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July 27, 2022

VIA ELECTRONIC FILING

Mr. Adam Teitzman
Division of the Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket No. 20220051-EI
First Correction to Florida Power & Light Company's
Rebuttal Testimony of Michael Jarro

Dear Mr. Teitzman:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") are the following documents correcting the Rebuttal Testimony of Micheal Jarro [DN 04177-2022]:


- First Errata Sheet of FPL witness Michael Jarro
- Attachment 1 - a redline version of the Rebuttal Testimony of Michael Jarro
- Attachment 2 - a complete clean version of the Rebuttal Testimony of Michael Jarro, which includes the original Exhibit MJ-2 filed on June 21, 2022 [DN 04177-2022].

The above-referenced documents correct FPL witness Jarro's Rebuttal Testimony to reflect that the Distribution Winterization Program and Transmission Winterization Program were withdrawn from FPL's 2023-2032 Storm Protection Plan on July 11, 2022.

For purposes of managing the existing record and ensuring references to FPL witness Jarro's Rebuttal Testimony remain accurate, the pagination and line numbers for the clean version provided in Attachment 2 remain identical to the original version filed on June 21, 2022.

Copies of this filing will be provided as indicated on the enclosed Certificate of Service. If you or your staff have any questions regarding this filing, please contact me at (561) 691-7144.

Respectfully submitted,



Christopher T. Wright
Authorized House Counsel No. 1007055

Enclosures

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by Electronic Mail to the following parties of record this 27th day of July 2022:

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s/ Christopher T. Wright
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Attorney for Florida Power & Light Company

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

Review of Storm Protection Plan, pursuant to
Rule 25-6.030, F.A.C., Florida Power & Light
Company

Docket No. 20220051-EI

Filed: July 27, 2022

FLORIDA POWER & LIGHT COMPANY
FIRST ERRATA SHEET OF MICHAEL JARRO

Florida Power & Light Company (“FPL”) hereby submits this first errata sheet to correct the **Rebuttal Testimony of Michael Jarro** filed in the above referenced docket on April 21, 2022.

The following changes have been made to FPL witness Jarro’s rebuttal testimony to reflect that the Distribution Winterization Program and Transmission Winterization Program were withdrawn from FPL’s 2023-2032 Storm Protection Plan on July 11, 2022:

Page and Line No.#

Changes/Corrections

P. 1, ln. 25	Insert: [Corrected by Errata Filed July 27, 2022]
P. 2, ln. 13	Replace: Eleven with [Nine]
P. 2, ln. 21-23	Strike: FPL’s New Transmission and Distribution Winterization Programs Would Reduce Restoration Costs and Outage Times Associated with Extreme Winter Events
P. 2, ln. 25	Strike: Exhibit MJ 3: FPL’s Responses to OPC’s Fourth Set of Interrogatories No. 40
P. 2, ln. 26-27	Strike: Exhibit MJ 4: FPL’s Response to OPC’s Fifth Request for Production of Documents
P. 5, ln. 2	Replace: eleven with [nine]
P. 5, ln. 5-6	Strike: reject the new Transmission and Distribution (“T&D”) Winterization Programs;
P. 5, ln. 16	Strike: Exhibit MJ 3, FPL’s Responses to OPC’s Fourth Set of Interrogatories No. 40; and
P. 5, ln. 17-18	Strike: Exhibit MJ 4, FPL’s Response to OPC’s Fifth Request for Production of Documents.

P. 8, ln. 7-8	Strike and Revise: As part of the 2023 SPP, FPL also proposed to implement [a] three new programs: Transmission Winterization Program, Distribution Winterization Program, and
P. 8, ln. 10-12	Strike: Exhibit MJ-1, the new T&D Winterization Programs will help mitigate the potential for power outages due to extreme cold weather events similar to the 1977, 1989, and 2010 winter events in Florida. The new Transmission Access Enhancement Program
P. 9, ln. 5	Strike: SPP programs and opposes the three new SPP programs. Based on the testimony of
P. 9, ln. 6	Replace: eleven with [nine]
P. 10, ln. 14	Replace: eleven with [nine]
P. 16, ln. 21	Replace: eleven with [nine]
P. 23, ln. 19	Replace: Eleven with [Nine]
P. 23, ln. 21	Replace: eleven with [nine]
P. 23, ln. 24	Replace: eleven with [nine]
P. 24, ln. 4-5	Strike: Program. OPC witness Mara also opposes the three new SPP programs: Transmission Winterization Program, Distribution Winterization Program, and Transmission Access
P. 24, ln. 7	Replace: eleven with [nine]
P. 25, ln. 2	Replace: eleven with [nine]
P. 38, ln. 15 through p. 45, ln. 4	Strike in its entirety

Provided as “**Attachment 1**” is a redline version of the Rebuttal Testimony of Michael Jarro that reflects the above referenced corrections. Provided as “**Attachment 2**” is a clean version of the Rebuttal Testimony of Michael Jarro that reflects the above-referenced corrections. For purposes of managing the existing record and ensuring earlier references to FPL witness Jarro’s Rebuttal Testimony remain accurate, the pagination and line numbers for the clean version provided in **Attachment 2** remain identical to the original version filed on June 21, 2022.

Respectfully submitted this 27th day of July 2022,

By: s/Christopher T. Wright

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ATTACHMENT 1

**Florida Power & Light Company
Docket No. 20220051-EI**

**Rebuttal Testimony of Michael Jarro
Corrected by First Errata Filed July 27, 2022 (*REDLINE*)**

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **DOCKET NO. 20220051-EI**

3
4 **FLORIDA POWER & LIGHT COMPANY**

5 **2023-2032 STORM PROTECTION PLAN**

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9 **REBUTTAL TESTIMONY OF**

10 **MICHAEL JARRO**

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24 **Filed: June 21, 2022**

25 [Corrected by Errata Filed July 27, 2022](#)

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1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Michael Jarro. My business address is Florida Power & Light Company
4 (“FPL” or the “Company”), 15430 Endeavor Drive, Jupiter, FL, 33478.

5 **Q. Did you previously submit direct testimony?**

6 A. Yes. I submitted written direct testimony on April 11, 2022, together with Exhibit MJ-
7 1 – FPL’s Storm Protection Plan 2023-2032. On May 6, 2022, FPL filed and served a
8 Notice of Filing a Revised Appendix E to Exhibit MJ-1 to correct the completion dates,
9 start dates, and amounts projected for certain Distribution Feeder Hardening Program
10 projects included in the 2023 project level detail.

11 **Q. What is the purpose of your rebuttal testimony?**

12 A. The purpose of my rebuttal testimony is to respond to certain portions of the direct
13 testimonies of Lane Kollen and Kevin J. Mara submitted on behalf of the Office of
14 Public Counsel (“OPC”). My rebuttal testimony will respond to the concerns,
15 questions, and recommendations raised by these witnesses in opposition to FPL’s 2023-
16 2032 Storm Protection Plan (“2023 SPP”) submitted as Exhibit MJ-1 and as corrected
17 by the Notice of Filing a Revised Appendix E to Exhibit MJ-1 filed on May 6, 2022.

18
19 First, I will provide some context and general observations regarding OPC’s concerns
20 and criticisms of FPL’s 2023 SPP.

21
22 Second, I will address OPC’s recommendation that the Florida Public Service
23 Commission (the “Commission”) apply new cost-effectiveness criteria and standards
24 to review and approve the SPP programs and projects proposed in this proceeding. In
25 essence, OPC seeks to convert this matter into a rulemaking proceeding and asks the

1 Commission to adopt and apply new criteria and standards that are not currently
2 required by Section 366.96, Florida Statutes (hereinafter referred to as the “SPP
3 Statute”), or Rule 25-6.030, Florida Administrative Code (hereinafter referred to as the
4 “SPP Rule”). As I will explain below, OPC’s attempt to amend the requirements of
5 the SPP Statute and SPP Rule as part of this proceeding is inappropriate and
6 unnecessary.

7

8 Third, I will address OPC’s contention that FPL did not provide an estimate of how the
9 programs and projects included in the 2023 SPP will reduce restoration costs and
10 outage times as required by the SPP Rule. As explained below, OPC’s position is based
11 on its incorrect interpretation of the SPP Statute and SPP Rule, and ignores the fact that
12 SPP programs and projects provide both quantitative and qualitative benefits. I will
13 further explain that FPL’s 2023 SPP complies with the requirements of the SPP Statute
14 and SPP Rule.

15

16 Fourth, I will address the incorrect contention of OPC witness Kollen that only new or
17 expanded storm hardening programs are eligible to be included in the SPP. As
18 explained below, OPC witness Kollen ignores the language of the SPP Statute and Rule
19 25-6.031, Florida Administrative Code (hereinafter referred to as the “SPPCRC Rule”)
20 that limits double-recovery, and misapplies the requirement for the Storm Protection
21 Plan Cost Recovery Clause (“SPPCRC”) to the SPP. Existing programs, together with
22 new or expanded programs, are all eligible for approval as SPP programs under the
23 SPP Statute. The issue of whether costs are recovered in base rates or the SPPCRC is
24 a matter to be addressed in the applicable SPPCRC proceeding.

25

1 Finally, I will address and rebut OPC witness Mara's recommendations and
2 adjustments to five out of the ~~eleven~~nine programs included in FPL's 2023 SPP.
3 Specifically, I will address the following recommendations by OPC: modify the
4 Substation Storm Surge/Flood Mitigation Program; reduce the budget for the
5 Distribution Lateral Hardening Program; ~~reject the new Transmission and Distribution~~
6 ~~("T&D") Winterization Programs;~~ and reject the new Transmission Access
7 Enhancement Program. As I explain below, each of these recommendations are
8 inappropriate and unnecessary, and do not serve customers' best interests.

9
10 I note that FPL witness Liz Fuentes will also respond to OPC witness Kollen's concerns
11 regarding FPL's calculation of the revenue requirements submitted with the 2023 SPP.

12 **Q. Are you sponsoring any exhibits with your rebuttal testimony?**

13 A. Yes. I am sponsoring the following exhibits with my rebuttal testimony:

- 14 • Exhibit MJ-2, FPL's Response to OPC's Fourth Set of Interrogatories No.
15 50;
- 16 • ~~Exhibit MJ-3, FPL's response to OPC's Fourth Set of Interrogatories No. 40; and~~
- 17 • ~~Exhibit MJ-4, FPL's response to OPC's Fifth Request for Production of~~
18 ~~Documents No. 33.~~

19
20 **II. GENERAL RESPONSE TO OPC'S CONCERNS**

21 **Q. Before addressing the specific issues and recommendations raised by OPC, do you**
22 **have any general observations?**

23 A. Yes. The evaluation of FPL's 2023 SPP must be grounded in the fact that FPL has
24 successfully been engaging in Commission-approved storm hardening for the last 16
25 years. During this time, the Commission has reviewed and had full transparency into

1 all aspects of FPL’s storm hardening activities, and interested parties and stakeholders
2 had the opportunity to participate in these reviews. Indeed, in its report “Review of
3 Florida’s Electric Utility Hurricane Preparedness and Restoration Actions 2018”, in
4 Docket No. 20170215-EU, the Commission recognized the success of historical storm
5 hardening efforts in Florida. Key findings by the Commission in that report included:

- 6 • Florida’s aggressive storm hardening programs are working (Section V);
- 7 • The length of outages was reduced markedly from the 2004-2005 storm
8 season (Section IV);
- 9 • The primary cause of power outages came from outside the utilities’ rights
10 of way including falling trees, displaced vegetation, and other debris
11 (Section IV);
- 12 • Vegetation management outside the utilities’ rights of way is typically not
13 performed by utilities due to lack of legal access (Section IV);
- 14 • Hardened overhead distribution facilities performed better than non-
15 hardened facilities (Section V);
- 16 • Very few transmission structure failures were reported (Section V); and
- 17 • Underground facilities performed much better compared to overhead
18 facilities (Section V).

19 In response to Hurricanes Matthew and Irma, the Florida Legislature passed the SPP
20 Statute “to mitigate restoration costs and outage times to utility customers” by
21 “strengthen[ing] electric utility infrastructure to withstand extreme weather conditions
22 by promoting the overhead hardening of electrical transmission and distribution
23 facilities, the undergrounding of certain electrical distribution lines, and vegetation
24 management.” Section 366.96(1)(c)-(e), F.S. From these facts, one can logically and
25 reasonably conclude that the Legislature did not pass the SPP Statute to stop or limit

1 storm hardening activity in Florida, nor can one assume that the passage of the SPP
2 Statute was an indictment or criticism against storm hardening activity that has
3 previously taken place in Florida. Rather, it is reasonable to assume that the Florida
4 Legislature passed the SPP Statute to encourage, streamline, and advance storm
5 hardening work in this state.

6

7 FPL's 2023 SPP outlines a comprehensive storm protection plan that meets the
8 statutory objectives codified in the SPP Statute and complies with the requirements of
9 the SPP Rule. The 2023 SPP is largely a continuation of the following programs
10 included in the current 2020-2029 Storm Protection Plan (hereinafter, the "2020 SPP")
11 that were agreed to by OPC in a Joint Motion for Approval of a Stipulation and
12 Settlement Agreement ("2020 SPP Settlement"), approved by Commission Order No.
13 PSC-2020-0293-AS-EI:

- 14 • Distribution Inspection Program
- 15 • Transmission Inspection Program
- 16 • Distribution Feeder Hardening Program
- 17 • Distribution Lateral Hardening Program
- 18 • Transmission Hardening Program
- 19 • Distribution Vegetation Management Program
- 20 • Transmission Vegetation Management Program
- 21 • Substation Storm Surge/Flood Mitigation Program

22 The majority of the existing SPP programs have been in place since 2007 and have
23 already demonstrated that they have provided and will continue to provide increased
24 T&D infrastructure resiliency, reduced restoration times, and reduced restoration costs
25 when FPL is impacted by extreme weather events. For certain existing SPP programs,

1 FPL proposed limited modifications to further improve these programs and implement
2 best practices as further described in my direct testimony and Exhibit MJ-1. Notably,
3 OPC has not opposed or challenged any of these modifications to the existing SPP
4 programs.

5

6 As part of the 2023 SPP, FPL also proposed to implement ~~athree new programs:~~
7 ~~Transmission Winterization Program, Distribution Winterization Program, and~~
8 Transmission Access Enhancement Program. As detailed in my direct testimony and
9 Exhibit MJ-1, the new ~~T&D Winterization Programs will help mitigate the potential~~
10 ~~for power outages due to extreme cold weather events similar to the 1977, 1989, and~~
11 ~~2010 winter events in Florida. The new~~ Transmission Access Enhancement Program
12 will help ensure that FPL and its contractors have reasonable access to FPL's
13 transmission facilities for repair and restoration activities following an extreme weather
14 event.

15 **Q. Does OPC challenge all of the programs included in FPL's 2023 SPP?**

16 A. No. OPC submitted the direct testimony of OPC witness Kollen in all four SPP dockets
17 currently pending before the Commission. The vast majority of his direct testimony
18 (pages 6-21) is dedicated to proposing that the Commission adopt new criteria
19 standards that do not exist in the SPP Statute or SPP Rule today and apply those to
20 reject all of the SPPs submitted by all four investor-owned utilities ("IOU") that do not
21 meet his proposed new cost-effectiveness threshold. Thus, OPC witness Kollen is
22 seeking to establish new standards, outside the SPP Statute and the SPP Rule, to review
23 the SPP and does not oppose or challenge any specific program included in FPL's 2023
24 SPP. I will respond to OPC witness Kollen's proposed new criteria and standards later
25 in my testimony and explain that his proposal is inappropriate and unnecessary.

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Q. Do you have any additional general observations about the testimonies of OPC witnesses Kollen and Mara?

10 A.

Yes. Other than the proposed adjustments to the Substation Storm Surge/Flood Mitigation Program and Distribution Lateral Hardening Program, and opposition to the three new proposed SPP programs, the OPC witnesses primarily make four general arguments in opposition to FPL's 2023 SPP.

14

15

First, OPC argues that the Commission should adopt and apply new formulaic cost-benefit and cost-effectiveness requirements for approval of SPP programs and projects.

17

As explained below, the Florida Legislature and this Commission, through the SPP Rule, have already addressed the issue and declined to require either cost benefit analysis or a cost-effectiveness threshold in the review and approval of a SPP. FPL's

20

2023 SPP has fully complied with all the requirements of what must be included in a SPP pursuant to the SPP Statute and SPP Rule as explained in my direct testimony.

22

For the reasons explained later in my testimony, OPC's proposal is inappropriate and unnecessary for several reasons.

24

1 Second, and related to its first argument, OPC contends that the benefits of the SPP
2 programs must be quantified and monetized in order to meet the requirements of the
3 SPP Rule. OPC's proposal again attempts to add new requirements to the SPP Statute
4 and SPP Rule that do not exist today. As explained in my direct testimony, FPL has
5 provided a description of how the 2023 SPP will reduce restoration costs and outage
6 times associated with extreme weather events in compliance with express requirements
7 of SPP Rule. As explained in greater detail below, storm hardening is not a simple
8 cost-effective proposition and OPC's belief that outage times should be monetized
9 ignores the very real and simple fact that the monetary value individual customers or
10 communities place on reduced outage times cannot be accurately or uniformly
11 estimated. Moreover, OPC's recommendation that FPL's SPP programs require further
12 cost-justification before they can be approved is directly contrary to OPC's own
13 testimony that requests the Commission reject only three of the ~~eleven~~nine programs
14 included in FPL's 2023 SPP as further explained in my rebuttal testimony.

15
16 Third, OPC argues that projects which displace base rate costs that would have been
17 incurred during the normal course of business and that are not incurred on an
18 incremental basis specifically to achieve the objectives of the SPP Rule are not eligible
19 to be included in the SPP. As explained below, OPC's argument misconstrues the
20 language of the SPP Statute and SPPCRC Rule, misapplies the requirement for the
21 SPPCRC to the SPP, and disregards that the issue of whether SPP costs are recovered
22 in base rates or the SPPCRC is a matter to be addressed in the annual SPPCRC
23 proceedings.

1 Finally, OPC raises questions regarding FPL's calculation of the SPP revenue
2 requirements that were used to estimate the rate impacts of the programs included in
3 FPL's 2023 SPP. FPL witness Liz Fuentes will respond to these criticisms.

4

5 **III. OPC's PROPOSED NEW COST-BENEFIT AND COST-EFFECTIVENESS**
6 **STANDARDS ARE NOT APPROPRIATE OR NECESSARY**

7 **Q. OPC is proposing that the Commission apply new standards and criteria to review**
8 **the IOUs' SPPs. Are these the same standards and criteria that FPL used to**
9 **prepare its 2023 SPP?**

10 A. No. FPL designed its SPP programs and prepared the 2023 SPP based on the
11 requirements and standards prescribed in the SPP Statute and SPP Rule that were in
12 effect at the time FPL filed the 2023 SPP on April 11, 2022, and which remain in effect
13 today. OPC, on the other hand, is asking the Commission to adopt new criteria and
14 standards that, as I further explain below, are not currently in either the SPP Statute or
15 SPP Rule and then retroactively apply those new requirements to the IOUs' SPPs that
16 were filed on April 11, 2022 to determine if they should be approved.

17 **Q. Please summarize OPC's proposal to add new criteria and standards to the review**
18 **of the IOUs' SPPs.**

19 A. OPC witness Kollen is proposing that the Commission adopt a new requirement for the
20 SPP's to include a cost-benefit analysis and establish a new cost-effectiveness test to
21 determine if the SPP programs should be approved. OPC witness Kollen then
22 recommends on page 9 of his testimony that the "Commission reject all proposed SPP
23 projects that are not economic, meaning that they do not have a benefit-to-cost ratio of
24 at least 100%." On page 14 of his direct testimony, OPC witness Kollen goes on to
25 conclude that "FPL's programs and costs are not prudent and reasonable unless they

1 meet all of the requirements” proposed by OPC witness Kollen. Thus, OPC witness
2 Kollen proposes that the Commission adopt a new cost-effectiveness threshold and
3 apply that new standard to review and approve/reject the programs and projects
4 included in FPL’s 2023 SPP.

5 **Q. Do you have concerns with OPC’s proposal that the Commission adopt and apply**
6 **a new cost-effectiveness test to review the IOUs’ SPPs?**

7 A. Yes. First, the SPP Statute and SPP Rule do not prescribe or require a traditional cost-
8 benefit analysis or cost-effectiveness test for projects or programs to be included in the
9 SPP. The Statute makes no mention of any such analysis or test and, instead, the
10 Florida Legislature left that determination to the discretion of the Commission by
11 directing it to adopt rules necessary to implement the statute. In adopting the SPP Rule,
12 the Commission could have prescribed specific metrics, standards, and formulas to
13 require the SPP programs to meet a cost-effective threshold, but it wisely did not
14 because each program is different and, therefore, must be evaluated on its particular
15 facts and merits. Indeed, Rule 25-6.030(3)(d)(4), F.A.C., requires the SPP to include a
16 “comparison” of the estimated costs and described benefits for each SPP program,
17 which is provided in the following portions of FPL’s 2023 SPP: Section II; the
18 “Comparison of Costs and Benefits” included in each SPP program description in
19 Section IV; and Appendix A of Exhibit MJ-1. As such, a cost-benefit analysis or cost-
20 effectiveness test for each major component of the SPP is not required under either the
21 SPP Statute or SPP Rule. OPC is attempting to re-litigate the SPP Rule approved by
22 this Commission.

23

24 Second, in the SPP Rule, the Commission prescribed specific information and data that
25 must be included with each SPP, including, but not limited to, estimated costs,

1 description of the benefits, criteria to prioritize and select projects, and estimated rate
2 impacts. As explained in my direct testimony, FPL provided this information in its
3 2023 SPP consistent with SPP Rule. The Commission can use and “compare” all of
4 the information it specifically required FPL to provide in the SPP to determine if,
5 pursuant to the SPP Statute, the programs and projects included in the SPP are in the
6 public interest and should be approved, or if the SPP programs should be modified or
7 denied. Each program is different and, therefore, the comparison of costs and benefits
8 must be evaluated on its particular facts and merits.

9

10 Third, the analysis of whether the benefits of a SPP program or project justify the
11 estimated costs is not a one-size-fits-all proposition as suggested by OPC. This is
12 clearly demonstrated by the fact that, as OPC witness Kollen acknowledges on page 14
13 of his direct testimony, each of the electric utilities took very different approaches to
14 comparing the estimated costs and benefits of their SPP programs. Further, such
15 analyses are necessarily dependent on several highly variable factors that, in large part,
16 are beyond the utility’s control and cannot be accurately predicted, including, but not
17 limited to: the number of annual extreme weather events; the path of each storm; the
18 intensity or category of each storm; the speed or duration of each storm; the availability
19 of resources to respond to and provide storm restoration services for each storm; and
20 the extent to which the infrastructure has been storm hardened at the time of each
21 projected storm. Moreover, the benefits to be included in such analyses should not be
22 limited to only avoided utility costs as I will explain further.

23

1 **IV. FPL'S 2023 SPP WILL REDUCE RESTORATION COSTS AND OUTAGE**
2 **TIMES AS REQUIRED BY RULE 25-6.030, F.A.C.**

3 **Q. Both OPC witnesses Kollen and Mara argue that FPL's 2023 SPP did not meet**
4 **the requirements of the SPP Rule because it did not quantify and monetize the**
5 **benefits of the proposed SPP Programs. Do you have a response?**

6 A. Yes. I disagree with OPC witnesses Kollen and Mara that further cost-justification of
7 FPL's 2023 SPP programs is needed or appropriate. On pages 17-19 of his testimony,
8 OPC witness Kollen states that FPL did not provide any quantitative benefits for the
9 proposed SPP programs and that it is not enough under the SPP Rule to simply say
10 there will be benefits without quantifying those benefits. OPC witness Mara likewise
11 states on pages 10-11 of his testimony that FPL only provided written descriptions of
12 SPP program benefits and did not quantify the estimated cost reductions or monetize
13 the reduction of outage times for each program. OPC witness Mara goes on to suggest
14 on page 11 of his testimony that FPL should be required to file an amended SPP that
15 provides this data. OPC's contention that FPL failed to comply with the SPP Rule
16 because it did not quantify the benefits of the SPP programs is misplaced for several
17 reasons.

18
19 First, OPC's contention that the SPP must include quantifiable and monetized benefits
20 for each SPP program is a fallout of OPC's proposal that the Commission adopt and
21 apply a new cost benefit analysis and new cost-effectiveness threshold for the SPP
22 programs. As I explained above, OPC's proposed new criteria and standards to review
23 the SPPs are contrary to the requirements of both the SPP Statute and SPP Rule and
24 should be rejected.

1 Second, there is nothing in either the SPP Statute or SPP Rule that prescribes that the
2 benefits of SPP programs must be quantified or monetized as suggested by the OPC
3 witnesses. Rather, the SPP Rule expressly provides that the SPP must include a
4 “description” of the benefits of the SPP programs. See Rule 25-6.030(3)(b), F.A.C.
5 (“For each Storm Protection Plan, the following information must be included.... (b)
6 *A description* of how the proposed Storm Protection Plan will reduce restoration costs
7 and outage times associated with extreme weather conditions” (emphasis added)); see
8 also Rule 25-6.030(3)(d)(1), F.A.C. (“*A description* of each proposed storm protection
9 program that includes: (1) A description of how each proposed storm protection
10 program is designed to enhance the utility’s existing transmission and distribution
11 facilities including an estimate of the resulting reduction in outage times and restoration
12 costs due to extreme weather events” (emphasis added)).

13
14 Third, storm hardening is not a simple cost-effective proposition as suggested by OPC.
15 OPC’s approach focuses only on program costs and savings in restoration costs
16 associated with extreme weather conditions (*i.e.*, a strictly quantitative analysis), and
17 completely ignores the qualitative component required by both the SPP Statute and SPP
18 Rule. Stated differently, OPC’s proposed cost-benefit and cost-effectiveness approach
19 ignores half of the benefits side of the equation. It cannot be reasonably disputed that
20 customers want the extended outage times associated with extreme weather events to
21 be reduced. Indeed, the Florida Legislature concluded that reducing outage times for
22 utility customers, as well as restoration costs, is in the public interest. The Commission
23 can and should compare these factors and determine whether the estimated benefits of
24 the storm hardening programs are justified by the estimated rate impacts.

1 Fourth, OPC witness Mara's belief that outage times should be monetized, ignores the
2 very real and simple fact that the monetary value individual customers or communities
3 place on reduced outage times cannot be accurately or uniformly estimated. Indeed,
4 some customers may be willing to pay a premium to never have a power outage, while
5 others may be willing to tolerate a few short outages. Moreover, the SPP Rule does
6 not require the outage times to be monetized as explained above, and there is no
7 uniform Commission or industry method to do so. Such analyses are necessarily
8 dependent on several highly variable factors (such as the intensity, path, and duration
9 of the extreme weather event and extent that the system has been hardened) and could
10 include a very wide range of subjective economic factors, including, but not limited to:
11 individual and different customer value on reduced outage times, including comfort,
12 health, and convenience; economic impact to individual customers due to spoilage, loss
13 or disruption of business, and loss of equipment or supplies; and impact to the local
14 and state economy. Thus, even if the SPP Statute and Rule did require the reduction in
15 outage times to be monetized, which they do not, there is significant uncertainty and
16 variability in how that should be done.

17
18 Finally, OPC's recommendation that FPL's SPP programs require further cost-benefit
19 analysis or cost-justification before they can be approved is directly contrary to OPC
20 witness Mara's testimony on pages 13 and 17-34 that requests the Commission only
21 reject three of the ~~eleven~~nine programs included in FPL's 2023 SPP. Stated
22 differently, OPC witness Mara does not dispute that it would be reasonable for the
23 Commission to allow FPL to implement the eight programs included in the 2023 SPP
24 as further explained below. Either these SPP programs are in the public interest and
25 should be approved, or they are not. The fact that OPC witness Mara has essentially

1 agreed that most of these programs should be approved without further cost-
2 justification clearly suggests that OPC believes FPL has provided sufficient
3 information about each of the SPP programs for the Commission to determine if they
4 are in the public interest.

5 **Q. On page 18 of his direct testimony, OPC witness Kollen recommends that FPL**
6 **should be directed to use its storm damage assessment model to model and**
7 **quantify the estimated benefits and savings from the programs included in FPL’s**
8 **2023 SPP. Please describe FPL’s Storm Damage Model.**

9 A. FPL’s Storm Damage Model is a very important proprietary tool developed by FPL to
10 prepare for major storms that threaten FPL’s service area. The Storm Damage Model
11 is used for major storms with a forecast track provided by the National Hurricane
12 Center to estimate the number of construction man-hours (“CMH”) required to restore
13 power to customers based on the forecasted intensity, speed, path of the storm, and the
14 condition (hardened vs. non-hardened) of the infrastructure at the time of the storm.
15 The Storm Damage Model is a planning tool used by the Company to estimate the
16 extent of damage expected from a projected storm, and the number and location of
17 resources that will be needed to quickly and safely restore power outages to the greatest
18 number of customers in the shortest amount of time.

19 **Q. Do you agree with OPC witness Kollen’s recommendation that FPL should use**
20 **the Storm Damage Model to model to quantify the benefits and savings associated**
21 **with the programs included in FPL’s 2023 SPP?**

22 A. No, FPL’s Storm Damage Model was not intended to be used to quantify individual
23 SPP programs or projects. As provided in Appendix A to Exhibit MJ-1, FPL used its
24 Storm Damage Model to analyze Hurricanes Matthew and Irma and estimate the
25 reduction in CMH, days to restore, and storm restoration costs that were attributable to

1 the storm hardening projects that were completed and in place at the time of the
2 hurricanes. This analysis was based mainly on the feeders that FPL knew had been
3 hardened versus non-hardened at the times Hurricanes Matthew and Irma occurred, and
4 included the distribution inspection and vegetation management that had been
5 completed at the times Hurricanes Matthew and Irma occurred. OPC witness Kollen
6 proposes something different.

7
8 OPC witness Kollen proposes that FPL use the Storm Damage Model to model the
9 future system with the proposed 2023 SPP programs in place for the entire 2023-2032
10 SPP period to quantify the costs that could be avoided due to the SPP programs. The
11 problem with this approach is that, beyond year one of the SPP (2023), the project level
12 detail has not been determined; meaning FPL does not at this time know which specific
13 projects will be completed each year or where they will be located for the entire 2023-
14 2032 SPP period. The scope and location of the storm hardening projects used in the
15 Storm Damage Model for each year of the SPP will have a significant impact on the
16 results of the analysis. For example, if FPL assumes a storm hardening project in a
17 densely populated urban area as opposed to a rural area, or vice versa, this could change
18 the damage estimated by the Storm Damage Model. Also illustrative is the fact that
19 the estimated length, number of poles, location, and accessibility of the laterals used in
20 the model would change the damage estimated by the Storm Damage Model. Each of
21 these factors, which cannot be reasonably predicted for the entire 2023-2032 SPP
22 period, would impact the estimated CMH, days to restore, and storm restoration costs
23 predicted by the Storm Damage Model. For these reasons, the Storm Damage Model
24 does not readily lend itself to model future SPP programs as proposed by OPC witness
25 Kollen.

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Q. Has FPL provided descriptions of how the programs included in its 2023 SPP will reduce restoration costs and outage times associated with extreme weather conditions?

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22

A. Yes. In compliance with Rules 25-6.030(3)(b) and 25-6.030(3)(d)(1), F.A.C., the benefits expected from the proposed SPP programs were provided in the following portions of FPL's 2023 SPP: Section II; the "Description of the Program and Benefits" included in each SPP program description in Section IV; and Appendix A of Exhibit

23

24

25

1 MJ-1. The existing SPP programs have already demonstrated that they will both reduce
2 restoration costs and outage times associated with extreme weather conditions, and
3 were previously approved as part of the 2020 SPP. Although FPL has proposed limited
4 modifications to certain of these existing SPP programs, these modifications will
5 further improve these programs and implement best practices where applicable as
6 explained in my direct testimony and Exhibit MJ-1. And, OPC has not opposed or
7 challenged any of these limited modifications to the existing SPP programs.

8

9 The Commission can review the benefits of the SPP programs described in my direct
10 testimony and Exhibit MJ-1, together with the prioritization, feasibility, estimated
11 costs, and estimated rate impacts, and determine whether the programs included in the
12 2023 SPP are in the public interest.

13

14 **V. OPC’S CLAIM THAT ONLY NEW OR EXPANDED STORM HARDENING**
15 **PROGRAMS QUALIFY FOR INCLUSION IN THE SPP IS INAPPROPRIATE**

16 **Q. On pages 13-15 of his direct testimony, OPC witness Kollen asserts that FPL has**
17 **included programs and projects that are within the scope of its existing base rate**
18 **programs and base rate recoveries in the normal course of business, and he**
19 **recommends that these programs and projects should be excluded from the SPPs.**
20 **Do you have a response?**

21 **A.** Yes. It appears that OPC witness Kollen is recommending that only new or expanded
22 storm hardening programs qualify for inclusion in the SPP, and that any programs that
23 have previously been recovered in base rates are not eligible to be included in the SPP.
24 Indeed, on page 7 of his testimony, OPC witness Kollen states that to be included in
25 the SPP, “the projects and the costs of the projects must be incremental, not simply

1 displacements of base rate costs that would have been incurred during the normal
2 course of business.” OPC witness Kollen’s recommendation is misplaced for several
3 reasons.

4
5 First, OPC witness Kollen is again attempting to re-litigate the Commission’s approval
6 of the SPP Rule and add a new requirement that is clearly not prescribed in either the
7 SPP Statute or SPP Rule. The SPP Statute and SPP Rule define the type of programs
8 eligible to be included in the SPP as programs for the overhead hardening and increased
9 resilience of T&D facilities, undergrounding of electric distribution facilities, and
10 vegetation management that will mitigate restoration costs and outage times due to
11 extreme weather events. Contrary to OPC witness Kollen’s assertion, there is nothing
12 in either the SPP Statute or SPP Rule that limit SPP programs to only new or expanded
13 storm hardening programs.

14
15 Second, OPC witness Kollen’s recommendation misconstrues and seeks to expand the
16 limitation in the SPP Statute and SPPCRC Rule that SPP costs cannot be recovered in
17 both base and clause rates. The SPP Statute provides that the “annual transmission and
18 distribution storm protection plan costs may not include costs recovered through the
19 public utility’s base rates.” See Section 366.96(8), F.S. Similarly, the SPPCRC Rule
20 provides that costs recoverable through the SPPCRC “shall not include costs recovered
21 through the utility’s base rates or any other cost recovery mechanisms.” See Rule 25-
22 6.031(6)(b), F.A.C. Simply stated, the limitation proscribed in the SPP Statute and
23 SPPCRC Rule ensures that there is no double recovery of SPP costs in both base and
24 clause rates. It does not limit SPP programs to only new or expanded storm hardening

1 programs that have not previously been recovered in base rates as suggested by OPC
2 witness Kollen.

3
4 Third, the issue of whether SPP costs are incremental or being recovered in base rates
5 is irrelevant to this SPP proceeding. As stated in Commission Order No. PSC-2020-
6 0162-PCO-EI in Docket No. 20200071-EI, this is an issue to be addressed in the
7 SPPCRC proceedings. Relatedly, OPC witness Kollen's recommendation overlooks
8 the fact that SPP costs can be recovered through either the SPPCRC or base rates – just
9 not both. See Rule 25-6.031(8), F.A.C. ("Recovery of costs under this rule does not
10 preclude a utility from proposing inclusion of unrecovered Storm Protection Plan
11 implementation costs in base rates in a subsequent rate proceeding").

12
13 Fourth, OPC witness Kollen's recommendation would lead to nonsensical results.
14 Under OPC witness Kollen's approach, none of the pole inspection, vegetation
15 management, transmission pole replacement, feeder hardening, or other long-standing
16 storm hardening programs that existed prior to the effective date of the SPP Statute
17 would be eligible to be included in the SPP unless they are expanded and, even then,
18 only the costs associated with the expanded portion of those programs could be
19 included in the SPP. See Direct Testimony of OPC witness Kollen, page 15. The flaw
20 with this approach is that these programs have largely been in place since 2007 and
21 approved as part of the Storm Hardening Plan, which has now been replaced with the
22 SPP. Moreover, the existing eight SPP programs were approved in FPL's and former
23 Gulf Power Company's (Gulf) 2020 SPPs. The purpose and policy of the SPP Statute
24 is to mitigate restoration costs and outage times by encouraging the IOUs to continue
25 and accelerate their storm hardening efforts by reducing regulatory lag and allowing

1 the IOUs to recover the associated costs through an annual clause proceeding. OPC
2 witness Kollen's new proposal, however, would defeat this legislative objective by
3 disallowing longstanding and proven storm hardening measures from being included
4 in the SPP.

5

6 Finally, although OPC witness Kollen alleges on page 13 of his testimony that FPL
7 included programs and projects in its 2023 SPP that are base rate programs recovered
8 in base rates in the normal course of business, neither OPC witness identifies any
9 specific FPL program that they believe are currently in FPL's base rates. While OPC
10 may attempt to raise this as an issue in the SPPCRC proceeding, it is important to
11 remember that, effective January 1, 2022, all SPP operations and maintenance expenses
12 and capital expenditures, with the exception of the cost of removal for assets existing
13 prior to 2021, have been recovered or will be requested for recovery through the
14 SPPCRC and, therefore, are incremental to and not being recovered in base rates. See
15 Direct Testimony of FPL witness Liz Fuentes filed in Docket No. 20210015-EI on
16 March 12, 2021; see Direct Testimony of FPL witnesses Liz Fuentes and Michael Jarro
17 filed in Docket No. 20200092-EI on July 24, 2020.

18

19 **VI. THE PROGRAMS AND PROJECTS INCLUDED IN FPL'S 2023 SPP ARE IN**
20 **THE PUBLIC INTEREST AND SHOULD BE APPROVED**

21 **A. OPC Essentially Agrees with Eight of the ~~Eleven~~-Nine Programs Included**
22 **in FPL's SPP**

23 **Q. You have stated that OPC essentially agrees with eight of the ~~eleven~~-nine**
24 **programs included in FPL's 2023 SPP. Can you please explain how you arrived**
25 **at that conclusion?**

1 A. Yes. As explained above, FPL's 2023 SPP includes a total of ~~eleven~~nine SPP
2 programs: eight existing programs included in the 2020 SPP approved by Commission
3 Order No. PSC-2020-0293-AS-EI, and three new programs. OPC witness Mara
4 proposes adjustments to two of the existing SPP programs: the existing Substation
5 Storm Surge/Flood Mitigation Program and the existing Distribution Lateral Hardening
6 Program. OPC witness Mara also opposes the ~~three new SPP programs: Transmission~~
7 ~~Winterization Program, Distribution Winterization Program, and~~ Transmission Access
8 Enhancement Program. Therefore, OPC witness Mara essentially agrees that six out
9 of the ~~eleven~~nine programs included in FPL's 2023 SPP should be approved as
10 submitted.

11
12 Further, with respect to the Substation Storm Surge/Flood Mitigation Program, OPC
13 witness Mara does not oppose the program but, rather, asserts on pages 16-17 of his
14 direct testimony that the Storm Surge/Flood Mitigation Program should exclude
15 substations that have alternate feeds available and do not have a history of flooding.
16 Therefore, OPC essentially agrees with FPL's proposed Substation Storm Surge/Flood
17 Mitigation Program but recommends additional selection criteria be considered, which
18 I will further address later in my testimony.

19
20 Similarly, OPC witness Mara does not oppose the Distribution Lateral Hardening
21 Program. Rather, OPC witness Mara recommends on pages 33-34 of his direct
22 testimony that the annual budget for the Distribution Lateral Hardening Program be
23 capped at \$606 million for the years 2025-2032. Therefore, OPC essentially agrees
24 with FPL's proposed Distribution Lateral Hardening Program but recommends a
25 reduction in the number of laterals that may be completed each year, which will delay

1 when customers will receive the direct benefits of the Distribution Lateral Hardening
2 Program. I will respond to OPC witness Mara's recommended adjustment below.

3
4 Based on the testimony of OPC witness Mara, it appears that OPC essentially agrees
5 with eight out of the ~~eleven~~-nine programs included in FPL's 2023 SPP. It further
6 appears that the only truly contested programs are the three new programs proposed in
7 FPL's 2023 SPP. I will respond to OPC criticisms of these new SPP programs below.

8
9 **B. OPC's Recommended Adjustment to the Storm Surge/Flood Mitigation**
10 **Program is not Reasonable or Appropriate**

11 **Q. OPC witness Mara recommends adjustments to the Storm Surge/Flood**
12 **Mitigation Program. Before responding to his specific recommendations, do you**
13 **have any general observations about his proposal?**

14 A. Yes. OPC witness Mara's recommendations regarding FPL's Storm Surge/Flood
15 Mitigation Program are inconsistent. On page 13 of his testimony, OPC witness Mara
16 appears to recommend that the entire budget for the Storm Surge/Flood Mitigation
17 Program should be rejected. However, on pages 16-18 of his testimony, OPC witness
18 Mara recommends that substations with alternate feeds or no history of flooding should
19 be excluded from the Storm Surge/Flood Mitigation Program. Notably, OPC witness
20 Mara does not identify any specific substation that would be excluded by his proposal,
21 nor does he explain or demonstrate how such exclusions would result in the elimination
22 of the entire budget for the Storm Surge/Flood Mitigation Program.

23 **Q. Do you have a response to OPC witness Mara's recommendation that the entire**
24 **budget for the Storm Surge/Flood Mitigation Program should be rejected?**

1 A. Yes. OPC witness Mara's recommendation overlooks that the Storm Surge/Flood
2 Mitigation Program included in FPL's 2023 SPP is the same program that was included
3 in FPL's 2020 SPP previously approved by Commission Order No. PSC-2020-0293-
4 AS-EI. In the 2020 SPP, FPL originally projected it would complete the Storm
5 Surge/Flood Mitigation Program by 2022. However, as explained in my direct
6 testimony and in Exhibit MJ-1, due to field conditions and permitting delays that were
7 largely beyond FPL's control, FPL was unable to complete the storm surge/mitigation
8 measures at all of the identified substations by year-end 2022 as originally projected.
9 As a result, FPL is proposing to continue the program to address the remaining four
10 substations originally identified in the 2020 SPP, which are currently expected to be
11 completed by year-end 2024. FPL has not added new or additional substations to the
12 Storm Surge/Flood Mitigation Program approved as part of the 2020 SPP. The new
13 exclusions proposed by OPC witness Mara were not part of either the 2020 SPP or the
14 2020 SPP Settlement that OPC joined. OPC witness Mara has not offered any reason
15 why it was in the public interest to complete the storm surge/mitigation measures at
16 these substations as part of the 2020 SPP, but not as part of the 2023 SPP.

17 **Q. Do you agree with OPC witness Mara's recommendation that substations with**
18 **alternate feeds should be excluded from the Storm Surge/Flood Mitigation**
19 **Program?**

20 A. No. Rather than installing measures to mitigate the potential for storm surge and flood
21 at these four substations, OPC witness Mara recommends that any of these substations
22 that have an alternative feed should be de-energized and the load served by the de-
23 energized substation should be transferred to an adjacent substation via the alternate
24 feed. OPC witness Mara's recommendation is not practical.

1 All of the four substations identified for the Storm Surge/Flood Mitigation Program
2 have alternative feeder ties to nearby substations. However, de-energizing one
3 substation due to storm surge or flooding does not mean an adjacently tied substation
4 can necessarily pick up and support the entire electric load from the de-energized
5 substation. For example, the St. Augustine Substation, which has an alternate feed,
6 was de-energized during Hurricanes Matthew and Irma and the majority of the
7 customers served by this substation experienced outages. Similarly, the South Daytona
8 Substation, which has an alternate feed, was de-energized during Hurricane Irma and
9 the majority of the customers served by this substation experienced outages. Further,
10 OPC witness Mara overlooks that the mitigation measures under the Storm
11 Surge/Flood Mitigation Program will not only reduce outages but will reduce
12 restoration costs associated with the need to repair and replace substation equipment
13 that is damaged due to storm surge or flooding following an extreme weather event.

14 **Q. Do you have a response to OPC witness Mara's recommendation that substations**
15 **with no history of flooding should be excluded from the Storm Surge/Flood**
16 **Mitigation Program?**

17 A. Yes. All four substations remaining to be completed under the Storm Surge/Flood
18 Mitigation Program have, in fact, experienced floods or storm surges in the past. Most
19 recently, the flood alarm monitor went off at the Dumfoundling Substation during
20 Tropical Cyclone One that impacted South Florida on June 2, 2022. With respect to
21 future potential flooding at these substations, FPL explained in its response to OPC's
22 Fourth Set of Interrogatories No. 50(d), which is attached to my rebuttal testimony as
23 Exhibit MJ-2, that each of the four substations remaining to be completed under the
24 program has projected flood levels that are higher than the current elevation of these
25 substations. Therefore, all four substations included in the Substation Storm

1 Surge/Flood Mitigation Program as part of the 2023 SPP have had a history of flooding
2 and remain susceptible to flooding.

3
4 **C. OPC's Recommended Adjustments to the Distribution Lateral**
5 **Hardening Program are not Reasonable or Appropriate**

6 **Q. Does OPC oppose the Distribution Lateral Hardening Program included in FPL's**
7 **2023 SPP?**

8 A. No. OPC witness Mara does not oppose FPL's Distribution Lateral Hardening
9 Program. Rather, OPC witness Mara recommends a reduction in the annual budget for
10 the Distribution Lateral Hardening Program, which will reduce the number of laterals
11 to be completed each year and delay when customers will receive the direct benefits of
12 the Distribution Lateral Hardening Program.

13 **Q. In the 2023 SPP, FPL proposed to establish protocols for determining when a**
14 **lateral may be evaluated for overhead hardening as opposed to being placed**
15 **underground. Does OPC oppose these new overhead hardening protocols?**

16 A. No. Although OPC witness Mara asserts on pages 29-30 of his testimony that the
17 overhead program is vague and not well defined, he does not oppose any of the
18 protocols proposed by FPL for evaluating when a lateral may be overhead hardened as
19 opposed to being placed underground. Rather, OPC witness Mara simply notes that
20 the overhead hardening protocols appear similar to the standards used in FPL's Feeder
21 Hardening Program. Notably, OPC does not oppose, criticize, or otherwise take any
22 issue with FPL's Feeder Hardening Program.

23 **Q. On page 33 of his testimony, OPC witness Mara recommends that overhead**
24 **hardened laterals and undergrounded laterals should be separated and tracked**
25 **as two individual SPP programs. Do you agree with his recommendation?**

1 A. I do not agree that there should be separate overhead and underground lateral SPP
2 programs. The overhead protocols were established and incorporated into the
3 Distribution Lateral Hardening Program pursuant to the 2020 SPP Settlement approved
4 by Commission Order No. PSC-2020-0293-AS-EI. FPL did not commit to create
5 separate overhead and underground lateral programs. Moreover, the underground and
6 overhead components of the Distribution Lateral Hardening Program are symbiotic,
7 and the work will be part of the same overall lateral project. As explained in my direct
8 testimony and Exhibit MJ-1, the selection and prioritization criteria for the Distribution
9 Lateral Hardening Program ranks each feeder based on actual historical experience of
10 all the overhead laterals on the feeder in order to address the worst performing circuits
11 first. All laterals on the feeders are then hardened according to the ranking of each
12 feeder. As explained in Exhibit MJ-1, constructing at the feeder level significantly
13 improves the efficiency and timing of construction because all of the work takes place
14 in the same location (feeder) on a set of laterals as opposed to being spread out over
15 multiple individual laterals across the entire service area. It also allows for a more
16 efficient design to reduce overall cable footage and the number of transformers needed
17 to serve an area by interconnecting existing laterals and using alternate cable paths to
18 reduce the total number of laterals in the area. When FPL performs the engineering
19 evaluation of all laterals on a feeder, it will apply the overhead protocols to evaluate
20 whether each lateral should be overhead hardened or converted to underground based
21 on the actual field conditions and limitations at the time. Thus, the overhead and
22 underground work is completed as part of a single conceptual design across all laterals
23 on an entire feeder under the Distribution Lateral Hardening Program. To treat and
24 separately manage the overhead hardening and underground lateral work as separate
25 programs, as suggested by OPC witness Mara, would reduce efficiencies and increase

1 costs. For these reasons, I believe it is appropriate and reasonable that the overhead
2 protocols should be included and part of the overall Distribution Lateral Hardening
3 Program and should not be a standalone SPP program.

4 **Q. On page 31 of his testimony, OPC witness Mara claims that the Distribution**
5 **Lateral Hardening Program does not meet the requirements of the SPP Rule**
6 **because FPL did not provide any estimate of the cost reductions to be realized**
7 **from the program. Do you have a response?**

8 A. I disagree with OPC witness Mara. First, his claim that FPL did not provide cost
9 reductions associated with the Distribution Lateral Hardening Program is a fallout of
10 OPC's proposal that the Commission should adopt and apply a new cost benefit
11 analysis requirement and new cost-effectiveness threshold for the SPP programs. As I
12 explained above, OPC's proposed cost benefit analysis and new cost-effectiveness
13 threshold should be rejected.

14

15 Second, as I explained above, there is nothing in either the SPP Statute or SPP Rule
16 that prescribes that the benefits of SPP programs must be quantified, and storm
17 hardening is not a simple cost-effective calculation as suggested by OPC.

18

19 Third, in compliance with Rules 25-6.030(3)(b) and 25-6.030(3)(d)(1), F.A.C., the
20 benefits expected from the Distribution Lateral Hardening Program were provided in
21 the following portions of FPL's 2023 SPP: Section II; Section IV(D)(1)(b); and
22 Appendix A of Exhibit MJ-1. In fact, on page 31 of his testimony, OPC witness Mara
23 relies on the 40-year net present value analysis of the reduction in storm restoration
24 costs provided by FPL in Appendix A of Exhibit MJ-1. Further, on page 34 of his
25 testimony, OPC witness Mara acknowledges that "[i]t is apparent from experiences in

1 Florida that undergrounding and hardening poles will reduce outage costs and outage
2 times.”

3

4 Finally, OPC witness Mara does not propose that the Distribution Lateral Hardening
5 Program be rejected; rather, he proposes an adjustment to the annual budget beginning
6 in 2025. Either the Distribution Lateral Hardening Program meets the requirements of
7 the SPP Rule and is eligible to be included in the SPP or it does not. OPC witness Mara
8 cannot have it both ways.

9 **Q. Does OPC agree with FPL’s prioritization and selection criteria for the**
10 **Distribution Lateral Hardening Program?**

11 A. No. Although OPC does not take issue with any specific selection and prioritization
12 criteria for the Distribution Lateral Hardening Program, OPC witness Mara nonetheless
13 states on page 32 of his testimony that he does not agree with FPL’s selection and
14 prioritization methodology. Apparently, OPC witness Mara believes that FPL needs to
15 do more so that lateral hardening and undergrounding and their associated benefits are
16 spread to more customers and communities:

17 My point is that the dollars are concentrated such that only a few
18 customers will see a reduction in customer outage minutes and enjoy
19 the aesthetics and other benefits of an undergrounded system. The
20 remaining customers only see a benefit cost ratio that is upside down
21 meaning more costs than benefits.

22 This is a significant investment in a small portion of the system (one
23 feeder) and in a single community. *There needs to be a mechanism*
24 *to help spread the undergrounding and hardening to more*
25 *communities*, which is important since all customers will be
26 contributing to the cost of undergrounding.

1 See Direct Testimony of OPC witness Mara, pp. 32-33 (emphasis added). As I address
2 later in my testimony, this statement is at odds with his recommendation of reducing
3 the budget for the Distribution Lateral Hardening Program.

4
5 **Q. Please describe OPC's proposed adjustment to the Distribution Lateral**
6 **Hardening Program.**

7 A. Despite the many pages of OPC's testimony dedicated to recommending that the
8 Commission adopt and apply a new cost-effectiveness test, on pages 33-34 of his
9 testimony OPC witness Mara recommends a qualitative adjustment to the annual
10 budget for the Distribution Lateral Hardening Program starting in 2025 and continuing
11 through 2032. Specifically, OPC witness Mara recommends that the annual budget for
12 the Distribution Lateral Hardening Program be capped at \$606 million per year for the
13 years 2025 to 2032, which results in a total ten-year budget reduction of approximately
14 \$3.4 billion.

15 **Q. Does OPC witness Mara describe how he calculated his proposed reduction to the**
16 **Distribution Lateral Hardening Program budget?**

17 A. No. His adjustment appears to be completely qualitative and, together with his other
18 proposed adjustments, is simply intended to reduce the ten-year capital cost per
19 customer to remain similar to the ten-year capital cost per customer for the combined
20 FPL and Gulf's 2020 SPPs. See Direct Testimony of OPC witness Mara, pp. 13 and
21 34.

22 **Q. Do you agree with OPC witness Mara's proposed adjustment to the Distribution**
23 **Lateral Hardening Program budget?**

24 A. No, I disagree for multiple reasons. It is important to understand OPC witness Mara's
25 proposed adjustment will reduce the number of laterals to be completed each year and

1 delay when customers will receive the direct benefits of the Distribution Lateral
2 Hardening Program. This adjustment directly contradicts his position on pages 32-33
3 that FPL needs to expand its efforts so that lateral hardening and undergrounding, and
4 their associated benefits, are spread to more customers and communities.

5

6 Although OPC witness Mara apparently seeks to simply maintain the status quo, he
7 overlooks that the Distribution Lateral Hardening Program was initially deployed as a
8 limited pilot, which was continued through 2022 as OPC agreed in the 2020 SPP
9 Settlement. As part of the 2023 SPP, FPL is seeking to deploy the Distribution Lateral
10 Hardening Program as a full-scale permanent SPP program and, as such, is ramping up
11 the program in order to provide the benefits of underground lateral hardening
12 throughout its system, including in the former Gulf service area. I note that OPC does
13 not object to the Distribution Lateral Hardening Program becoming a permanent SPP
14 program.

15

16 FPL's Distribution Lateral Hardening Program was designed to achieve the objectives
17 and goals of the SPP Statute. Therein, the Florida Legislature expressly found that "[i]t
18 is in the state's interest to strengthen electric utility infrastructure to withstand extreme
19 weather conditions by promoting the overhead hardening of electrical transmission and
20 distribution facilities, the undergrounding of certain electrical distribution lines, and
21 vegetation management" and "[p]rotecting and strengthening transmission and
22 distribution electric utility infrastructure from extreme weather conditions can
23 effectively reduce restoration costs and outage times to customers." See Sections
24 366.96(1)(c), (d), F.S. FPL's underground lateral program is an impactful and crucial
25 tool to achieve these legislative objectives and is appropriately designed to address the

1 worst performing circuits and areas first based on actual historical experience. Indeed,
2 as shown in FPL's Hurricane Irma Forensic Report, underground laterals performed
3 6.6 times (85%) better during Hurricane Irma than overhead laterals.¹
4

5 The ramp up in the number of laterals to be completed each year under the Distribution
6 Lateral Hardening Program is due primarily to the inclusion of the former Gulf service
7 area and the significant number of laterals that remain to be hardened, the strong local
8 support and interest in the program, as well as the addition of the Management Region
9 selection approach in 2025 as explained in my direct testimony and Exhibit MJ-1.
10 Notably, the OPC does not criticize or challenge the proposed addition of the
11 Management Region selection approach.
12

13 The annual budget for the Distribution Lateral Hardening Program is a product of the
14 number of estimated projects to be completed throughout FPL's system as provided in
15 Appendix C to Exhibit MJ-1. Although all customers indirectly benefit from overhead
16 hardened and underground laterals through reduced restoration costs, the direct benefits
17 for customers of overhead hardened and underground laterals, including both reduced
18 outage times and aesthetics (as recognized by OPC witness Mara on page 32 of his
19 testimony), will be facilitated and realized more quickly through the expanded number
20 of underground projects contemplated by FPL's SPP. How fast and how many lateral
21 projects are completed under the Distribution Lateral Hardening Program, and how
22 quickly customers realize the direct and indirect benefits therefrom, is ultimately a

¹ Refer to Page 7 of FPL's Hurricane Irma Forensic Report in Docket No. 20180049, which is available at:
<http://www.psc.state.fl.us/library/filings/2019/05615-2019/Support/Exhibit%2036/POD%20No.%202/20180049%20-%20OPC's%201st%20POD%20No.%202%20-%20Attachment%20No.%201.pdf>

1 regulatory decision for the Commission to be made in the context of the policy and
2 objectives of the SPP Statute.

3 **D. FPL's New Transmission Access Enhancement Program is Consistent**
4 **with the Objectives of the SPP Statute and Should be Approved**

5 **Q. Does the OPC agree with FPL's proposal to add the new Transmission Access**
6 **Enhancement Program to the 2023 SPP?**

7 A. No. On pages 26-29 of his testimony, OPC witness Mara contends that maintenance
8 of bridges, roads, and culverts are ordinary base rate activities and FPL failed to
9 demonstrate how its proposed Transmission Access Enhancement Program will meet
10 the objectives of the SPP statute to reduce restoration costs and outage times associated
11 with extreme weather events.

12 **Q. Do you agree that projects to be completed under the Transmission Access**
13 **Enhancement Program should be maintained as part of FPL's ordinary base rate**
14 **activities?**

15 A. No. OPC witness Mara appears to misunderstand the scope and purpose of the
16 Transmission Access Enhancement Program. FPL is not proposing to simply maintain
17 roads, rights of way, bridges, and culverts for purposes of accessing transmission
18 facilities for day-to-day maintenance and vegetation management activities, which
19 activities are typically scheduled and conducted during drier times of the year and
20 within the existing transmission rights-of-way. Rather, as explained in my direct
21 testimony and Exhibit MJ-1, the purpose of the Transmission Access Enhancement
22 Program is to ensure that FPL has access to its transmission facilities following an
23 extreme weather event by targeting and addressing areas that become inaccessible due
24 to flooding or saturated soils. Notably, the peak of the Atlantic Hurricane Season
25 coincides with Florida's wet season when increased rainfall will exacerbate the

1 inaccessibility of many of these low-lying, saturated, and wetland areas. As explained
2 in my direct testimony and Exhibit MJ-1, and as acknowledged by OPC witness Mara
3 on page 27 of his testimony, these low-lying areas may not be accessible following an
4 extreme weather event without specialized equipment and vehicles, which has limited
5 availability during and immediately following storm events.

6 **Q. Do you have a response to OPC witness Mara’s contention on pages 27-28 of his**
7 **testimony that FPL did not demonstrate that the Transmission Access**
8 **Enhancement Program will reduce restoration costs and outage times associated**
9 **with extreme weather events?**

10 A. Yes. OPC witness Mara’s argument is, again, a fallout of OPC’s proposal that the
11 Commission should adopt and apply a new cost benefit analysis requirement and new
12 cost-effectiveness threshold for the SPP programs. As I explained above, OPC’s
13 proposed new criteria and standards to review the SPPs are contrary to the requirements
14 of both the SPP Statute and SPP Rule and should be rejected.

15

16 My direct testimony and Section IV(K)(1) of Exhibit MJ-1 explained that the
17 Transmission Access Enhancement Program will ensure that FPL and its contractors
18 have access to FPL’s transmission facilities following an extreme weather event, which
19 will reduce the need and associated costs for specialized equipment and will help
20 expedite restoration activities and thereby reduce customer outage times. Importantly,
21 a transmission-related outage can result in an outage affecting tens of thousands of
22 customers and may cause a cascading event that could result in loss of service for
23 hundreds of thousands of customers. The Transmission Access Enhancement Program
24 will allow FPL and its contractors to quickly address such outages following an extreme

1 weather event, which would result in a reduction of outage times for tens of thousands
2 to hundreds of thousands of customers following an extreme weather event.

3 **Q. Do you have any other observations regarding OPC's opposition to the**
4 **Transmission Access Enhancement Program?**

5 A. Yes. OPC witness Mara appears to overlook that the Commission's SPP Rule defines
6 a storm protection project to include enhancement of T&D areas and not just the T&D
7 facilities themselves: "a specific activity within a storm protection program designed
8 for the enhancement of an identified portion *or area of existing electric or distribution*
9 *facilities* for the purpose of reduction restoration costs and reduction outage times
10 associated with extreme weather conditions therefore improving overall service
11 reliability." See Rule 25-6.030(2)(b), F.A.C. (emphasis added). I also note that FPL's
12 proposed program was modeled after the Transmission Access Enhancement Program
13 included in Tampa Electric Company's ("TECO") 2020-2029 SPP that was previously
14 agreed to in a Stipulation and Settlement Agreement, which OPC joined, that was
15 approved by Commission Order No. PSC-2020-0293-AS-EI.²

16 **Q. On page 27 of his testimony, OPC witness Mara states that, as an alternative, FPL**
17 **should consider simply purchasing the specialized equipment necessary to access**
18 **its transmission facilities located in low-lying and saturated areas following an**
19 **extreme weather event. Do you have a response to his alternative proposal?**

20 A. Yes. FPL has evaluated large tire equipment used in other industries. However, FPL
21 has not been able to locate large tire vehicles readily available for purchase that are
22 capable of working within Florida's unique topography, terrain, and hydrology while
23 still meeting the necessary technical loading and reach specifications required to

² FPL acknowledges that, despite agreeing to the program in the TECO 2020-2029 SPP, OPC witness Mara filed testimony in Docket No. 20220048-EI opposing the continuation of TECO's previously approved Transmission Enhancement Program.

1 perform transmission line restoration work following an extreme weather event.
2 Although floating equipment, such as barges, are utilized for construction of
3 transmission line river crossings, this floating equipment cannot be used to access the
4 low-lying and saturated areas to be addressed by the Transmission Access
5 Enhancement Program.

6
7 Even if this specialized equipment was readily available on the market for purchase,
8 FPL would need a large fleet of specialized equipment because the Company's service
9 area encompasses more than 35,000 square miles across 43 counties with more than
10 9,000 miles of transmission lines. Purchasing a large fleet of specialty vehicles would
11 also require ongoing specialized maintenance and specialized resources trained and
12 familiar with operating and maintaining the specialized equipment. Lastly, external
13 resources that perform restoration work following an extreme weather event may not
14 be able to utilize the specialized equipment, resulting in potential delays to restoration
15 of transmission structures and equipment.

16
17 **E. FPL's New Transmission and Distribution Winterization Programs**
18 **Would Reduce Restoration Costs and Outage Times Associated with**
19 **Extreme Winter Events**

20 **~~Q. — Does OPC agree with FPL's proposed new T&D Winterization Programs?~~**

21 **~~A. — No. On page 19 of his testimony, OPC witness Mara contends that an extreme weather~~**
22 **~~event must be wind driven under the SPP Statute and, therefore, projects to address~~**
23 **~~extreme cold temperatures are not eligible to be included in the SPP. On pages 20-21~~**
24 **~~of his testimony, OPC witness Mara contends that changes to planning criteria and~~**
25 **~~increasing capacity of the system to meet forecasted load is a standard base rate activity.~~**

1 Finally, on pages 20 and 21-24 of his testimony, OPC witness Mara contends that FPL
2 has made no attempt to estimate the probability of an extreme weather event and has
3 failed to demonstrate that the T&D Winterization Programs will reduce restoration
4 costs and outage times as required by the SPP Statute and SPP Rule.

5 **Q. — Do you agree that SPP Statute and SPP Rule limit extreme weather events to only**
6 **wind-driven events as suggested by OPC witness Mara?**

7 **A. —** No. Although the Legislature found that during extreme weather conditions high winds
8 can cause vegetation and debris to blow into and damage electrical transmission and
9 distribution facilities, resulting in power outages, the statutory findings do not limit
10 SPPs only to programs designed to address damage due to high winds. Indeed, the
11 Legislature went on to conclude that “[i]t is in the state’s interest to strengthen electric
12 utility infrastructure to withstand extreme weather conditions by promoting the
13 overhead hardening of electrical transmission and distribution facilities, the
14 undergrounding of certain electrical distribution lines, and vegetation management”
15 and that “[p]rotecting and strengthening transmission and distribution electric utility
16 infrastructure from extreme weather conditions can effectively reduce restoration costs
17 and outage times to customers and improve overall service reliability for customers.”
18 See Sections 366.96(1)(c) and (d), F.S. Therefore, the intent and purpose of the SPP
19 Statute is to protect and strengthen the existing transmission and distribution system
20 from all extreme weather events in order to reduce restoration costs and outage times
21 associated with extreme weather events. Consistent with this intent and purpose, FPL
22 notes that its previously approved Substation Storm Surge/Flood Mitigation Program
23 and its proposed Transmission Access Enhancement Program are designed to mitigate
24 flooding and storm surge conditions that occur in conjunction with extreme weather
25 events and are unrelated to vegetation blown by wind.

1 ~~Q. — Do you have a response to OPC witness Mara's contention that FPL did not~~
2 ~~demonstrate that the T&D Winterization Programs will reduce restoration costs~~
3 ~~and outage times?~~

4 ~~A. — Yes. An extreme cold weather event can have significant consequences for areas~~
5 ~~typically unaccustomed to such conditions. This was clearly demonstrated by the~~
6 ~~Texas February 2021 winter event which left millions without electricity for days. The~~
7 ~~Texas February 2021 winter event was a region-wide reminder for all utilities in the~~
8 ~~Southeast more familiar with summer peaking events, such as FPL, that extreme~~
9 ~~weather is now a year-round concern and not limited only to vegetation and debris~~
10 ~~blown by the wind. My direct testimony and Sections II(B), IV(I)(1), and IV(J)(1),~~
11 ~~clearly explain that the T&D Winterization Programs will enable FPL to better serve~~
12 ~~forecasted peak loads during extreme winter events and will help mitigate restoration~~
13 ~~costs and outage times associated with extreme cold weather events similar to the 1977,~~
14 ~~1989, and 2010 winter events in Florida.~~

15 ~~Q. — On pages 22-24 of his direct testimony, OPC witness Mara contends that FPL did~~
16 ~~not provide any evidence of outages on the distribution system due to extreme cold~~
17 ~~weather events. Do you agree?~~

18 ~~A. — No. In response to OPC's First Request for Production of Documents No. 1, which is~~
19 ~~provided on page 1 of Exhibit KJM-3 attached to the testimony of OPC witness Mara,~~
20 ~~FPL provided eight documents regarding the potential impact of an extreme cold~~
21 ~~weather event, including its T&D winterization analysis of a 1989 winter-type of event~~
22 ~~that was used by FPL in its evaluation and development of the proposed T&D~~
23 ~~Winterization Programs. As summarized in my direct testimony and Exhibit MJ-1,~~
24 ~~these documents project that certain T&D facilities could become overloaded and result~~

1 in outages due to an extreme cold weather event similar to the 1977, 1989, and 2010
2 winter events in Florida.

3 ~~Q. — On pages 22-25 of his testimony, OPC witness Mara is critical of FPL’s “January~~
4 ~~2010 Winter Analysis.” Before addressing his specific concerns, do you have a~~
5 ~~comment about his use of the “January 2010 Winter Analysis”?~~

6 ~~A. — Yes. In support of his contention that FPL’s proposed T&D Winterization Programs~~
7 ~~are not needed, OPC witness Mara appears to rely on the information included in the~~
8 ~~“January 2010 Winter Analysis,” which is provided on pages 3-30 of his Exhibit KJM-~~
9 ~~3. The flaw with this approach is that the “January 2010 Winter Analysis” was not the~~
10 ~~final analysis for the proposed T&D Winterization Programs but, rather, the “January~~
11 ~~2010 Winter Analysis” was a report on the actual impacts and outages on FPL’s T&D~~
12 ~~system due to the 2010 winter event. As noted therein, further analysis was required~~
13 ~~to identify the potential impacts of extreme cold weather events similar to the 1977,~~
14 ~~1989, and 2010 winter events in Florida and to develop proposed mitigating measures.~~
15 ~~See page 3 of Exhibit KJM-3 attached to the testimony of OPC witness Mara. The~~
16 ~~analysis actually used by FPL to identify the potential impacts that a 1989 winter type~~
17 ~~of event could have on FPL’s T&D system, which was used to design and support its~~
18 ~~proposed T&D Winterization Programs, was provided to OPC in response to discovery.~~

19 ~~Q. — On page 22 of his testimony, OPC witness Mara asserts that 69% of the outages~~
20 ~~from the January 2010 winter event did not result in the need to replace the~~
21 ~~distribution transformer? Do you have a response?~~

22 ~~A. — Yes. OPC witness Mara’s statement mischaracterizes the FPL “January 2010 Winter~~
23 ~~Analysis.” This statement is not included in the “January 2010 Winter Analysis” and~~
24 ~~FPL assumes that OPC witness Mara reached this simple conclusion by reviewing the~~
25 ~~pie chart on page 11 of the “January 2010 Winter Analysis” (see OPC witness Mara~~

1 ~~Exhibit KJM 3, p. 12) that shows that 31% of the tickets were for transformers. This~~
2 ~~conclusion is inaccurate as the pie chart on page 11 of the “January 2010 Winter~~
3 ~~Analysis” refers to only over head equipment failure. The eight segments in the pie~~
4 ~~chart are the eight “outage codes” noted by the line crews based on their preliminary~~
5 ~~review. Any of these eight “outage codes” in the pie chart could also have resulted in~~
6 ~~a transformer replacement. More accurately, as provided on page 3 of the “January~~
7 ~~2010 Winter Analysis” (see OPC witness Mara Exhibit KJM 3, p. 4), 62% of the total~~
8 ~~Customer Minutes Impacted (CMI) (or, 71% of the total tickets) during the 2010~~
9 ~~January winter event for FPL were due to transformer-related outages. Furthermore, a~~
10 ~~list of all transformers damaged and subsequently replaced from FPL’s January 2010~~
11 ~~winter event was provided in FPL’s response to OPC’s Fourth Set of Interrogatories~~
12 ~~No. 40, which is attached to my rebuttal testimony as Exhibit MJ 3. Additionally,~~
13 ~~FPL’s forensic analysis of the January 2010 winter event identified that overloading~~
14 ~~was the primary driver of the transformer failures during the January 2010 winter event.~~
15 ~~A copy of FPL’s forensic analysis was produced in FPL’s response to OPC’s Fifth~~
16 ~~Request for Production of Documents No. 33, which is attached as Exhibit MJ 4 to my~~
17 ~~rebuttal testimony.~~

18 ~~**Q. On page 23 of his testimony, OPC witness Mara states that FPL’s use of a 1.35**~~
19 ~~**multiplier of the summer peak to predict the winter peak for the replacement of**~~
20 ~~**transformers under the Distribution Winterization Program is too simplistic for**~~
21 ~~**prudent engineering practice. Do you have a response?**~~

22 ~~**A.** Yes. The 1.35 multiplier used in the “January 2010 Winter Analysis” is the system~~
23 ~~average winter/summer peak ratio that was derived based on actual feeder winter-~~
24 ~~summer peak ratios measured during the 2010 extreme cold event. While the specific~~
25 ~~ratio may vary at individual transformers, the 1.35 average multiplier offers FPL a~~

1 comprehensive and uniform approach to develop a company wide standard to help
2 mitigate overload risks that could lead to outages. OPC witness Mara suggests that
3 FPL should research overloading on each individual transformer and only replace those
4 distribution transformers that could become overloaded. FPL serves 5.7 million
5 customers across 43 counties in Florida, and currently has more than one million
6 distribution transformers. It would be inefficient and costly to evaluate each individual
7 distribution transformer and develop and apply individual loading criteria for each
8 transformer as suggested by OPC witness Mara. Therefore, FPL developed a
9 standardized winter overloading criteria that could be applied consistently across its
10 entire service area to ensure that its system can withstand the risk of an extreme weather
11 event, reduce restoration costs, and reduce customer outage times. However, FPL did
12 review the individual transformers on the system to ensure that they complied with both
13 the summer and winter overload criteria. Those individual transformers that did not
14 meet the winter overload criteria are targeted for replacement as part of the SPP
15 Distribution Winterization Program.

16 **Q. On pages 24-25 of his testimony, OPC witness Mara cites to the “January 2010**
17 **Winter Analysis” and states that there were only a few transmission outages**
18 **associated with the January 2010 winter event and the proposed Transmission**
19 **Winterization Program will not correct 70% of the customer minutes interrupted**
20 **(CMI) that occurred during the January 2010 winter event. Do you have a**
21 **response?**

22 **A.** The “January 2010 Winter Analysis” shows the impact that occurred as a result of the
23 2010 winter event in Florida. The SPP Transmission Winterization Program is
24 designed to mitigate any potential transmission impacts that could result from a 1989
25 winter type of event. FPL’s modeling of a 1989 winter type of event identified three

1 transmission line sections that would have capacity constraints and would not meet the
2 forecasted load during an extreme cold weather event. Under the new Transmission
3 Winterization Program, FPL will replace these sections of existing transmission line
4 and the associated substation equipment with higher capacity equipment to better
5 withstand increased load during an extreme cold weather event.

6 ~~Q. On page 25 of his testimony, OPC witness Mara claims that the Transmission~~
7 ~~Winterization Program is not needed because FPL can simply isolate the~~
8 ~~transmission components prior to failure as they reach capacity limits during an~~
9 ~~extreme weather event. Do you agree?~~

10 ~~A. No. OPC witness Mara's suggestion that FPL simply "isolate any components prior to~~
11 ~~failure" before approaching its capacity limit does not apply to the projects identified~~
12 ~~for the Transmission Winterization Program. The FPL transmission system is designed~~
13 ~~and operated to comply with NERC Reliability Standards, which includes a~~
14 ~~requirement to operate the system for an N-1 contingency without exceeding the rating~~
15 ~~of the facility under normal peak load conditions (e.g., TPL-001). Although the~~
16 ~~Transmission Winterization Program modeled an extreme winter load, this does not~~
17 ~~mean that the facility can simply be removed from service without consequences such~~
18 ~~as loss of firm load. The system is required to stay within its facility ratings under an~~
19 ~~N-1 condition unless there is mitigation to address the overload of the facility (NERC~~
20 ~~Reliability Standards TPL-001 and TOP-001). It is important to understand that during~~
21 ~~an extreme winter event, the system loading will likely be at maximum across the entire~~
22 ~~transmission system. Simply isolating the transmission equipment during this time will~~
23 ~~result in additional loading to other existing facilities and could potentially overload~~
24 ~~other facilities resulting in potential equipment failures and system reliability issues. It~~
25 ~~should be noted that as a part of its FPL's winterization analysis, FPL identified specific~~

1 ~~existing transmission lines that would be overloaded under N-1 conditions as required~~
2 ~~by NERC Reliability Standard TPL-001 during an extreme winter peak load with no~~
3 ~~mitigation other than disconnecting firm load. Only these specific facilities have been~~
4 ~~included in the SPP Transmission Winterization Program.~~

5 **Q. Does this conclude your rebuttal testimony?**

6 A. Yes.

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ATTACHMENT 2

**Florida Power & Light Company
Docket No. 20220051-EI**

**Rebuttal Testimony of Michael Jarro
Corrected by First Errata Filed July 27, 2022 (CLEAN)**

Includes the original Exhibit MJ-2 filed on June 21, 2022

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **DOCKET NO. 20220051-EI**

3
4 **FLORIDA POWER & LIGHT COMPANY**

5 **2023-2032 STORM PROTECTION PLAN**

6
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8
9 **REBUTTAL TESTIMONY OF**

10 **MICHAEL JARRO**

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24 **Filed: June 21, 2022**

25 **Corrected by Errata Filed July 27, 2022**

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Exhibit MJ-2: FPL’s Response to OPC’s Fourth Set of Interogatories No. 50

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Michael Jarro. My business address is Florida Power & Light Company
4 (“FPL” or the “Company”), 15430 Endeavor Drive, Jupiter, FL, 33478.

5 **Q. Did you previously submit direct testimony?**

6 A. Yes. I submitted written direct testimony on April 11, 2022, together with Exhibit MJ-
7 1 – FPL’s Storm Protection Plan 2023-2032. On May 6, 2022, FPL filed and served a
8 Notice of Filing a Revised Appendix E to Exhibit MJ-1 to correct the completion dates,
9 start dates, and amounts projected for certain Distribution Feeder Hardening Program
10 projects included in the 2023 project level detail.

11 **Q. What is the purpose of your rebuttal testimony?**

12 A. The purpose of my rebuttal testimony is to respond to certain portions of the direct
13 testimonies of Lane Kollen and Kevin J. Mara submitted on behalf of the Office of
14 Public Counsel (“OPC”). My rebuttal testimony will respond to the concerns,
15 questions, and recommendations raised by these witnesses in opposition to FPL’s 2023-
16 2032 Storm Protection Plan (“2023 SPP”) submitted as Exhibit MJ-1 and as corrected
17 by the Notice of Filing a Revised Appendix E to Exhibit MJ-1 filed on May 6, 2022.

18
19 First, I will provide some context and general observations regarding OPC’s concerns
20 and criticisms of FPL’s 2023 SPP.

21
22 Second, I will address OPC’s recommendation that the Florida Public Service
23 Commission (the “Commission”) apply new cost-effectiveness criteria and standards
24 to review and approve the SPP programs and projects proposed in this proceeding. In
25 essence, OPC seeks to convert this matter into a rulemaking proceeding and asks the

1 Commission to adopt and apply new criteria and standards that are not currently
2 required by Section 366.96, Florida Statutes (hereinafter referred to as the “SPP
3 Statute”), or Rule 25-6.030, Florida Administrative Code (hereinafter referred to as the
4 “SPP Rule”). As I will explain below, OPC’s attempt to amend the requirements of
5 the SPP Statute and SPP Rule as part of this proceeding is inappropriate and
6 unnecessary.

7

8 Third, I will address OPC’s contention that FPL did not provide an estimate of how the
9 programs and projects included in the 2023 SPP will reduce restoration costs and
10 outage times as required by the SPP Rule. As explained below, OPC’s position is based
11 on its incorrect interpretation of the SPP Statute and SPP Rule, and ignores the fact that
12 SPP programs and projects provide both quantitative and qualitative benefits. I will
13 further explain that FPL’s 2023 SPP complies with the requirements of the SPP Statute
14 and SPP Rule.

15

16 Fourth, I will address the incorrect contention of OPC witness Kollen that only new or
17 expanded storm hardening programs are eligible to be included in the SPP. As
18 explained below, OPC witness Kollen ignores the language of the SPP Statute and Rule
19 25-6.031, Florida Administrative Code (hereinafter referred to as the “SPPCRC Rule”)
20 that limits double-recovery, and misapplies the requirement for the Storm Protection
21 Plan Cost Recovery Clause (“SPPCRC”) to the SPP. Existing programs, together with
22 new or expanded programs, are all eligible for approval as SPP programs under the
23 SPP Statute. The issue of whether costs are recovered in base rates or the SPPCRC is
24 a matter to be addressed in the applicable SPPCRC proceeding.

25

1 Finally, I will address and rebut OPC witness Mara's recommendations and
2 adjustments to five out of the nine programs included in FPL's 2023 SPP.
3 Specifically, I will address the following recommendations by OPC: modify the
4 Substation Storm Surge/Flood Mitigation Program; reduce the budget for the
5 Distribution Lateral Hardening Program;
6 and reject the new Transmission Access
7 Enhancement Program. As I explain below, each of these recommendations are
8 inappropriate and unnecessary, and do not serve customers' best interests.

9

10 I note that FPL witness Liz Fuentes will also respond to OPC witness Kollen's concerns
11 regarding FPL's calculation of the revenue requirements submitted with the 2023 SPP.

12 **Q. Are you sponsoring any exhibits with your rebuttal testimony?**

13 A. Yes. I am sponsoring the following exhibits with my rebuttal testimony:

- 14 • Exhibit MJ-2, FPL's Response to OPC's Fourth Set of Interrogatories No.
15 50.

16

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20

21 **II. GENERAL RESPONSE TO OPC'S CONCERNS**

22 **Q. Before addressing the specific issues and recommendations raised by OPC, do you**
23 **have any general observations?**

24 A. Yes. The evaluation of FPL's 2023 SPP must be grounded in the fact that FPL has
25 successfully been engaging in Commission-approved storm hardening for the last 16

1 years. During this time, the Commission has reviewed and had full transparency into
2 all aspects of FPL's storm hardening activities, and interested parties and stakeholders
3 had the opportunity to participate in these reviews. Indeed, in its report "Review of
4 Florida's Electric Utility Hurricane Preparedness and Restoration Actions 2018", in
5 Docket No. 20170215-EU, the Commission recognized the success of historical storm
6 hardening efforts in Florida. Key findings by the Commission in that report included:

- 7 • Florida's aggressive storm hardening programs are working (Section V);
- 8 • The length of outages was reduced markedly from the 2004-2005 storm
9 season (Section IV);
- 10 • The primary cause of power outages came from outside the utilities' rights
11 of way including falling trees, displaced vegetation, and other debris
12 (Section IV);
- 13 • Vegetation management outside the utilities' rights of way is typically not
14 performed by utilities due to lack of legal access (Section IV);
- 15 • Hardened overhead distribution facilities performed better than non-
16 hardened facilities (Section V);
- 17 • Very few transmission structure failures were reported (Section V); and
- 18 • Underground facilities performed much better compared to overhead
19 facilities (Section V).

20 In response to Hurricanes Matthew and Irma, the Florida Legislature passed the SPP
21 Statute "to mitigate restoration costs and outage times to utility customers" by
22 "strengthen[ing] electric utility infrastructure to withstand extreme weather conditions
23 by promoting the overhead hardening of electrical transmission and distribution
24 facilities, the undergrounding of certain electrical distribution lines, and vegetation
25 management." Section 366.96(1)(c)-(e), F.S. From these facts, one can logically and

1 reasonably conclude that the Legislature did not pass the SPP Statute to stop or limit
2 storm hardening activity in Florida, nor can one assume that the passage of the SPP
3 Statute was an indictment or criticism against storm hardening activity that has
4 previously taken place in Florida. Rather, it is reasonable to assume that the Florida
5 Legislature passed the SPP Statute to encourage, streamline, and advance storm
6 hardening work in this state.

7

8 FPL's 2023 SPP outlines a comprehensive storm protection plan that meets the
9 statutory objectives codified in the SPP Statute and complies with the requirements of
10 the SPP Rule. The 2023 SPP is largely a continuation of the following programs
11 included in the current 2020-2029 Storm Protection Plan (hereinafter, the "2020 SPP")
12 that were agreed to by OPC in a Joint Motion for Approval of a Stipulation and
13 Settlement Agreement ("2020 SPP Settlement"), approved by Commission Order No.
14 PSC-2020-0293-AS-EI:

- 15 • Distribution Inspection Program
- 16 • Transmission Inspection Program
- 17 • Distribution Feeder Hardening Program
- 18 • Distribution Lateral Hardening Program
- 19 • Transmission Hardening Program
- 20 • Distribution Vegetation Management Program
- 21 • Transmission Vegetation Management Program
- 22 • Substation Storm Surge/Flood Mitigation Program

23 The majority of the existing SPP programs have been in place since 2007 and have
24 already demonstrated that they have provided and will continue to provide increased
25 T&D infrastructure resiliency, reduced restoration times, and reduced restoration costs

1 when FPL is impacted by extreme weather events. For certain existing SPP programs,
2 FPL proposed limited modifications to further improve these programs and implement
3 best practices as further described in my direct testimony and Exhibit MJ-1. Notably,
4 OPC has not opposed or challenged any of these modifications to the existing SPP
5 programs.

6

7 As part of the 2023 SPP, FPL also proposed to implement a new

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9 Transmission Access Enhancement Program. As detailed in my direct testimony and
10 Exhibit MJ-1, the new

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12 Transmission Access Enhancement Program
13 will help ensure that FPL and its contractors have reasonable access to FPL's
14 transmission facilities for repair and restoration activities following an extreme weather
15 event.

16 **Q. Does OPC challenge all of the programs included in FPL's 2023 SPP?**

17 A. No. OPC submitted the direct testimony of OPC witness Kollen in all four SPP dockets
18 currently pending before the Commission. The vast majority of his direct testimony
19 (pages 6-21) is dedicated to proposing that the Commission adopt new criteria
20 standards that do not exist in the SPP Statute or SPP Rule today and apply those to
21 reject all of the SPPs submitted by all four investor-owned utilities ("IOU") that do not
22 meet his proposed new cost-effectiveness threshold. Thus, OPC witness Kollen is
23 seeking to establish new standards, outside the SPP Statute and the SPP Rule, to review
24 the SPP and does not oppose or challenge any specific program included in FPL's 2023

1 SPP. I will respond to OPC witness Kollen's proposed new criteria and standards later
2 in my testimony and explain that his proposal is inappropriate and unnecessary.

3

4 On pages 13, and 17-34, OPC witness Mara proposes adjustments to two of the existing
5 SPP programs and opposes the new SPP program . Based on the testimony of
6 OPC witness Mara, it appears that OPC essentially agrees with eight out of the nine
7 programs included in FPL's 2023 SPP. I will respond to OPC's recommended
8 adjustments to the existing SPP programs and criticisms of the new SPP programs later
9 in my testimony.

10 **Q. Do you have any additional general observations about the testimonies of OPC**
11 **witnesses Kollen and Mara?**

12 A. Yes. Other than the proposed adjustments to the Substation Storm Surge/Flood
13 Mitigation Program and Distribution Lateral Hardening Program, and opposition to the
14 three new proposed SPP programs, the OPC witnesses primarily make four general
15 arguments in opposition to FPL's 2023 SPP.

16

17 First, OPC argues that the Commission should adopt and apply new formulaic cost-
18 benefit and cost-effectiveness requirements for approval of SPP programs and projects.
19 As explained below, the Florida Legislature and this Commission, through the SPP
20 Rule, have already addressed the issue and declined to require either cost benefit
21 analysis or a cost-effectiveness threshold in the review and approval of a SPP. FPL's
22 2023 SPP has fully complied with all the requirements of what must be included in a
23 SPP pursuant to the SPP Statute and SPP Rule as explained in my direct testimony.
24 For the reasons explained later in my testimony, OPC's proposal is inappropriate and
25 unnecessary for several reasons.

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Second, and related to its first argument, OPC contends that the benefits of the SPP programs must be quantified and monetized in order to meet the requirements of the SPP Rule. OPC’s proposal again attempts to add new requirements to the SPP Statute and SPP Rule that do not exist today. As explained in my direct testimony, FPL has provided a description of how the 2023 SPP will reduce restoration costs and outage times associated with extreme weather events in compliance with express requirements of SPP Rule. As explained in greater detail below, storm hardening is not a simple cost-effective proposition and OPC’s belief that outage times should be monetized ignores the very real and simple fact that the monetary value individual customers or communities place on reduced outage times cannot be accurately or uniformly estimated. Moreover, OPC’s recommendation that FPL’s SPP programs require further cost-justification before they can be approved is directly contrary to OPC’s own testimony that requests the Commission reject only three of the nine programs included in FPL’s 2023 SPP as further explained in my rebuttal testimony.

Third, OPC argues that projects which displace base rate costs that would have been incurred during the normal course of business and that are not incurred on an incremental basis specifically to achieve the objectives of the SPP Rule are not eligible to be included in the SPP. As explained below, OPC’s argument misconstrues the language of the SPP Statute and SPPCRC Rule, misapplies the requirement for the SPPCRC to the SPP, and disregards that the issue of whether SPP costs are recovered in base rates or the SPPCRC is a matter to be addressed in the annual SPPCRC proceedings.

1 Finally, OPC raises questions regarding FPL's calculation of the SPP revenue
2 requirements that were used to estimate the rate impacts of the programs included in
3 FPL's 2023 SPP. FPL witness Liz Fuentes will respond to these criticisms.

4

5 **III. OPC's PROPOSED NEW COST-BENEFIT AND COST-EFFECTIVENESS**
6 **STANDARDS ARE NOT APPROPRIATE OR NECESSARY**

7 **Q. OPC is proposing that the Commission apply new standards and criteria to review**
8 **the IOUs' SPPs. Are these the same standards and criteria that FPL used to**
9 **prepare its 2023 SPP?**

10 A. No. FPL designed its SPP programs and prepared the 2023 SPP based on the
11 requirements and standards prescribed in the SPP Statute and SPP Rule that were in
12 effect at the time FPL filed the 2023 SPP on April 11, 2022, and which remain in effect
13 today. OPC, on the other hand, is asking the Commission to adopt new criteria and
14 standards that, as I further explain below, are not currently in either the SPP Statute or
15 SPP Rule and then retroactively apply those new requirements to the IOUs' SPPs that
16 were filed on April 11, 2022 to determine if they should be approved.

17 **Q. Please summarize OPC's proposal to add new criteria and standards to the review**
18 **of the IOUs' SPPs.**

19 A. OPC witness Kollen is proposing that the Commission adopt a new requirement for the
20 SPP's to include a cost-benefit analysis and establish a new cost-effectiveness test to
21 determine if the SPP programs should be approved. OPC witness Kollen then
22 recommends on page 9 of his testimony that the "Commission reject all proposed SPP
23 projects that are not economic, meaning that they do not have a benefit-to-cost ratio of
24 at least 100%." On page 14 of his direct testimony, OPC witness Kollen goes on to
25 conclude that "FPL's programs and costs are not prudent and reasonable unless they

1 meet all of the requirements” proposed by OPC witness Kollen. Thus, OPC witness
2 Kollen proposes that the Commission adopt a new cost-effectiveness threshold and
3 apply that new standard to review and approve/reject the programs and projects
4 included in FPL’s 2023 SPP.

5 **Q. Do you have concerns with OPC’s proposal that the Commission adopt and apply**
6 **a new cost-effectiveness test to review the IOUs’ SPPs?**

7 A. Yes. First, the SPP Statute and SPP Rule do not prescribe or require a traditional cost-
8 benefit analysis or cost-effectiveness test for projects or programs to be included in the
9 SPP. The Statute makes no mention of any such analysis or test and, instead, the
10 Florida Legislature left that determination to the discretion of the Commission by
11 directing it to adopt rules necessary to implement the statute. In adopting the SPP Rule,
12 the Commission could have prescribed specific metrics, standards, and formulas to
13 require the SPP programs to meet a cost-effective threshold, but it wisely did not
14 because each program is different and, therefore, must be evaluated on its particular
15 facts and merits. Indeed, Rule 25-6.030(3)(d)(4), F.A.C., requires the SPP to include a
16 “comparison” of the estimated costs and described benefits for each SPP program,
17 which is provided in the following portions of FPL’s 2023 SPP: Section II; the
18 “Comparison of Costs and Benefits” included in each SPP program description in
19 Section IV; and Appendix A of Exhibit MJ-1. As such, a cost-benefit analysis or cost-
20 effectiveness test for each major component of the SPP is not required under either the
21 SPP Statute or SPP Rule. OPC is attempting to re-litigate the SPP Rule approved by
22 this Commission.

23

24 Second, in the SPP Rule, the Commission prescribed specific information and data that
25 must be included with each SPP, including, but not limited to, estimated costs,

1 description of the benefits, criteria to prioritize and select projects, and estimated rate
2 impacts. As explained in my direct testimony, FPL provided this information in its
3 2023 SPP consistent with SPP Rule. The Commission can use and “compare” all of
4 the information it specifically required FPL to provide in the SPP to determine if,
5 pursuant to the SPP Statute, the programs and projects included in the SPP are in the
6 public interest and should be approved, or if the SPP programs should be modified or
7 denied. Each program is different and, therefore, the comparison of costs and benefits
8 must be evaluated on its particular facts and merits.

9

10 Third, the analysis of whether the benefits of a SPP program or project justify the
11 estimated costs is not a one-size-fits-all proposition as suggested by OPC. This is
12 clearly demonstrated by the fact that, as OPC witness Kollen acknowledges on page 14
13 of his direct testimony, each of the electric utilities took very different approaches to
14 comparing the estimated costs and benefits of their SPP programs. Further, such
15 analyses are necessarily dependent on several highly variable factors that, in large part,
16 are beyond the utility’s control and cannot be accurately predicted, including, but not
17 limited to: the number of annual extreme weather events; the path of each storm; the
18 intensity or category of each storm; the speed or duration of each storm; the availability
19 of resources to respond to and provide storm restoration services for each storm; and
20 the extent to which the infrastructure has been storm hardened at the time of each
21 projected storm. Moreover, the benefits to be included in such analyses should not be
22 limited to only avoided utility costs as I will explain further.

23

1 **IV. FPL'S 2023 SPP WILL REDUCE RESTORATION COSTS AND OUTAGE**
2 **TIMES AS REQUIRED BY RULE 25-6.030, F.A.C.**

3 **Q. Both OPC witnesses Kollen and Mara argue that FPL's 2023 SPP did not meet**
4 **the requirements of the SPP Rule because it did not quantify and monetize the**
5 **benefits of the proposed SPP Programs. Do you have a response?**

6 A. Yes. I disagree with OPC witnesses Kollen and Mara that further cost-justification of
7 FPL's 2023 SPP programs is needed or appropriate. On pages 17-19 of his testimony,
8 OPC witness Kollen states that FPL did not provide any quantitative benefits for the
9 proposed SPP programs and that it is not enough under the SPP Rule to simply say
10 there will be benefits without quantifying those benefits. OPC witness Mara likewise
11 states on pages 10-11 of his testimony that FPL only provided written descriptions of
12 SPP program benefits and did not quantify the estimated cost reductions or monetize
13 the reduction of outage times for each program. OPC witness Mara goes on to suggest
14 on page 11 of his testimony that FPL should be required to file an amended SPP that
15 provides this data. OPC's contention that FPL failed to comply with the SPP Rule
16 because it did not quantify the benefits of the SPP programs is misplaced for several
17 reasons.

18
19 First, OPC's contention that the SPP must include quantifiable and monetized benefits
20 for each SPP program is a fallout of OPC's proposal that the Commission adopt and
21 apply a new cost benefit analysis and new cost-effectiveness threshold for the SPP
22 programs. As I explained above, OPC's proposed new criteria and standards to review
23 the SPPs are contrary to the requirements of both the SPP Statute and SPP Rule and
24 should be rejected.

1 First, there is nothing in either the SPP Statute or SPP Rule that prescribes that the
2 benefits of SPP programs must be quantified or monetized as suggested by the OPC
3 witnesses. Rather, the SPP Rule expressly provides that the SPP must include a
4 “description” of the benefits of the SPP programs. See Rule 25-6.030(3)(b), F.A.C.
5 (“For each Storm Protection Plan, the following information must be included.... (b)
6 *A description* of how the proposed Storm Protection Plan will reduce restoration costs
7 and outage times associated with extreme weather conditions” (emphasis added)); see
8 also Rule 25-6.030(3)(d)(1), F.A.C. (“*A description* of each proposed storm protection
9 program that includes: (1) A description of how each proposed storm protection
10 program is designed to enhance the utility’s existing transmission and distribution
11 facilities including an estimate of the resulting reduction in outage times and restoration
12 costs due to extreme weather events” (emphasis added)).

13
14 Second, storm hardening is not a simple cost-effective proposition as suggested by
15 OPC. OPC’s approach focuses only on program costs and savings in restoration costs
16 associated with extreme weather conditions (*i.e.*, a strictly quantitative analysis), and
17 completely ignores the qualitative component required by both the SPP Statute and SPP
18 Rule. Stated differently, OPC’s proposed cost-benefit and cost-effectiveness approach
19 ignores half of the benefits side of the equation. It cannot be reasonably disputed that
20 customers want the extended outage times associated with extreme weather events to
21 be reduced. Indeed, the Florida Legislature concluded that reducing outage times for
22 utility customers, as well as restoration costs, is in the public interest. The Commission
23 can and should compare these factors and determine whether the estimated benefits of
24 the storm hardening programs are justified by the estimated rate impacts.

1 Third, OPC witness Mara's belief that outage times should be monetized, ignores the
2 very real and simple fact that the monetary value individual customers or communities
3 place on reduced outage times cannot be accurately or uniformly estimated. Indeed,
4 some customers may be willing to pay a premium to never have a power outage, while
5 others may be willing to tolerate a few short outages. Moreover, the SPP Rule does
6 not require the outage times to be monetized as explained above, and there is no
7 uniform Commission or industry method to do so. Such analyses are necessarily
8 dependent on several highly variable factors (such as the intensity, path, and duration
9 of the extreme weather event and extent that the system has been hardened) and could
10 include a very wide range of subjective economic factors, including, but not limited to:
11 individual and different customer value on reduced outage times, including comfort,
12 health, and convenience; economic impact to individual customers due to spoilage, loss
13 or disruption of business, and loss of equipment or supplies; and impact to the local
14 and state economy. Thus, even if the SPP Statute and Rule did require the reduction in
15 outage times to be monetized, which they do not, there is significant uncertainty and
16 variability in how that should be done.

17
18 Finally, OPC's recommendation that FPL's SPP programs require further cost-benefit
19 analysis or cost-justification before they can be approved is directly contrary to OPC
20 witness Mara's testimony on pages 13 and 17-34 that requests the Commission only
21 reject three of the nine programs included in FPL's 2023 SPP. Stated differently,
22 OPC witness Mara does not dispute that it would be reasonable for the Commission to
23 allow FPL to implement the eight programs included in the 2023 SPP as further
24 explained below. Either these SPP programs are in the public interest and should be
25 approved, or they are not. The fact that OPC witness Mara has essentially agreed that

1 most of these programs should be approved without further cost-justification clearly
2 suggests that OPC believes FPL has provided sufficient information about each of the
3 SPP programs for the Commission to determine if they are in the public interest.

4 **Q. On page 18 of his direct testimony, OPC witness Kollen recommends that FPL**
5 **should be directed to use its storm damage assessment model to model and**
6 **quantify the estimated benefits and savings from the programs included in FPL’s**
7 **2023 SPP. Please describe FPL’s Storm Damage Model.**

8 A. FPL’s Storm Damage Model is a very important proprietary tool developed by FPL to
9 prepare for major storms that threaten FPL’s service area. The Storm Damage Model
10 is used for major storms with a forecast track provided by the National Hurricane
11 Center to estimate the number of construction man-hours (“CMH”) required to restore
12 power to customers based on the forecasted intensity, speed, path of the storm, and the
13 condition (hardened vs. non-hardened) of the infrastructure at the time of the storm.
14 The Storm Damage Model is a planning tool used by the Company to estimate the
15 extent of damage expected from a projected storm, and the number and location of
16 resources that will be needed to quickly and safely restore power outages to the greatest
17 number of customers in the shortest amount of time.

18 **Q. Do you agree with OPC witness Kollen’s recommendation that FPL should use**
19 **the Storm Damage Model to model to quantify the benefits and savings associated**
20 **with the programs included in FPL’s 2023 SPP?**

21 A. No, FPL’s Storm Damage Model was not intended to be used to quantify individual
22 SPP programs or projects. As provided in Appendix A to Exhibit MJ-1, FPL used its
23 Storm Damage Model to analyze Hurricanes Matthew and Irma and estimate the
24 reduction in CMH, days to restore, and storm restoration costs that were attributable to
25 the storm hardening projects that were completed and in place at the time of the

1 hurricanes. This analysis was based mainly on the feeders that FPL knew had been
2 hardened versus non-hardened at the times Hurricanes Matthew and Irma occurred, and
3 included the distribution inspection and vegetation management that had been
4 completed at the times Hurricanes Matthew and Irma occurred. OPC witness Kollen
5 proposes something different.

6
7 OPC witness Kollen proposes that FPL use the Storm Damage Model to model the
8 future system with the proposed 2023 SPP programs in place for the entire 2023-2032
9 SPP period to quantify the costs that could be avoided due to the SPP programs. The
10 problem with this approach is that, beyond year one of the SPP (2023), the project level
11 detail has not been determined; meaning FPL does not at this time know which specific
12 projects will be completed each year or where they will be located for the entire 2023-
13 2032 SPP period. The scope and location of the storm hardening projects used in the
14 Storm Damage Model for each year of the SPP will have a significant impact on the
15 results of the analysis. For example, if FPL assumes a storm hardening project in a
16 densely populated urban area as opposed to a rural area, or vice versa, this could change
17 the damage estimated by the Storm Damage Model. Also illustrative is the fact that
18 the estimated length, number of poles, location, and accessibility of the laterals used in
19 the model would change the damage estimated by the Storm Damage Model. Each of
20 these factors, which cannot be reasonably predicted for the entire 2023-2032 SPP
21 period, would impact the estimated CMH, days to restore, and storm restoration costs
22 predicted by the Storm Damage Model. For these reasons, the Storm Damage Model
23 does not readily lend itself to model future SPP programs as proposed by OPC witness
24 Kollen.

25

1 Even assuming the Storm Damage Model was appropriate to provide an estimate of
2 CMH, days to restore, and storm restoration costs for future SPP programs, FPL's
3 Storm Damage Model is only used for major storms with a forecast track provided by
4 the National Hurricane Center. Thus, the Model would not account for any other types
5 of extreme weather conditions, as well as any associated reductions in restoration costs
6 and outage times. Florida remains the most hurricane-prone state in the nation and,
7 with the significant coast-line exposure of FPL's system and the fact that the vast
8 majority of FPL's customers live within 20 miles of the coast, FPL's service area has
9 a high probability of being impacted by multiple extreme weather events every year.
10 Although no one is in a position to know for sure how frequently FPL's service area
11 will be impacted by extreme weather conditions, the Storm Damage Model estimate of
12 cumulative reductions in restoration costs and outage times associated with the SPP
13 programs will be directly affected by frequency, strength, speed, and path of storms
14 that impact FPL's service area. As required by the SPP Rule, FPL has provided a
15 description of the benefits and estimated cost for all the programs in FPL's 2023 SPP,
16 in some cases these benefits are qualitative and in others they are quantitative, as
17 provided in Sections II and IV and Appendix A to Exhibit MJ-1.

18 **Q. Has FPL provided descriptions of how the programs included in its 2023 SPP will**
19 **reduce restoration costs and outage times associated with extreme weather**
20 **conditions?**

21 A. Yes. In compliance with Rules 25-6.030(3)(b) and 25-6.030(3)(d)(1), F.A.C., the
22 benefits expected from the proposed SPP programs were provided in the following
23 portions of FPL's 2023 SPP: Section II; the "Description of the Program and Benefits"
24 included in each SPP program description in Section IV; and Appendix A of Exhibit
25 MJ-1. The existing SPP programs have already demonstrated that they will both reduce

1 restoration costs and outage times associated with extreme weather conditions, and
2 were previously approved as part of the 2020 SPP. Although FPL has proposed limited
3 modifications to certain of these existing SPP programs, these modifications will
4 further improve these programs and implement best practices where applicable as
5 explained in my direct testimony and Exhibit MJ-1. And, OPC has not opposed or
6 challenged any of these limited modifications to the existing SPP programs.

7

8 The Commission can review the benefits of the SPP programs described in my direct
9 testimony and Exhibit MJ-1, together with the prioritization, feasibility, estimated
10 costs, and estimated rate impacts, and determine whether the programs included in the
11 2023 SPP are in the public interest.

12

13 **V. OPC’S CLAIM THAT ONLY NEW OR EXPANDED STORM HARDENING**
14 **PROGRAMS QUALIFY FOR INCLUSION IN THE SPP IS INAPPROPRIATE**

15 **Q. On pages 13-15 of his direct testimony, OPC witness Kollen asserts that FPL has**
16 **included programs and projects that are within the scope of its existing base rate**
17 **programs and base rate recoveries in the normal course of business, and he**
18 **recommends that these programs and projects should be excluded from the SPPs.**
19 **Do you have a response?**

20 **A.** Yes. It appears that OPC witness Kollen is recommending that only new or expanded
21 storm hardening programs qualify for inclusion in the SPP, and that any programs that
22 have previously been recovered in base rates are not eligible to be included in the SPP.
23 Indeed, on page 7 of his testimony, OPC witness Kollen states that to be included in
24 the SPP, “the projects and the costs of the projects must be incremental, not simply
25 displacements of base rate costs that would have been incurred during the normal

1 course of business.” OPC witness Kollen’s recommendation is misplaced for several
2 reasons.

3

4 First, OPC witness Kollen is again attempting to re-litigate the Commission’s approval
5 of the SPP Rule and add a new requirement that is clearly not prescribed in either the
6 SPP Statute or SPP Rule. The SPP Statute and SPP Rule define the type of programs
7 eligible to be included in the SPP as programs for the overhead hardening and increased
8 resilience of T&D facilities, undergrounding of electric distribution facilities, and
9 vegetation management that will mitigate restoration costs and outage times due to
10 extreme weather events. Contrary to OPC witness Kollen’s assertion, there is nothing
11 in either the SPP Statute or SPP Rule that limit SPP programs to only new or expanded
12 storm hardening programs.

13

14 Second, OPC witness Kollen’s recommendation misconstrues and seeks to expand the
15 limitation in the SPP Statute and SPPCRC Rule that SPP costs cannot be recovered in
16 both base and clause rates. The SPP Statute provides that the “annual transmission and
17 distribution storm protection plan costs may not include costs recovered through the
18 public utility’s base rates.” See Section 366.96(8), F.S. Similarly, the SPPCRC Rule
19 provides that costs recoverable through the SPPCRC “shall not include costs recovered
20 through the utility’s base rates or any other cost recovery mechanisms.” See Rule 25-
21 6.031(6)(b), F.A.C. Simply stated, the limitation proscribed in the SPP Statute and
22 SPPCRC Rule ensures that there is no double recovery of SPP costs in both base and
23 clause rates. It does not limit SPP programs to only new or expanded storm hardening
24 programs that have not previously been recovered in base rates as suggested by OPC
25 witness Kollen.

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Third, the issue of whether SPP costs are incremental or being recovered in base rates is irrelevant to this SPP proceeding. As stated in Commission Order No. PSC-2020-0162-PCO-EI in Docket No. 20200071-EI, this is an issue to be addressed in the SPPCRC proceedings. Relatedly, OPC witness Kollen’s recommendation overlooks the fact that SPP costs can be recovered through either the SPPCRC or base rates – just not both. See Rule 25-6.031(8), F.A.C. (“Recovery of costs under this rule does not preclude a utility from proposing inclusion of unrecovered Storm Protection Plan implementation costs in base rates in a subsequent rate proceeding”).

Fourth, OPC witness Kollen’s recommendation would lead to nonsensical results. Under OPC witness Kollen’s approach, none of the pole inspection, vegetation management, transmission pole replacement, feeder hardening, or other long-standing storm hardening programs that existed prior to the effective date of the SPP Statute would be eligible to be included in the SPP unless they are expanded and, even then, only the costs associated with the expanded portion of those programs could be included in the SPP. See Direct Testimony of OPC witness Kollen, page 15. The flaw with this approach is that these programs have largely been in place since 2007 and approved as part of the Storm Hardening Plan, which has now been replaced with the SPP. Moreover, the existing eight SPP programs were approved in FPL’s and former Gulf Power Company’s (Gulf) 2020 SPPs. The purpose and policy of the SPP Statute is to mitigate restoration costs and outage times by encouraging the IOUs to continue and accelerate their storm hardening efforts by reducing regulatory lag and allowing the IOUs to recover the associated costs through an annual clause proceeding. OPC witness Kollen’s new proposal, however, would defeat this legislative objective by

1 disallowing longstanding and proven storm hardening measures from being included
2 in the SPP.

3
4 Finally, although OPC witness Kollen alleges on page 13 of his testimony that FPL
5 included programs and projects in its 2023 SPP that are base rate programs recovered
6 in base rates in the normal course of business, neither OPC witness identifies any
7 specific FPL program that they believe are currently in FPL's base rates. While OPC
8 may attempt to raise this as an issue in the SPPCRC proceeding, it is important to
9 remember that, effective January 1, 2022, all SPP operations and maintenance expenses
10 and capital expenditures, with the exception of the cost of removal for assets existing
11 prior to 2021, have been recovered or will be requested for recovery through the
12 SPPCRC and, therefore, are incremental to and not being recovered in base rates. See
13 Direct Testimony of FPL witness Liz Fuentes filed in Docket No. 20210015-EI on
14 March 12, 2021; see Direct Testimony of FPL witnesses Liz Fuentes and Michael Jarro
15 filed in Docket No. 20200092-EI on July 24, 2020.

16
17 **VI. THE PROGRAMS AND PROJECTS INCLUDED IN FPL'S 2023 SPP ARE IN**
18 **THE PUBLIC INTEREST AND SHOULD BE APPROVED**

19 **A. OPC Essentially Agrees with Eight of the Nine Programs Included in**
20 **FPL's SPP**

21 **Q. You have stated that OPC essentially agrees with eight of the nine programs**
22 **included in FPL's 2023 SPP. Can you please explain how you arrived at that**
23 **conclusion?**

24 **A. Yes. As explained above, FPL's 2023 SPP includes a total of nine SPP programs:**
25 **eight existing programs included in the 2020 SPP approved by Commission Order No.**

1 PSC-2020-0293-AS-EI, and three new programs. OPC witness Mara proposes
2 adjustments to two of the existing SPP programs: the existing Substation Storm
3 Surge/Flood Mitigation Program and the existing Distribution Lateral Hardening
4 Program. OPC witness Mara also opposes the

5 Transmission Access
6 Enhancement Program. Therefore, OPC witness Mara essentially agrees that six out
7 of the nine programs included in FPL's 2023 SPP should be approved as submitted.
8

9 Further, with respect to the Substation Storm Surge/Flood Mitigation Program, OPC
10 witness Mara does not oppose the program but, rather, asserts on pages 16-17 of his
11 direct testimony that the Storm Surge/Flood Mitigation Program should exclude
12 substations that have alternate feeds available and do not have a history of flooding.
13 Therefore, OPC essentially agrees with FPL's proposed Substation Storm Surge/Flood
14 Mitigation Program but recommends additional selection criteria be considered, which
15 I will further address later in my testimony.
16

17 Similarly, OPC witness Mara does not oppose the Distribution Lateral Hardening
18 Program. Rather, OPC witness Mara recommends on pages 33-34 of his direct
19 testimony that the annual budget for the Distribution Lateral Hardening Program be
20 capped at \$606 million for the years 2025-2032. Therefore, OPC essentially agrees
21 with FPL's proposed Distribution Lateral Hardening Program but recommends a
22 reduction in the number of laterals that may be completed each year, which will delay
23 when customers will receive the direct benefits of the Distribution Lateral Hardening
24 Program. I will respond to OPC witness Mara's recommended adjustment below.
25

1 Based on the testimony of OPC witness Mara, it appears that OPC essentially agrees
2 with eight out of the nine programs included in FPL's 2023 SPP. It further
3 appears that the only truly contested programs are the three new programs proposed in
4 FPL's 2023 SPP. I will respond to OPC criticisms of these new SPP programs below.

5

6 **B. OPC's Recommended Adjustment to the Storm Surge/Flood Mitigation**
7 **Program is not Reasonable or Appropriate**

8 **Q. OPC witness Mara recommends adjustments to the Storm Surge/Flood**
9 **Mitigation Program. Before responding to his specific recommendations, do you**
10 **have any general observations about his proposal?**

11 A. Yes. OPC witness Mara's recommendations regarding FPL's Storm Surge/Flood
12 Mitigation Program are inconsistent. On page 13 of his testimony, OPC witness Mara
13 appears to recommend that the entire budget for the Storm Surge/Flood Mitigation
14 Program should be rejected. However, on pages 16-18 of his testimony, OPC witness
15 Mara recommends that substations with alternate feeds or no history of flooding should
16 be excluded from the Storm Surge/Flood Mitigation Program. Notably, OPC witness
17 Mara does not identify any specific substation that would be excluded by his proposal,
18 nor does he explain or demonstrate how such exclusions would result in the elimination
19 of the entire budget for the Storm Surge/Flood Mitigation Program.

20 **Q. Do you have a response to OPC witness Mara's recommendation that the entire**
21 **budget for the Storm Surge/Flood Mitigation Program should be rejected?**

22 A. Yes. OPC witness Mara's recommendation overlooks that the Storm Surge/Flood
23 Mitigation Program included in FPL's 2023 SPP is the same program that was included
24 in FPL's 2020 SPP previously approved by Commission Order No. PSC-2020-0293-
25 AS-EI. In the 2020 SPP, FPL originally projected it would complete the Storm

1 Surge/Flood Mitigation Program by 2022. However, as explained in my direct
2 testimony and in Exhibit MJ-1, due to field conditions and permitting delays that were
3 largely beyond FPL's control, FPL was unable to complete the storm surge/mitigation
4 measures at all of the identified substations by year-end 2022 as originally projected.
5 As a result, FPL is proposing to continue the program to address the remaining four
6 substations originally identified in the 2020 SPP, which are currently expected to be
7 completed by year-end 2024. FPL has not added new or additional substations to the
8 Storm Surge/Flood Mitigation Program approved as part of the 2020 SPP. The new
9 exclusions proposed by OPC witness Mara were not part of either the 2020 SPP or the
10 2020 SPP Settlement that OPC joined. OPC witness Mara has not offered any reason
11 why it was in the public interest to complete the storm surge/mitigation measures at
12 these substations as part of the 2020 SPP, but not as part of the 2023 SPP.

13 **Q. Do you agree with OPC witness Mara's recommendation that substations with**
14 **alternate feeds should be excluded from the Storm Surge/Flood Mitigation**
15 **Program?**

16 A. No. Rather than installing measures to mitigate the potential for storm surge and flood
17 at these four substations, OPC witness Mara recommends that any of these substations
18 that have an alternative feed should be de-energized and the load served by the de-
19 energized substation should be transferred to an adjacent substation via the alternate
20 feed. OPC witness Mara's recommendation is not practical.

21
22 All of the four substations identified for the Storm Surge/Flood Mitigation Program
23 have alternative feeder ties to nearby substations. However, de-energizing one
24 substation due to storm surge or flooding does not mean an adjacently tied substation
25 can necessarily pick up and support the entire electric load from the de-energized

1 substation. For example, the St. Augustine Substation, which has an alternate feed,
2 was de-energized during Hurricanes Matthew and Irma and the majority of the
3 customers served by this substation experienced outages. Similarly, the South Daytona
4 Substation, which has an alternate feed, was de-energized during Hurricane Irma and
5 the majority of the customers served by this substation experienced outages. Further,
6 OPC witness Mara overlooks that the mitigation measures under the Storm
7 Surge/Flood Mitigation Program will not only reduce outages but will reduce
8 restoration costs associated with the need to repair and replace substation equipment
9 that is damaged due to storm surge or flooding following an extreme weather event.

10 **Q. Do you have a response to OPC witness Mara's recommendation that substations**
11 **with no history of flooding should be excluded from the Storm Surge/Flood**
12 **Mitigation Program?**

13 A. Yes. All four substations remaining to be completed under the Storm Surge/Flood
14 Mitigation Program have, in fact, experienced floods or storm surges in the past. Most
15 recently, the flood alarm monitor went off at the Dumfoundling Substation during
16 Tropical Cyclone One that impacted South Florida on June 2, 2022. With respect to
17 future potential flooding at these substations, FPL explained in its response to OPC's
18 Fourth Set of Interrogatories No. 50(d), which is attached to my rebuttal testimony as
19 Exhibit MJ-2, that each of the four substations remaining to be completed under the
20 program has projected flood levels that are higher than the current elevation of these
21 substations. Therefore, all four substations included in the Substation Storm
22 Surge/Flood Mitigation Program as part of the 2023 SPP have had a history of flooding
23 and remain susceptible to flooding.

1 **C. OPC's Recommended Adjustments to the Distribution Lateral**
2 **Hardening Program are not Reasonable or Appropriate**

3 **Q. Does OPC oppose the Distribution Lateral Hardening Program included in FPL's**
4 **2023 SPP?**

5 A. No. OPC witness Mara does not oppose FPL's Distribution Lateral Hardening
6 Program. Rather, OPC witness Mara recommends a reduction in the annual budget for
7 the Distribution Lateral Hardening Program, which will reduce the number of laterals
8 to be completed each year and delay when customers will receive the direct benefits of
9 the Distribution Lateral Hardening Program.

10 **Q. In the 2023 SPP, FPL proposed to establish protocols for determining when a**
11 **lateral may be evaluated for overhead hardening as opposed to being placed**
12 **underground. Does OPC oppose these new overhead hardening protocols?**

13 A. No. Although OPC witness Mara asserts on pages 29-30 of his testimony that the
14 overhead program is vague and not well defined, he does not oppose any of the
15 protocols proposed by FPL for evaluating when a lateral may be overhead hardened as
16 opposed to being placed underground. Rather, OPC witness Mara simply notes that
17 the overhead hardening protocols appear similar to the standards used in FPL's Feeder
18 Hardening Program. Notably, OPC does not oppose, criticize, or otherwise take any
19 issue with FPL's Feeder Hardening Program.

20 **Q. On page 33 of his testimony, OPC witness Mara recommends that overhead**
21 **hardened laterals and undergrounded laterals should be separated and tracked**
22 **as two individual SPP programs. Do you agree with his recommendation?**

23 A. I do not agree that there should be separate overhead and underground lateral SPP
24 programs. The overhead protocols were established and incorporated into the
25 Distribution Lateral Hardening Program pursuant to the 2020 SPP Settlement approved

1 by Commission Order No. PSC-2020-0293-AS-EI. FPL did not commit to create
2 separate overhead and underground lateral programs. Moreover, the underground and
3 overhead components of the Distribution Lateral Hardening Program are symbiotic,
4 and the work will be part of the same overall lateral project. As explained in my direct
5 testimony and Exhibit MJ-1, the selection and prioritization criteria for the Distribution
6 Lateral Hardening Program ranks each feeder based on actual historical experience of
7 all the overhead laterals on the feeder in order to address the worst performing circuits
8 first. All laterals on the feeders are then hardened according to the ranking of each
9 feeder. As explained in Exhibit MJ-1, constructing at the feeder level significantly
10 improves the efficiency and timing of construction because all of the work takes place
11 in the same location (feeder) on a set of laterals as opposed to being spread out over
12 multiple individual laterals across the entire service area. It also allows for a more
13 efficient design to reduce overall cable footage and the number of transformers needed
14 to serve an area by interconnecting existing laterals and using alternate cable paths to
15 reduce the total number of laterals in the area. When FPL performs the engineering
16 evaluation of all laterals on a feeder, it will apply the overhead protocols to evaluate
17 whether each lateral should be overhead hardened or converted to underground based
18 on the actual field conditions and limitations at the time. Thus, the overhead and
19 underground work is completed as part of a single conceptual design across all laterals
20 on an entire feeder under the Distribution Lateral Hardening Program. To treat and
21 separately manage the overhead hardening and underground lateral work as separate
22 programs, as suggested by OPC witness Mara, would reduce efficiencies and increase
23 costs. For these reasons, I believe it is appropriate and reasonable that the overhead
24 protocols should be included and part of the overall Distribution Lateral Hardening
25 Program and should not be a standalone SPP program.

1 **Q. On page 31 of his testimony, OPC witness Mara claims that the Distribution**
2 **Lateral Hardening Program does not meet the requirements of the SPP Rule**
3 **because FPL did not provide any estimate of the cost reductions to be realized**
4 **from the program. Do you have a response?**

5 A. I disagree with OPC witness Mara. First, his claim that FPL did not provide cost
6 reductions associated with the Distribution Lateral Hardening Program is a fallout of
7 OPC's proposal that the Commission should adopt and apply a new cost benefit
8 analysis requirement and new cost-effectiveness threshold for the SPP programs. As I
9 explained above, OPC's proposed cost benefit analysis and new cost-effectiveness
10 threshold should be rejected.

11
12 Second, as I explained above, there is nothing in either the SPP Statute or SPP Rule
13 that prescribes that the benefits of SPP programs must be quantified, and storm
14 hardening is not a simple cost-effective calculation as suggested by OPC.

15
16 Third, in compliance with Rules 25-6.030(3)(b) and 25-6.030(3)(d)(1), F.A.C., the
17 benefits expected from the Distribution Lateral Hardening Program were provided in
18 the following portions of FPL's 2023 SPP: Section II; Section IV(D)(1)(b); and
19 Appendix A of Exhibit MJ-1. In fact, on page 31 of his testimony, OPC witness Mara
20 relies on the 40-year net present value analysis of the reduction in storm restoration
21 costs provided by FPL in Appendix A of Exhibit MJ-1. Further, on page 34 of his
22 testimony, OPC witness Mara acknowledges that "[i]t is apparent from experiences in
23 Florida that undergrounding and hardening poles will reduce outage costs and outage
24 times."

1 Finally, OPC witness Mara does not propose that the Distribution Lateral Hardening
2 Program be rejected; rather, he proposes an adjustment to the annual budget beginning
3 in 2025. Either the Distribution Lateral Hardening Program meets the requirements of
4 the SPP Rule and is eligible to be included in the SPP or it does not. OPC witness Mara
5 cannot have it both ways.

6 **Q. Does OPC agree with FPL's prioritization and selection criteria for the**
7 **Distribution Lateral Hardening Program?**

8 A. No. Although OPC does not take issue with any specific selection and prioritization
9 criteria for the Distribution Lateral Hardening Program, OPC witness Mara nonetheless
10 states on page 32 of his testimony that he does not agree with FPL's selection and
11 prioritization methodology. Apparently, OPC witness Mara believes that FPL needs to
12 do more so that lateral hardening and undergrounding and their associated benefits are
13 spread to more customers and communities:

14 My point is that the dollars are concentrated such that only a few
15 customers will see a reduction in customer outage minutes and enjoy
16 the aesthetics and other benefits of an undergrounded system. The
17 remaining customers only see a benefit cost ratio that is upside down
18 meaning more costs than benefits.

19 This is a significant investment in a small portion of the system (one
20 feeder) and in a single community. *There needs to be a mechanism*
21 *to help spread the undergrounding and hardening to more*
22 *communities*, which is important since all customers will be
23 contributing to the cost of undergrounding.

24 See Direct Testimony of OPC witness Mara, pp. 32-33 (emphasis added). As I address
25 later in my testimony, this statement is at odds with his recommendation of reducing
26 the budget for the Distribution Lateral Hardening Program.

27

1 **Q. Please describe OPC’s proposed adjustment to the Distribution Lateral**
2 **Hardening Program.**

3 A. Despite the many pages of OPC’s testimony dedicated to recommending that the
4 Commission adopt and apply a new cost-effectiveness test, on pages 33-34 of his
5 testimony OPC witness Mara recommends a qualitative adjustment to the annual
6 budget for the Distribution Lateral Hardening Program starting in 2025 and continuing
7 through 2032. Specifically, OPC witness Mara recommends that the annual budget for
8 the Distribution Lateral Hardening Program be capped at \$606 million per year for the
9 years 2025 to 2032, which results in a total ten-year budget reduction of approximately
10 \$3.4 billion.

11 **Q. Does OPC witness Mara describe how he calculated his proposed reduction to the**
12 **Distribution Lateral Hardening Program budget?**

13 A. No. His adjustment appears to be completely qualitative and, together with his other
14 proposed adjustments, is simply intended to reduce the ten-year capital cost per
15 customer to remain similar to the ten-year capital cost per customer for the combined
16 FPL and Gulf’s 2020 SPPs. See Direct Testimony of OPC witness Mara, pp. 13 and
17 34.

18 **Q. Do you agree with OPC witness Mara’s proposed adjustment to the Distribution**
19 **Lateral Hardening Program budget?**

20 A. No, I disagree for multiple reasons. It is important to understand OPC witness Mara’s
21 proposed adjustment will reduce the number of laterals to be completed each year and
22 delay when customers will receive the direct benefits of the Distribution Lateral
23 Hardening Program. This adjustment directly contradicts his position on pages 32-33
24 that FPL needs to expand its efforts so that lateral hardening and undergrounding, and
25 their associated benefits, are spread to more customers and communities.

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Although OPC witness Mara apparently seeks to simply maintain the status quo, he overlooks that the Distribution Lateral Hardening Program was initially deployed as a limited pilot, which was continued through 2022 as OPC agreed in the 2020 SPP Settlement. As part of the 2023 SPP, FPL is seeking to deploy the Distribution Lateral Hardening Program as a full-scale permanent SPP program and, as such, is ramping up the program in order to provide the benefits of underground lateral hardening throughout its system, including in the former Gulf service area. I note that OPC does not object to the Distribution Lateral Hardening Program becoming a permanent SPP program.

FPL's Distribution Lateral Hardening Program was designed to achieve the objectives and goals of the SPP Statute. Therein, the Florida Legislature expressly found that "[i]t 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" and "[p]rotecting and strengthening transmission and distribution electric utility infrastructure from extreme weather conditions can effectively reduce restoration costs and outage times to customers." See Sections 366.96(1)(c), (d), F.S. FPL's underground lateral program is an impactful and crucial tool to achieve these legislative objectives and is appropriately designed to address the worst performing circuits and areas first based on actual historical experience. Indeed,

1 as shown in FPL's Hurricane Irma Forensic Report, underground laterals performed
2 6.6 times (85%) better during Hurricane Irma than overhead laterals.¹
3

4 The ramp up in the number of laterals to be completed each year under the Distribution
5 Lateral Hardening Program is due primarily to the inclusion of the former Gulf service
6 area and the significant number of laterals that remain to be hardened, the strong local
7 support and interest in the program, as well as the addition of the Management Region
8 selection approach in 2025 as explained in my direct testimony and Exhibit MJ-1.
9 Notably, the OPC does not criticize or challenge the proposed addition of the
10 Management Region selection approach.
11

12 The annual budget for the Distribution Lateral Hardening Program is a product of the
13 number of estimated projects to be completed throughout FPL's system as provided in
14 Appendix C to Exhibit MJ-1. Although all customers indirectly benefit from overhead
15 hardened and underground laterals through reduced restoration costs, the direct benefits
16 for customers of overhead hardened and underground laterals, including both reduced
17 outage times and aesthetics (as recognized by OPC witness Mara on page 32 of his
18 testimony), will be facilitated and realized more quickly through the expanded number
19 of underground projects contemplated by FPL's SPP. How fast and how many lateral
20 projects are completed under the Distribution Lateral Hardening Program, and how
21 quickly customers realize the direct and indirect benefits therefrom, is ultimately a
22 regulatory decision for the Commission to be made in the context of the policy and
23 objectives of the SPP Statute.

¹ Refer to Page 7 of FPL's Hurricane Irma Forensic Report in Docket No. 20180049, which is available at:
<http://www.psc.state.fl.us/library/filings/2019/05615-2019/Support/Exhibit%2036/POD%20No.%202/20180049%20-%20OPC's%201st%20POD%20No.%202%20-%20Attachment%20No.%201.pdf>

1 **D. FPL’s New Transmission Access Enhancement Program is Consistent**
2 **with the Objectives of the SPP Statute and Should be Approved**

3 **Q. Does the OPC agree with FPL’s proposal to add the new Transmission Access**
4 **Enhancement Program to the 2023 SPP?**

5 A. No. On pages 26-29 of his testimony, OPC witness Mara contends that maintenance
6 of bridges, roads, and culverts are ordinary base rate activities and FPL failed to
7 demonstrate how its proposed Transmission Access Enhancement Program will meet
8 the objectives of the SPP statute to reduce restoration costs and outage times associated
9 with extreme weather events.

10 **Q. Do you agree that projects to be completed under the Transmission Access**
11 **Enhancement Program should be maintained as part of FPL’s ordinary base rate**
12 **activities?**

13 A. No. OPC witness Mara appears to misunderstand the scope and purpose of the
14 Transmission Access Enhancement Program. FPL is not proposing to simply maintain
15 roads, rights of way, bridges, and culverts for purposes of accessing transmission
16 facilities for day-to-day maintenance and vegetation management activities, which
17 activities are typically scheduled and conducted during drier times of the year and
18 within the existing transmission rights-of-way. Rather, as explained in my direct
19 testimony and Exhibit MJ-1, the purpose of the Transmission Access Enhancement
20 Program is to ensure that FPL has access to its transmission facilities following an
21 extreme weather event by targeting and addressing areas that become inaccessible due
22 to flooding or saturated soils. Notably, the peak of the Atlantic Hurricane Season
23 coincides with Florida’s wet season when increased rainfall will exacerbate the
24 inaccessibility of many of these low-lying, saturated, and wetland areas. As explained
25 in my direct testimony and Exhibit MJ-1, and as acknowledged by OPC witness Mara

1 on page 27 of his testimony, these low-lying areas may not be accessible following an
2 extreme weather event without specialized equipment and vehicles, which has limited
3 availability during and immediately following storm events.

4 **Q. Do you have a response to OPC witness Mara's contention on pages 27-28 of his**
5 **testimony that FPL did not demonstrate that the Transmission Access**
6 **Enhancement Program will reduce restoration costs and outage times associated**
7 **with extreme weather events?**

8 A. Yes. OPC witness Mara's argument is, again, a fallout of OPC's proposal that the
9 Commission should adopt and apply a new cost benefit analysis requirement and new
10 cost-effectiveness threshold for the SPP programs. As I explained above, OPC's
11 proposed new criteria and standards to review the SPPs are contrary to the requirements
12 of both the SPP Statute and SPP Rule and should be rejected.

13

14 My direct testimony and Section IV(K)(1) of Exhibit MJ-1 explained that the
15 Transmission Access Enhancement Program will ensure that FPL and its contractors
16 have access to FPL's transmission facilities following an extreme weather event, which
17 will reduce the need and associated costs for specialized equipment and will help
18 expedite restoration activities and thereby reduce customer outage times. Importantly,
19 a transmission-related outage can result in an outage affecting tens of thousands of
20 customers and may cause a cascading event that could result in loss of service for
21 hundreds of thousands of customers. The Transmission Access Enhancement Program
22 will allow FPL and its contractors to quickly address such outages following an extreme
23 weather event, which would result in a reduction of outage times for tens of thousands
24 to hundreds of thousands of customers following an extreme weather event.

1 **Q. Do you have any other observations regarding OPC's opposition to the**
2 **Transmission Access Enhancement Program?**

3 A. Yes. OPC witness Mara appears to overlook that the Commission's SPP Rule defines
4 a storm protection project to include enhancement of T&D areas and not just the T&D
5 facilities themselves: "a specific activity within a storm protection program designed
6 for the enhancement of an identified portion *or area of existing electric or distribution*
7 *facilities* for the purpose of reduction restoration costs and reduction outage times
8 associated with extreme weather conditions therefore improving overall service
9 reliability." See Rule 25-6.030(2)(b), F.A.C. (emphasis added). I also note that FPL's
10 proposed program was modeled after the Transmission Access Enhancement Program
11 included in Tampa Electric Company's ("TECO") 2020-2029 SPP that was previously
12 agreed to in a Stipulation and Settlement Agreement, which OPC joined, that was
13 approved by Commission Order No. PSC-2020-0293-AS-EI.²

14 **Q. On page 27 of his testimony, OPC witness Mara states that, as an alternative, FPL**
15 **should consider simply purchasing the specialized equipment necessary to access**
16 **its transmission facilities located in low-lying and saturated areas following an**
17 **extreme weather event. Do you have a response to his alternative proposal?**

18 A. Yes. FPL has evaluated large tire equipment used in other industries. However, FPL
19 has not been able to locate large tire vehicles readily available for purchase that are
20 capable of working within Florida's unique topography, terrain, and hydrology while
21 still meeting the necessary technical loading and reach specifications required to
22 perform transmission line restoration work following an extreme weather event.
23 Although floating equipment, such as barges, are utilized for construction of

² FPL acknowledges that, despite agreeing to the program in the TECO 2020-2029 SPP, OPC witness Mara filed testimony in Docket No. 20220048-EI opposing the continuation of TECO's previously approved Transmission Enhancement Program.

1 transmission line river crossings, this floating equipment cannot be used to access the
2 low-lying and saturated areas to be addressed by the Transmission Access
3 Enhancement Program.

4

5 Even if this specialized equipment was readily available on the market for purchase,
6 FPL would need a large fleet of specialized equipment because the Company's service
7 area encompasses more than 35,000 square miles across 43 counties with more than
8 9,000 miles of transmission lines. Purchasing a large fleet of specialty vehicles would
9 also require ongoing specialized maintenance and specialized resources trained and
10 familiar with operating and maintaining the specialized equipment. Lastly, external
11 resources that perform restoration work following an extreme weather event may not
12 be able to utilize the specialized equipment, resulting in potential delays to restoration
13 of transmission structures and equipment.

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15 **E.**

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Q. Does this conclude your rebuttal testimony?

A. Yes.

Exhibit MJ-2

**Florida Power & Light Company
Docket No. 20220051-EI
OPC's Fourth Set of Interrogatories
Interrogatory No. 50
Page 1 of 2**

QUESTION:

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

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

RESPONSE:

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

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

Florida Power & Light Company
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Page 2 of 2

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