the level spent on this Program in 2022, approximately \$187.3 million per year, in order to mitigate the rate impact to customers.<sup>12</sup> Staff is not disputing that the Distribution Lateral Hardening Program is in the public interest; rather, staff is recommending to slow down the program's activity and annual spending.

For DEF's Feeder Hardening Program, staff recommends no adjustment to the Program budget. Compared to the Lateral Hardening Program, the Program budget for the Feeder Hardening Program makes up a smaller percentage of the total SPP costs and will impact a larger number of customers. Specific to the clearance encroachments concerns identified by witness Mara, staff is inclined to agree with witness Lloyd that encroachment issues may occur when installing new hardened poles and it is appropriate to address these issues within this program.

#### CONCLUSION

The estimated annual rate impact, as provided by DEF, is projected to increase approximately 108 percent the first three years of its Storm Protection Plan. In order to mitigate the rate impact to DEF's customers, staff recommends DEF's Distribution Lateral Hardening Program continue at the 2022 annual spending levels, approximately \$187.3 million per year.

<sup>&</sup>lt;sup>12</sup> The actual value will be determined as part of the SPPCRC proceeding.

**Issue 10C:** Is it in the public interest to approve, approve with modification, or deny DEF's Storm Protection Plan?

**Recommendation:** Staff recommends DEF's SPP meets the requirements of Rule 25-6.030, F.A.C., as discussed in Issue 1C. Staff recommends that DEF's SPP, with the following modifications, is in the public interest and should be approved: (1) continue the level of spending for the Distribution Lateral Hardening Program at the 2022 level; and, (2) remove the Transmission Loop Radially Fed Substation Program. DEF should file an amended SPP within 30 days of issuance of the final order for administrative approval by Commission staff. (Knoblauch)

# Position of the Parties

**DEF:** DEF's 2023 SPP is in the public interest and should be approved without modification. DEF demonstrated by a preponderance of the evidence that its 2023 SPP is estimated to provide the outage reduction and restoration cost reductions the Legislature has determined to be in the public interest, and does so in a cost-effective manner.

**JOINT PARTIES:** No, the DEF SPP 2023 should not be approved without modification. The programs are not cost-effective, compliant or prudent to undertake. Except for the programs/projects that are subject to the, the plan should not be approved as filed. Subject to 2021 Stipulation for 2023 and 2024, the adjustments recommended by Kevin J. Mara at TR 685 are required.

**WALMART:** Walmart believes the public interest would benefit if the Commission directs each utility to continue to collaborate with interested stakeholders during the interim period before their next required updated SPPs to develop ways in which customer-sited generation may be utilized as part of the SPP in order to strengthen the T&D systems and provide customers with lower restoration costs, shorter outage periods, and more reliable electric service overall.

# DEF

# PARTIES' ARGUMENTS

DEF argued its 2023 SPP, as required by the SPP Statute and Rule, balances the costs to customers along with the resulting benefits. DEF argued that all of its SPP programs would reduce restoration costs and outages, improve reliability, and are cost-effective. Therefore, DEF argued that the Commission should approve its 2023 SPP without modification as it complies with the requirements of the SPP Rule and is in the public interest as outlined by the SPP Statute. (DEF BR 30)

# JOINT PARTIES

As laid out in Issues 2C and 5C, the Joint Parties argued the DEF's proposed SPP programs are not cost-effective and do not reduce both restoration costs and outage times. Nevertheless, the Commission should allow the inclusion of the Distribution Feeder Hardening and Distribution Lateral Hardening Programs at the reduced spending levels outlined by OPC witness Mara. The six programs discussed in Issue 2C should be included for the years 2023 and 2024, but for 2025 and beyond, the programs should be excluded from DEF's SPP. The Distribution and

Transmission Vegetation Management Programs should remain in DEF's SPP as proposed. (Joint Parties BR 27)

#### WALMART

Walmart argued it would be in the public interest if DEF would continue to collaborate with Walmart and other interested stakeholders to develop ways in which customer-sited generation may be utilized to strengthen DEF's system. (Walmart BR 6)

#### ANALYSIS

Section 366.96(5), F.S., states that the Commission shall determine, no later than 180 days after a utility files its plan, "whether it is in the public interest to approve, approve with modification, or deny the plan." Unlike the Storm Hardening Plans, Section 366.96(7), F.S., states that once a storm protection plan is approved, a utility's "actions to implement the plan shall not constitute or be evidence of imprudence." As discussed in Issue 1C, staff recommends that DEF's filing satisfies the requirements of Rule 25-6.030, F.A.C., and provides the Commission with adequate information in order to satisfy its statutory requirements.

As described by DEF witness Lloyd, the Company's proposed SPP covers the period of 2023-2032, and uses the same analysis methodology and programs that were included in its previous SPP for the period of 2020-2029. (TR 122) DEF's SPP includes the following 10 programs:

- Distribution Feeder Hardening
- Distribution Lateral Hardening
- Distribution Self-Optimizing Grid
- Distribution Underground Flood Mitigation
- Transmission Structure Hardening
- Transmission Substation Flood Mitigation
- Transmission Loop Radially Fed Substations
- Transmission Substation Hardening
- Distribution Vegetation Management
- Transmission Vegetation Management

As discussed in prior issues, OPC witness Mara recommended modifications to all of DEF's SPP programs, except for the vegetation management programs. Witness Mara's recommendations are summarized in Table 10C-1. FIPUG, PCS, and NUCOR took the same position and agreed with OPC. Walmart provided no witness testimony but argued in its brief that it would be in the public interest if DEF continued to collaborate with Walmart and other interested stakeholders to develop ways in which customer-sited generation may be utilized to strengthen DEF's system. (Walmart BR 6) Although staff agrees with continuing the collaboration between utilities and interested stakeholders, the SPP Statute does not contemplate customer-sited generation. Section 366.96(2)(b), F.S., defines a transmission and distribution storm protection plan as "a plan for the overhead hardening and increased resilience of electric transmission and distribution facilities, undergrounding of electric distribution facilities, and vegetation management." Thus, on-site generation does not meet the definition as laid out in the statute. As discussed in Issue 1C, staff does not agree with witnesses Kollen and Mara's interpretation of the SPP Rule and

does not recommend adjustments due to lack of compliance with the SPP Rule to the six programs listed in Table 10C-1.

Table 10C-1

Witness Mara's Recommended Program Adjustments						
Program	Total 2023- 2032 SPP (millions)	Reductions Proposed by Mara (millions)	Net 2023- 2032 SPP (millions)	Reason for Reduction		
Feeder Hardening	\$2,027	(\$500)	\$1,527	Limit impact to customers		
Lateral Hardening	\$2,931	(\$700)	\$2,231	Limit impact to customers		
Self-Optimizing Grid	\$340	(\$340)	\$0	Does not comply with SPP Rule		
Underground Flood Mitigation	\$15	(\$15)	\$0	Does not comply with SPP Rule		
Structure Hardening	\$1,603	(\$200)	\$1,403	Does not comply with SPP Rule		
Substation Flood Mitigation	\$38	(\$38)	\$0	Does not comply with SPP Rule		
Loop Radially Fed Substations	\$82	(\$82)	\$0	Does not comply with SPP Rule		
Substation Hardening	\$133	(\$133)	\$0	Does not comply with SPP Rule		

Source: (TR 685)

Witness Mara's rate mitigation recommendations for the Feeder and Lateral Hardening Programs were discussed in detail in Issue 6C, as well as staff's recommended adjustments. Further, as stated previously in Issue 6C, witness Mara acknowledges that his recommended adjustments to the remaining six programs are superseded by a stipulation approved by the Commission in Order No. PSC-2021-0202A-AS-EI. The stipulation allows for the costs of the six programs to be included in the SPPCRC for recovery in the years 2023-2024. With the exception of the Loop Radially Fed Substations Program that is discussed below, the remainder of the programs meet the requirements of the SPP Rule, are a continuation of DEF's 2020 SPP, and are built upon the foundation established in DEF's Storm Hardening Plans. (TR 125, 211)

Staff does have concerns regarding the Transmission Loop Radially Fed Substations (LRFS) Program, which is scheduled to start in 2025. Since the Program has not yet begun, DEF was not required to provide project-level detail since none of the projects will fall within the first year (2023) of the plan per the SPP Rule. The information provided for the scope of the Transmission LRFS Program was it would address approximately 17 sites over 20 years, the estimated 10-year cost would be approximately \$82 million, and a description listing the types of assets that would be targeted. (EXH 3, P 49) While staff believes DEF met the requirements of the SPP Rule, there is limited, particularly project-level detail for the Transmission LRFS Program at this time.

Moreover, staff does not believe the Transmission LRFS Program meets the objective of storm protection or hardening. Utility storm protection or hardening is a discretionary activity that goes above and beyond the basic standard of service to strengthen a utility's existing infrastructure to

withstand the potential for extreme weather. Looping substations is a common utility practice to ensure reliable service. Rule 25-6.030(1)(a), F.A.C., defines a storm protection program as a collection of projects that "enhance the utility's <u>existing</u> infrastructure." (Emphasis added) The Transmission LRFS Program involves the construction of new redundant infrastructure, rather than the enhancement or hardening of existing facilities. While staff agrees that such activity may enhance a utility's transmission system, it does not strengthen existing transmission facilities. Therefore, staff recommends that a new redundant infrastructure project, such as looping substations, should not be characterized as storm protection pursuant to Rule 25-6.030(1)(a), F.A.C. Witness Mara testified to the concept of limiting programs, stating that "unchecked spending on SPP programs will result in an excessive burden on the rate payers." (TR 685-686) As previously discussed, customer rate impact is a critical component of encouraging storm protection activities.

In summary, as discussed in Issue 6C, staff recommends DEF's Lateral Hardening Program be continued at its 2022 spending level, and the Transmission LRFS Program be excluded from DEF's 2023 SPP. The Transmission LRFS Program is not planned to begin until 2025; therefore it is not in conflict with the stipulation approved by the Commission which addresses cost recovery for years 2023 and 2024. With these two modifications, staff recommends that DEF's SPP is in the public interest. DEF should file an amended SPP within 30 days of issuance of the final order for administrative approval by Commission staff.

#### CONCLUSION

Staff recommends DEF's SPP meets the requirements of Rule 25-6.030, F.A.C., as discussed in Issue 1C. Staff recommends that DEF's SPP, with the following modifications, is in the public interest and should be approved: (1) continue the level of spending for the Distribution Lateral Hardening Program at the 2022 level; and (2) remove the Transmission Loop Radially Fed Substation Program. DEF should file an amended SPP within 30 days of issuance of the final order for administrative approval by Commission staff.

*Issue 11C:* Should this docket be closed?

**Recommendation:** No. As discussed in Issue 10C, DEF should file an amended SPP within 30 days of issuance of the final order for administrative approval by Commission staff. Therefore, the docket should remain open for staff's verification that the amended SPP has been filed and complies with the Commission's order. Once these actions are complete, this docket should be closed administratively. (Trierweiler, Imig)

# Position of the Parties

DEF: Yes, after the Commission enters its final order, this docket should be closed.

**JOINT PARTIES:** The Docket should remain open for DEF to amend their filing consistent with the modifications the commission orders. OPC has raised a legal issue regarding the Order striking Mr. Kollen's testimony. The legal issue requires resolution before the docket is closed. In connection with the legal issue, both parties have made evidentiary proffers which must be considered if OPC prevails on the legal issue.

# WALMART: Yes.

# PARTIES' ARGUMENTS

# DEF

No post-hearing position or argument was provided in its brief.

# JOINT PARTIES

No post-hearing position or argument was provided in its brief.

# WALMART

No post-hearing position or argument was provided in its brief.

# CONCLUSION

As discussed in Issue 10C, DEF should file an amended SPP within 30 days of issuance of the final order for administrative approval by Commission staff. Therefore, the docket should remain open for staff's verification that the amended SPP has been filed and complies with the Commission's order. Once these actions are complete, this docket should be closed administratively.

# Duke Energy Florida, LLC Proposed 2023-2032 Storm Protection Plan Programs

#### **Distribution Feeder Hardening**

By incorporating pole inspection and replacement activities, existing feeder circuits can be strengthened to better withstand extreme weather events. This includes strengthening or replacing structures, updating basic insulation levels and conductors to current standards, relocating difficult to access facilities, relocating or undergrounding facilities to address clearance encroachments, and replacing oil filled equipment as appropriate. All new structures will meet the NESC 250C extreme wind load standard.

#### **Distribution Lateral Hardening**

This program will enable branch lines to better withstand extreme weather events. The Lateral Hardening Program includes undergrounding of the laterals that are most prone to damage during extreme weather events and overhead hardening of those laterals less prone to damage.

#### **Distribution Self-Optimizing Grid**

This program utilizes automated switching which allows most circuits to be restored from alternate sources. In addition, the program provides segmentation such that the distribution circuits have much smaller line segments, thus reducing the number of customers that are affected by outages.

#### **Distribution Underground Flood Mitigation**

Underground facilities that are prone to storm surge will be converted to submersible lines and equipment. In some cases, the pad mounted equipment is placed on elevated structures, which raises the equipment two to four feet above grade, to mitigate potential flood impacts.

#### **Distribution Vegetation Management**

The program consists of routine maintenance trimming, hazard tree removal, herbicide applications, vine removal, customer requested work, and right-of-way brush mowing. DEF trims its feeders on a three-year cycle and trims its laterals on a five-year cycle.

#### Transmission Structure Hardening

This program includes wood to non-wood upgrades, tower upgrades, adding cathodic protection, automating gang operated air break switches, overhead groundwire upgrades, and structure inspections.

#### **Transmission Substation Flood Mitigation**

This program builds in protection for substations most vulnerable to flood damage using flood plain and storm surge data. It includes a systematic review and prioritization of substations at risk of flooding to determine the proper mitigation solution, which may include elevating or modifying equipment, or relocating substations altogether. New assets could include control houses, relays, or total station rebuilds to increase elevation, etc.

#### Transmission Loop Radially-Fed Substations

This program builds a more resilient and networked transmission system by creating a secondary feed into substations that are more likely to experience long outage durations during extreme weather events. As part of the additional feed construction, other assets could include equipment such as breakers, switches, bus work, structures, insulators, potential transformers, lightning arresters, relays, control houses.

#### Transmission Substation Hardening

The replacement of electro-mechanical relays with electronic relays is designed to support rapid restoration. Electronic relays are equipped with communication capabilities and microprocessor technology, which enables a quicker recovery from events. Relay upgrades will be matched with breaker replacements when feasible.

#### **Transmission Vegetation Management**

DEF trims its transmission system on a three to six-year cycle in order to minimize vegetation related interruptions and ensures adequate conductor-to-vegetation clearances. The program consists of danger tree identification and mitigation, reactive work, herbicide, mowing, and hand cutting brush management.

#### 366.96 Storm protection plan cost recovery.—

(1) The Legislature finds that:

(a) During extreme weather conditions, high winds can cause vegetation and debris to blow into and damage electrical transmission and distribution facilities, resulting in power outages.

(b) A majority of the power outages that occur during extreme weather conditions in the state are caused by vegetation blown by the wind.

(c) It is in the state's interest 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.

(d) Protecting and strengthening transmission and distribution electric utility infrastructure from extreme weather conditions can effectively reduce restoration costs and outage times to customers and improve overall service reliability for customers.

(e) It is in the state's interest for each utility to mitigate restoration costs and outage times to utility customers when developing transmission and distribution storm protection plans.

(f) All customers benefit from the reduced costs of storm restoration.

(2) As used in this section, the term:

(a) "Public utility" or "utility" has the same meaning as set forth in s. <u>366.02(8)</u>, except that it does not include a gas utility.

(b) "Transmission and distribution storm protection plan" or "plan" means a plan for the overhead hardening and increased resilience of electric transmission and distribution facilities, undergrounding of electric distribution facilities, and vegetation management.

(c) "Transmission and distribution storm protection plan costs" means the reasonable and prudent costs to implement an approved transmission and distribution storm protection plan.

(d) "Vegetation management" means the actions a public utility takes to prevent or curtail vegetation from interfering with public utility infrastructure. The term includes, but is not limited to, the mowing of vegetation, application of herbicides, tree trimming, and removal of trees or brush near and around electric transmission and distribution facilities.

(3) Each public utility shall file, pursuant to commission rule, a transmission and distribution storm protection plan that covers the immediate 10-year planning period. Each plan must explain the systematic approach the utility will follow to achieve the objectives of reducing restoration costs and outage times associated with extreme weather events and enhancing reliability. The commission shall adopt rules to specify the elements that must be included in a utility's filing for review of transmission and distribution storm protection plans.

(4) In its review of each transmission and distribution storm protection plan filed pursuant to this section, the commission shall consider:

(a) The extent to which the plan is expected to reduce restoration costs and outage times associated with extreme weather events and enhance reliability, including whether the plan prioritizes areas of lower reliability performance.

(b) The extent to which storm protection of transmission and distribution infrastructure is feasible, reasonable, or practical in certain areas of the utility's service territory, including, but not limited to, flood zones and rural areas.

(c) The estimated costs and benefits to the utility and its customers of making the improvements proposed in the plan.

(d) The estimated annual rate impact resulting from implementation of the plan during the first 3 years addressed in the plan.

(5) No later than 180 days after a utility files a transmission and distribution storm protection plan that contains all of the elements required by commission rule, the commission shall determine whether it is in the public interest to approve, approve with modification, or deny the plan.

(6) At least every 3 years after approval of a utility's transmission and distribution storm protection plan, the utility must file for commission review an updated transmission and distribution storm protection plan that addresses each element specified by commission rule. The commission shall approve, modify, or deny each updated plan pursuant to the criteria used to review the initial plan.

(7) After a utility's transmission and distribution storm protection plan has been approved, proceeding with actions to implement the plan shall not constitute or be evidence of imprudence. The commission shall conduct an annual proceeding to determine the utility's prudently incurred transmission and distribution storm protection plan costs and allow the utility to recover such costs through a charge separate and apart from its base rates, to be referred to as the storm protection plan cost recovery clause. If the commission determines that costs were prudently incurred, those costs will not be subject to disallowance or further prudence review except for fraud, perjury, or intentional withholding of key information by the public utility.

(8) The annual transmission and distribution storm protection plan costs may not include costs recovered through the public utility's base rates and must be allocated to customer classes pursuant to the rate design most recently approved by the commission.

(9) If a capital expenditure is recoverable as a transmission and distribution storm protection plan cost, the public utility may recover the annual depreciation on the cost, calculated at the public utility's current approved depreciation rates, and a return on the undepreciated balance of the costs calculated at the public utility's weighted average cost of capital using the last approved return on equity.

(10) Beginning December 1 of the year after the first full year of implementation of a transmission and distribution storm protection plan and annually thereafter, the commission shall submit to the Governor, the President of the Senate, and the Speaker of the House of Representatives a report on the status of utilities' storm protection activities. The report shall include, but is not limited to, identification of all storm protection activities completed or planned for completion, the actual costs and rate impacts associated with completed activities as compared to the estimated costs and rate impacts for those activities, and the estimated costs and rate impacts associated with activities and rate impacts.

(11) The commission shall adopt rules to implement and administer this section and shall propose a rule for adoption as soon as practicable after the effective date of this act, but not later than October 31, 2019.

History.—s. 1, ch. 2019-158; s. 30, ch. 2022-4.

#### 25-6.030 Storm Protection Plan.

(1) Application and Scope. Each utility as defined in Section 366.96(2)(a), F.S., must file a petition with the Commission for approval of a Transmission and Distribution Storm Protection Plan (Storm Protection Plan) that covers the utility's immediate 10-year planning period. Each utility must file, for Commission approval, an updated Storm Protection Plan at least every 3 years.

(2) For the purpose of this rule, the following definitions apply:

(a) "Storm protection program" - a category, type, or group of related storm protection projects that are undertaken to enhance the utility's existing infrastructure for the purpose of reducing restoration costs and reducing outage times associated with extreme weather conditions therefore improving overall service reliability.

(b) "Storm protection project" – a specific activity within a storm protection program designed for the enhancement of an identified portion or area of existing electric transmission or distribution facilities for the purpose of reducing restoration costs and reducing outage times associated with extreme weather conditions therefore improving overall service reliability.

(c) "Transmission and distribution facilities" – all utility owned poles and fixtures, towers and fixtures, overhead conductors and devices, substations and related facilities, land and land rights, roads and trails, underground conduits, and underground conductors.

(3) Contents of the Storm Protection Plan. For each Storm Protection Plan, the following information must be provided:

(a) A description of how implementation of the proposed Storm Protection Plan will 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.

(b) A description of how implementation of the proposed Storm Protection Plan will reduce restoration costs and outage times associated with extreme weather conditions therefore improving overall service reliability.

(c) A description of the utility's service area, including areas prioritized for enhancement and any areas where the utility has determined that enhancement of the utility's existing transmission and distribution facilities would not be feasible, reasonable, or practical. Such description must include a general map, number of customers served within each area, and the utility's reasoning for prioritizing certain areas for enhanced performance and for designating other areas of the system as not feasible, reasonable, or practical.

(d) A description of each proposed storm protection program that includes:

1. A description of how each proposed storm protection program is designed to enhance the utility's existing transmission and distribution facilities including an estimate of the resulting reduction in outage times and restoration costs due to extreme weather conditions;

2. If applicable, the actual or estimated start and completion dates of the program;

3. A cost estimate including capital and operating expenses;

4. A comparison of the costs identified in subparagraph (3)(d)3. and the benefits identified in subparagraph (3)(d)1; and

5. A description of the criteria used to select and prioritize proposed storm protection programs.

(e) For the first three years in a utility's Storm Protection Plan, the utility must provide the following information:

1. For the first year of the plan, a description of each proposed storm protection project that includes:

a. The actual or estimated construction start and completion dates;

b. A description of the affected existing facilities, including number and type(s) of customers served, historic service reliability performance during extreme weather conditions, and how this data was used to prioritize the proposed storm protection project;

c. A cost estimate including capital and operating expenses; and

d. A description of the criteria used to select and prioritize proposed storm protection projects.

2. For the second and third years of the plan, project related information in sufficient detail, such as estimated number and costs of projects under every specific program, to allow the development of preliminary estimates of rate impacts as required by paragraph (3)(h) of this rule.

(f) For each of the first three years in a utility's Storm Protection Plan, the utility must provide a description of its proposed vegetation management activities including:

1. The projected frequency (trim cycle);

2. The projected miles of affected transmission and distribution overhead facilities;

3. The estimated annual labor and equipment costs for both utility and contractor personnel; and

4. A description of how the vegetation management activity will reduce outage times and restoration costs due to extreme weather conditions.

(g) An estimate of the annual jurisdictional revenue requirements for each year of the Storm Protection Plan.

(h) An estimate of rate impacts for each of the first three years of the Storm Protection Plan for the utility's typical residential, commercial, and industrial customers.

(i) A description of any implementation alternatives that could mitigate the resulting rate impact for each of the first three years of the proposed Storm Protection Plan.

(j) Any other factors the utility requests the Commission to consider.

(4) By June 1, each utility must submit to the Commission Clerk an annual status report on the utility's Storm Protection Plan programs and projects. The annual status report shall include:

(a) Identification of all Storm Protection Plan programs and projects completed in the prior calendar year or planned for completion;

(b) Actual costs and rate impacts associated with completed activities under the Storm Protection Plan as compared to the estimated costs and rate impacts for those activities; and

(c) Estimated costs and rate impacts associated with programs planned for completion during the next calendar year.

Rulemaking Authority 366.96 FS. Law Implemented 366.96 FS. History-New 2-18-20.