

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
**REVIEW OF STORM PROTECTION PLAN, PURSUANT TO RULE 25-6.030, F.A.C.,**  
**DUKE ENERGY FLORIDA, LLC.**

**DOCKET NO. 20220050-EI**

**REBUTTAL TESTIMONY OF BRIAN M. LLOYD**  
**ON BEHALF OF DUKE ENERGY FLORIDA, LLC**

**JUNE 30, 2022**

**1 I. INTRODUCTION AND QUALIFICATIONS.**

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

**3 A. My name is Brian M. Lloyd. My current business address is 3250 Bonnet Creek Road,**  
**4 Lake Buena Vista, FL 32830.**

**5**

**6 Q. Have you previously filed direct testimony in this docket?**

**7 A. Yes, I filed direct testimony supporting the Company's SPP on April 11, 2022.**

**8**

**9 Q. Has your employment status and job responsibilities remained the same since**  
**10 discussed in your previous testimony?**

**11 A. Yes.**

**12**

**13 II. PURPOSE AND SUMMARY OF TESTIMONY.**

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

1 A. The purpose of my testimony is to provide the Company's rebuttal to certain assertions and  
2 conclusions contained in the direct testimonies of OPC's witnesses Kollen and Mara. Ms.  
3 Howe and Mr. Menendez will present additional rebuttal of the testimonies of OPC's  
4 witnesses Kollen and Mara.

5  
6 **Q. Do you have any exhibits to your testimony?**

7 A. Yes, I am sponsoring the following exhibit to my rebuttal testimony:

- 8 • Exhibit No. \_\_ (BML-4), 712 Self-Healing Team Benefits Report

9 This exhibit was prepared by the Company in the normal course of business and is true and  
10 correct to the best of my information and belief.

11  
12 **Q. At the outset, do you have any over-arching concerns with OPC's positions in this**  
13 **docket?**

14 A. Yes, I do. While I am not a lawyer (though I note that neither of OPC's witnesses are  
15 lawyers either), it appears to DEF that their interpretation of the SPP statute and rule is  
16 overly constricted, to the point of essentially eliminating much of what DEF believes was  
17 the Legislature's and Commission's intent in enacting the statute and rules.

18  
19 **Q. Can you explain what you mean?**

20 A. Yes. From DEF's perspective, the Legislature directed the utilities to develop integrated  
21 storm protection plans that as a whole achieve the goals of reducing restoration costs and  
22 outage times to customers and improving overall service reliability. DEF has followed that  
23 directive by crafting a systematic Plan that includes a suite of programs that, overall, are

1 intended to accomplish these goals, over time, in a cost-effective manner. If, as OPC and  
2 specifically Mr. Mara suggest, the Company was required to limit its proposed programs  
3 to just those that themselves are projected to accomplish the goals set out in the statute, the  
4 ability to systematically harden the system against the effects of extreme weather would be  
5 seriously curtailed.

6 Said differently, I believe OPC has lost the forest for the trees. DEF operates an integrated  
7 system, from generation, to transmission, and then ultimately distribution to our customers.  
8 As such, system planning requires a highly integrated and interconnected approach, taking  
9 into account the impact actions directed at one component will have on the remainder of  
10 the system. That is, assuming without agreeing that an individual program “only” reduced  
11 restoration costs while another “only” reduced outage times, the two programs combined  
12 would achieve the legislature’s goals. DEF believes this is what the legislature intended  
13 when it directed the utilities to file a plan explaining the Company’s systematic approach  
14 to achieving the identified goals.

15 Moreover, DEF is required to plan for a range of contingencies and cannot assume a “one  
16 size fits all” approach. For example, the “extreme weather conditions” we must be  
17 prepared for include, but are not limited to, heavy rain events, lightning, coastal flooding,  
18 inland flooding (e.g., rivers), and gale-force winds. These events can occur on almost any  
19 given day and are not constrained to tropical weather systems, though those are the most  
20 oft thought of example of extreme weather in Florida. Further, even within the context of  
21 tropical weather systems, we know that each storm is unique in the degree, type, and  
22 concentration of damage – for example, Irma impacted almost the entirety of the state

1 causing widespread damage while Michael was much more concentrated but nevertheless  
2 caused extreme damage in the impacted areas.

3 The point being, our intent, which we believe aligns with the legislature's directive, was to  
4 propose a holistic Plan to systematically harden the system to better withstand the range of  
5 extreme weather conditions expected to impact the state. The Plan, as a whole, is projected  
6 to achieve the multi-pronged goals of reducing storm restoration costs, outage times, and  
7 improving overall reliability. Taking the myopic approach offered by OPC would  
8 improperly hinder those efforts to the detriment of our customers and the state itself.

9  
10 **Q. Please summarize your testimony.**

11 A. My testimony will focus on Witness Mara's and Witness Kollen's testimonies and explain  
12 the misinformation contained within. I will focus on three main areas: Benefits to Cost  
13 Analysis, Qualification for Inclusion in the Storm Protection Plan, and Staging Costs. As  
14 provided below, the programs DEF proposed in its SPP 2023-2032 ("SPP 2023"), all of  
15 which are extensions of the programs included in DEF's current SPP 2020-2029 ("SPP  
16 2020"), are appropriate, consistent with the statute and rule, and should be approved by the  
17 Commission.

18  
19 **III. BENEFITS TO COST ANALYSIS ("BCA") DISCUSSION**

20 **Q. Both Witness Mara and Witness Kollen allege that the costs of DEF's SPP 2023 are**  
21 **higher than the benefits provided by the Plan. Are the Witnesses' allegations**  
22 **accurate?**

23 A. No, both witnesses are incorrect. Table 1, below, summarizes present value benefits,  
24 present value costs, net present value (i.e., benefits minus costs), and the benefits to cost

ratio for each program in DEF's SPP 2023. Table 1 clearly shows, without question, that DEF's programs have a benefits to cost ratio greater than 1, which indicates that the benefits are greater than the costs. DEF's Plan, as outlined in Exhibits BML-1 and BML-2, provides long-term benefits to the customers and State of Florida. I will provide further details as to why Witness Mara's and Witness Kollen's commentary on the benefits and costs are incorrect.

Table 1

Program	PV Benefits	PV Costs	NPV	B/C Ratio
D1: Feeder Hardening	\$3,829,367,264	\$2,016,634,712	\$1,812,732,552	1.9
D2: Lateral Hardening	\$8,005,067,340	\$2,495,576,854	\$5,509,490,486	3.21
D3: Self-Optimizing Grid (SOG)	\$6,974,753,639	\$228,987,548	\$6,745,766,092	30.46
D4: Underground Flood Mitigation	\$30,838,403	\$14,369,826	\$16,468,577	2.15
T1: Structure Hardening	\$1,912,020,741	\$1,489,983,733	\$422,037,008	1.28
T2: Substation Flood Mitigation	\$272,287,898	\$73,697,798	\$198,590,100	3.69
T3: Loop Radially Fed Substations	\$110,329,885	\$72,889,856	\$37,440,029	1.51
T4: Substation Hardening	\$287,436,172	\$121,128,264	\$166,307,908	2.37
<b>Total</b>	<b>\$21,422,101,343</b>	<b>\$6,513,268,591</b>	<b>\$14,908,832,752</b>	<b>3.29</b>

**Q. In Witness Mara's opening discussion of section 366.96, he states that "Clearly, the goal (of SPP) is to invest in storm hardening activities that benefit the customers of the of the electric utilities at a cost that is reasonable relative to those benefits." Do you agree with this statement?**

**A.** Yes, I do agree with this statement as it is the basis for DEF's overall Storm Protection Plan. As outlined in BML-2, DEF and Guidehouse utilized a detailed analysis that measured the benefits, including customer benefits as estimated by Interruption Cost Estimator (which I will discuss below) and restoration costs savings, compared with the costs of the programs. All of DEF's SPP 2023 programs have a benefit to cost ratio greater than 1, as shown above in Table 1. I believe that DEF's SPP 2023 meets both the

requirements laid forth in the Statute and rule as well as Witness Mara's statement noted above.

**Q. Do you agree with Mr. Mara's contention that DEF only considered resource availability as a possible limitation to the SPP Programs' budgets?**

A. Absolutely not. As DEF explained in response to interrogatory number 78, DEF began the planning process with a consideration of the appropriate level of investment to properly balance the goal of strengthening the system as directed by the legislature with the impact on customers' bills:

DEF establishes its overall SPP program spend, including capital expenditures, with consideration of the impact to customer rates as a key consideration, but must also balance this impact with the goals and requirements of the Storm Protection Plan statute and rule and the outage risk a non-hardened grid creates during extreme weather events. The establishment of SPP program spend is accomplished at the outset of the plan development process and therefore represents an express decision not to expend greater amounts which would have a greater impact on customer rates. Thus, the entirety of the plan represents a balancing of the goals of the SPP with impact on customers' rates.

Further, Exhibit BML-2, includes Figure A-2, which is a Detailed Modeling Approach Flow Diagram. As part of the decision-making process regarding program scope, after Guidehouse identified its preferred Portfolio of programs and projects, it then moved to Step M, the "Funding and Timing Constraints" provided to it by DEF: "Guidehouse applied program- and portfolio-level funding constraints, which DEF provided. *These represent practical limits on program implementation.*" (e.s.).

1 Mr. Mara's opinion to the contrary ignores DEF's planning process as outlined in Exhibit  
2 BML-2 and DEF's responses to OPC's discovery requests. Moreover, I note that Mr. Mara  
3 provides no citation to where he claims DEF asserted the "only limit to the magnitude of  
4 the budgets was the limitation of resources" to complete the Plan's goals, and it appears to  
5 DEF that Mr. Mara has taken a statement regarding the consideration of "available  
6 resources" made in the context of prioritizing project deployment (see, Program  
7 Descriptions in Ex. BML-1) and conflated it with the development of Program scope.

8  
9 To say that Mr. Mara has mixed apples and oranges to reach his conclusion would be an  
10 understatement. As demonstrated in Ex. BML-2 and expounded upon in DEF's response  
11 to Interrogatory 78, DEF's determination of the appropriate funding level (which by  
12 definition includes a decision on acceptable level of customer bill impact) operated as an  
13 explicit limitation on Program scope.

14  
15 **Q. Witness Kollen recommends that the Commission reject all proposed SPP projects**  
16 **that do not have a benefit-to-cost ratio of at least 100%. Do you see an issue with this**  
17 **recommendation?**

18 **A.** Yes, I do. Although all of DEF's programs contained within its SPP 2023 have a benefit-  
19 to-cost ratio of at least 100% (as shown in Table 1), there are individual projects within  
20 those programs that do not meet a 100% benefits-to-cost ratio. The rule does not require  
21 *projects* to meet a specific threshold, but rather requires a comparison of the description of  
22 projected *Program* benefits to costs. In fact, Mr. Mara's newly proposed requirement  
23 would exclude a large number of DEF's customers who may live in areas where hardening

1 is necessary but may not be as economically practical as areas with greater customer  
2 density from receiving any direct benefits from the hardening programs they are helping to  
3 fund. This litmus test would exclude many customers from outage relief during a major  
4 storm event solely based on geography or the relative cost of needed upgrades in their area,  
5 although these same customers would be paying the same rates as those who have received  
6 these benefits. DEF completely disagrees that such a result was intended by the legislature  
7 or Commission.

8 The transmission and distribution systems are integrated and work together while serving  
9 our customers. As Witness Howe discusses in detail in her testimony, the coalescence of  
10 the individual pieces form the connected grid and applying the Storm Protection Plan  
11 programs to them in the manner outlined in DEF's plan ensures all links in the chain are  
12 addressed to serve customers.

13  
14 **Q. Witness Mara claimed that the benefits of hardening will be reduced over time as the**  
15 **hardening sub-program is applied to feeders that are not as vulnerable to extreme**  
16 **wind and may have less tree cover or stronger poles already in place. Do you agree**  
17 **with this assessment?**

18 **A.** While I agree in principle that DEF is prioritizing projects for the most "vulnerable" areas  
19 first, as outlined in DEF's benefits to cost analysis, Rule 25-6.030 requires DEF to update  
20 its SPP at least every three years, which I believe was a very well contemplated rule as it  
21 allows an opportunity to reevaluate the system and adjust plans accordingly. For example,  
22 if a circuit is hardened through means outside of the SPP, such as during a highway  
23 relocation project or customer requested undergrounding project, the circuit could be



1 assessed, and the plan changed. However, I am concerned that Witness Mara is discounting  
2 the customers that are served by the circuits that he says are less “vulnerable.” Those  
3 customers can still be impacted by extreme weather events and, as I stated above, should  
4 have the opportunity for their circuits to be hardened even if the benefits to cost ratio is  
5 lower than higher prioritized projects.

6  
7 **Q. Witness Kollen states that DEF’s benefits to cost analysis was “flawed and used to**  
8 **calculate excessive benefits by including the societal value of customer interruptions,”**  
9 **that these costs are “highly subjective,” are not “cost[s] ... actually incurred or**  
10 **avoided by the utility or customer” and “should be excluded from the justification of**  
11 **SPP programs and projects.” Do you find flaws in Witness Kollen’s statements?**

12 **A.** Yes, I believe that Witness Kollen’s statements on societal benefits and their inclusion in  
13 the benefits/cost analysis are misguided. Dismissing the societal benefits misses the overall  
14 purpose of the SPP which is to protect and strengthen the grid to reduce the impact from  
15 extreme weather events so the State of Florida can return to normal business as quickly as  
16 possible. Medical facilities functioning to full capacity; roadways opened; students back  
17 in school; businesses employing workers and serving customers; citizens being able to  
18 stock their refrigerators, wash clothes and take hot showers; and tourists returning to the  
19 State’s amazing destinations. All of these societal norms have value to the customers that  
20 OPC represents beyond the reduced restoration costs, even if they are not directly realized  
21 by the utility or customer.

22 Personally, I have felt the “cost” of being without electricity for multiple days following  
23 an extreme weather event, costs such as bringing ice home every night so my wife, who

1 was eight months pregnant at the time, could keep my one-year old's milk cold. I am also  
2 certain that my wife and son paid a cost of sitting in the heat and would have benefitted  
3 from having power at the house for those days.

4 Another example that shows the true value of having electric service to customers is, after  
5 Hurricane Irma, a customer was in such need for service that they called in a bomb threat  
6 against the facility where I was working. Obviously, this is extremely out of line, but it  
7 reinforces how customers are dependent on electricity to power their lives and benefit from  
8 having service. Not attributing a value to that benefit is shortsighted and ignores the reality  
9 faced by customers.

10 That said, DEF took a conservative approach in quantifying these benefits through use of  
11 the Interruption Cost Estimator ("ICE") model. The ICE model was developed by  
12 Lawrence Berkeley National Laboratory ("LBNL") and Nexant, Inc. This tool is designed  
13 for electric reliability planners at utilities, government organizations, and other entities that  
14 are interested in estimating interruption costs and/or the benefits associated with reliability  
15 improvements in the United States. The ICE Calculator is funded by the Energy Resilience  
16 Division of the U.S. Department of Energy's Office of Electricity. This non-electric  
17 benefit model has been used throughout the industry and in regulatory proceedings.

18  
19 **Q. Witness Mara utilizes ten years of benefits when calculating a benefit to cost ratio**  
20 **for the Lateral Hardening program. Is this a proper methodology for comparing**  
21 **programs' benefits and costs?**

22 A. No, this is not a proper methodology for comparing programs' benefits and costs because  
23 electric utility asset investments are not intended to only last ten years, so assuming only

1 ten years' worth of benefits compared to the costs of the programs would be understating  
2 the value of the investments. DEF's methodology properly considered the benefits  
3 programs will deliver over the life of the assets, as outlined in Exhibit BML-2, by assessing  
4 costs and benefits over a 30-year period for distribution programs and a 40-year period for  
5 transmission programs.

6  
7 **Q. In Witness Mara's testimony, he states "rate payers are paying more for the SPP and**  
8 **'reduced' storm costs than they would if the electric utilities did no storm hardening."**  
9 **Do you agree with the statement?**

10 **A.** No, I do not agree with Witness Mara's statement. First, to the extent Witness Mara is  
11 either arguing against the legislature's decision to create the SPP in the first place or  
12 implying that DEF should not follow the legislature's and Commission's direction to  
13 further harden the system, DEF disagrees. Second, and this is indicative of OPC's  
14 witnesses' lack of consistent comparisons, he is comparing ten years of future investment  
15 spend to only five years of historical restoration costs, when, as described above, DEF is  
16 making these investments expecting 30 to 40 years of benefits. Additionally, DEF utilized  
17 FEMA's HAZUS study which includes approximately 200 years of hurricane data, as  
18 described in Exhibit BML-2, providing a much more robust calculation of probabilistic  
19 extreme weather events and their associated restoration costs over the 30-40 year life of  
20 the hardened asset. Third, Witness Mara is only focusing on DEF's direct restoration costs  
21 savings and leaves out the true total cost of a storm to the customers as I described above.

22  
23 **IV. QUALIFICATION FOR INCLUSION IN THE STORM PROTECTION PLAN**

1 **Q. On June 27, 2022, OPC filed a motion to accept amended testimony along with**  
2 **amendments to both Witnesses' pre-filed direct testimonies. Have you reviewed the**  
3 **amended testimonies, and if so, what impacts do the amendments have on your**  
4 **rebuttal testimony?**

5 A. Yes, I have reviewed the proposed amended testimonies. As I understand the proposed  
6 amendments, the witnesses are acknowledging that DEF's 2021 Settlement Agreement  
7 includes a provision that the costs incurred with DEF's SPP are properly recovered through  
8 the SPPCRC and have been removed from base rates as required by the SPP Statute and  
9 Rule. As such, I understand that the witnesses are no longer advocating for exclusion of  
10 any Programs from the Plan (at least for cost recovery years 2023-2024). I agree with this  
11 result, but would argue further that Programs appropriate for inclusion in the Plan (and  
12 recovered through the SPPCRC) for two years of the planning period are likewise  
13 appropriate for the Plan (and SPPCRC recovery) for the third year as well.

14  
15 Because the amended testimonies continue to include the incorrect premises and  
16 assumptions, mischaracterizations and misunderstandings, and unreasonably constricted  
17 interpretation of the governing statute and rule, I continue to believe it is appropriate to  
18 address those issues for the Commission notwithstanding that the witnesses are no longer  
19 advocating for exclusion of certain programs.

20  
21 **Q. In Witness Mara's testimony, he opines that not all of DEF's SPP programs qualify**  
22 **for the Plan and therefore should be excluded from the Plan by the Commission. Do**  
23 **you agree with Witness Mara's opinion?**

1 A. No, I do not agree with Witness Mara's opinion as I believe all of DEF's SPP Programs  
2 qualify for inclusion per the statute and rule and should be approved by the FPSC. I also  
3 note that they are the same Programs included in DEF's current SPP 2020 approved by the  
4 Commission in 2020. The programs submitted are projected to reduce restoration costs  
5 and/or reduce outage durations during extreme weather events, while improving overall  
6 reliability, and therefore the Plan as a whole will meet the objectives of the statute and rule.  
7 I will address why I disagree with Witness Mara's opinion and inaccuracies in the  
8 testimony for the Distribution programs Feeder Hardening, Lateral Hardening, Self-  
9 Optimizing Grid, and Underground Flood Mitigation. Witness Howe will address DEF's  
10 disagreements with Mr. Mara's incorrect assertions and conclusions regarding DEF's  
11 Transmission programs and subprograms.

12  
13 **Q. Witness Mara recommends that the Feeder Hardening and Lateral Hardening**  
14 **programs be capped at \$1.5B and \$2.2B, respectively, to align with DEF's SPP 2020-**  
15 **2029 instead of the "substantial increase in capital expenditures proposed by DEF."**  
16 **Did DEF propose a "substantial increase" over its SPP 2020-2029?**

17 A. No, DEF has not proposed a "substantial increase" when compared to its SPP 2020. The  
18 original SPP included transitional years 2020 and 2021 as the Company worked to  
19 complete other projects and ramp up engineering and construction resources to prepare for  
20 the SPP. As shown in Docket No. 20200069, Exhibit JWO-2, DEF had zero work planned  
21 under SPPCRC in 2020 and only had Feeder Hardening and Structure Hardening for 2021.  
22 DEF's proposed SPP 2023 reaches a steady state and the last three years of this Plan replace  
23 the first three years of SPP 2020, making it appear to be an increase when it is truly a

1 continuation of the plan that was previously approved in Docket No. 20200069. Mr.  
2 Menendez provides additional detail on this point in his rebuttal testimony.

3  
4 **Q. Do you agree with Witness Mara's assertion that the cost for corrective actions to**  
5 **address clearance encroachments should not be included in the Storm Protection**  
6 **Plan?**

7 A. No, I do not agree with Witness Mara's assertion on page 18 of his testimony. Given that  
8 new pole locations, sizes and guying will be required when designing a hardened system,  
9 DEF will indeed find situations where proper clearances cannot be met with existing  
10 overhead structures along and in the public right of way. DEF also must maintain clearance  
11 to other existing public and privately owned underground facilities which can further  
12 reduce potential pole and guying locations. DEF maintains that newly installed facilities  
13 should remain open to truck access for maintenance purposes and should be in easements  
14 or adjacent to roadways as outlined in Rule 25-6.0341 (Location of the Utility's Electric  
15 Distribution Facilities). DEF is not in agreement with any portion of Witness Mara's  
16 conclusion relative to clearance encroachments as outlined on pages 17 and 18 as it does  
17 not consider these issues, even though they were discussed in Exhibit BML-1 on pages 7  
18 and 17.

19  
20 **Q. The Self-Optimizing Grid program was addressed by Witness Mara as a program**  
21 **that should not qualify for the Storm Protection Plan as it does not reduce the number**  
22 **of outages. Do you agree with Witness Mara's assessment?**

1 A. No, I do not agree with this assessment because the Self Optimizing Grid program does  
2 reduce the number of outages. The design and function of the Self Optimizing Grid, as  
3 described in Exhibit BML-1, is to sectionalize the grid into sections that serve smaller  
4 number of customers and creates ties between circuits to allow the transferring of  
5 customers when a fault occurs during an extreme weather event. On a typical circuit, this  
6 will reduce the number of outages caused by a fault during extreme weather by  
7 approximately 75%.

8  
9 **Q. But Witness Mara states that the Self Optimizing Grid “system is not effective during**  
10 **an extreme weather event” because it is “doubtful that adjacent feeders will be**  
11 **available because the adjacent feeders will likely have suffered an outage as well” and**  
12 **that “DEF has not provided any evidence the system will be a benefit during extreme**  
13 **weather events.” Do you agree with Witness Mara’s opinion?**

14 A. No, I do not agree with Witness Mara’s conclusion, nor do I agree with his highly  
15 speculative premise regarding the availability of neighboring feeders, which is based on a  
16 very specific instance of hypothetical damage that is then over-generalized for purposes of  
17 reaching a predetermined conclusion. Although I concede that if a Category 5 hurricane  
18 were to cause severe damage to a concentrated area similar to what occurred with Hurricane  
19 Michael, the adjacent feeder is “likely [to] have suffered an outage,” I would state that  
20 DEF, as I described in my summary, is deploying Self Optimizing Grid, and all of its SPP,  
21 to reduce outages during all levels of extreme weather events, including, but not limited to,  
22 Tropical Depressions; Tropical Storms; Hurricanes; tornadoes; coastal and inland flooding;  
23 and lightning storms. During these types of events, it is very likely that adjacent feeders

1 will be available for customer transfers, thus reducing the number and duration of outages.  
2 Additionally, DEF's Feeder Hardening program is designed to strengthen the feeders to  
3 increase the likelihood that adjacent circuits are available, which underscores the inter-  
4 related nature of the SPP.

5 In fact, had OPC requested the information prior to filing its testimony, DEF could have  
6 shared that the Self Optimizing Grid system has proven to be very effective during extreme  
7 weather events. As shown in Exhibit BML-4, since the inception of the Self Optimizing  
8 Grid, and its predecessor Self-Healing Teams, over 25% of the total customer minutes of  
9 interruption saved by the systems have been during extreme weather events.

10  
11 **Q. If the Self Optimizing Grid program was disallowed as Witness Mara recommends,**  
12 **would there be negative impacts to DEF's overall Storm Protection Plan?**

13 A. Yes, there would be negative impacts. DEF's Storm Protection Plan is the sum of its parts  
14 with the programs working together to reduce restoration costs and outage times associated  
15 with extreme weather events. As I stated above, during an extreme weather event, the  
16 Feeder Hardening and Self Optimizing Grid programs work in tandem to reduce outages  
17 by allowing customers to be served via multiple, hardened circuits.

18  
19 **Q. Witness Mara states that DEF's Underground Flood Mitigation program should be**  
20 **eliminated because it is obvious to him that it is being used to fund the replacement**  
21 **of aging equipment. Do you agree with Witness Mara's assessment?**

22 A. No, I do not agree with Witness Mara's assessment because it is, once again, built upon a  
23 false premise. Witness Mara's conclusion is apparently based on the assumption that the



1 replacement of 7 switchgear and 24 transformers in 2021 were passed through the Storm  
2 Protection Plan Cost Recovery Clause (“SPPCRC”). This is incorrect; these replacements  
3 were included in base rates as Witness Mara said should have been the case. In DEF’s SPP  
4 2020 and in subsequent SPPCRC filings, it was shown that the Underground Flood  
5 Mitigation program was not going to begin as a part of SPPCRC until 2022. This  
6 demonstrates the conflation of the SPP and recovery of costs through the SPPCRC more  
7 thoroughly discussed by Mr. Menendez.

8  
9 **Q. Could aging equipment be replaced in the Underground Flood Mitigation program?**

10 A. The focus of the program, as described in Exhibit BML-1, is to harden existing  
11 underground distribution facilities in locations that are prone to storm surge during extreme  
12 weather events. Although the program could include aging equipment being replaced, that  
13 is not the driving factor for target selection.

14  
15 **Q. Witness Mara notes that the Floramar project planned for 2023 is likely to have**  
16 **livefront transformers. Is this accurate?**

17 A. No, it is not accurate. Mr. Mara opined that it was likely to have livefront transformers  
18 (plural). Yet, of the 110 transformers in the Floramar area targeted for Underground Flood  
19 Mitigation, DEF’s records show that only one (1) transformer (singular) is an existing  
20 livefront. 1 out of 110. This reinforces that DEF is not selecting targets to address aging  
21 units, but instead is focusing on areas that are prone to storm surge during extreme weather  
22 events.

1 **Q. Witness Mara states that “hardening means to design and build components to a**  
2 **strength that would not normally be required” and that “aging infrastructure”**  
3 **should not be replaced in the Storm Protection Plan. Do you agree with Witness**  
4 **Mara’s statement?**

5 A. No, I do not agree with Witness Mara’s statement. As Witness Howe describes in detail  
6 in her testimony, replacing “aging infrastructure” hardens the system. With my  
7 disagreement with Witness Mara’s recommendation that the Underground Flood  
8 Mitigation program should be eliminated from SPP (page 26 lines 8 through 10), I will  
9 note that DEF plans to replace existing conventional switchgear, what would normally be  
10 required, with submersible switchgear designed to withstand the potential storm surge and  
11 flood waters thus meeting Witness Mara’s proposed requirements.

12  
13 **Q. But Witness Mara believes that DEF is not using submersible switchgear within the**  
14 **Underground Flood Mitigation program. Is he correct?**

15 A. No, Witness Mara is not correct. He is misinterpreting information DEF provided in  
16 response to OPC’s Request for Production of Documents (“POD”) 21 and omitting  
17 information provided in response to OPC’s POD 15. POD 21, as shown in the table on  
18 page 26 of Witness Mara’s testimony, provides the names of base rate projects; Witness  
19 Mara misinterprets the types of existing switchgear as the type that would be installed upon  
20 replacement. As provided in response to POD 15, DEF’s Distribution Standard Manual  
21 states that “Flooding and Storm Surge Requirements” are the use of “Submersible  
22 Switchgear.”

23  
24 **V. STAGING COSTS**

1   **Q.     Witness Mara states that if DEF’s system is hardened, it “should logically spend less**  
2       **on pre-staging and would be expected to limit the amount of staging they do ahead of**  
3       **a storm.” Can you please explain why Mara’s statement is counter to the intent of**  
4       **the Storm Protection Plan statute and rule?**

5   **A.**    Yes. The statute and rule are focused on enhancing the utility’s existing infrastructure for  
6       the purposes of reducing restoration costs and reducing outage times. The SPP rule does  
7       not require the utility to provide details on its restoration processes. DEF scales its  
8       restoration efforts to meet the magnitude of the expected extreme weather event, pre-  
9       staging included.

10   Pre-staging resources is a critical step in the restoration planning process as it ensures that  
11   the necessary personnel are in place and ready to perform necessary activities to reduce  
12   outage times and return the State of Florida to normal operations. When the SPP hardening  
13   efforts are completed, the overall restoration efforts will be reduced but DEF will still pre-  
14   stage resources as necessary to respond to the anticipated scope of the impending event to  
15   ensure customers impacted by extreme weather events are restored as safely and swiftly as  
16   possible.

17  
18   **VI. CONCLUSION**

19   **Q.     Mr. Lloyd, your rebuttal covers a lot of ground, but did you respond to every**  
20       **contention regarding the Company’s proposed plan in your rebuttal?**

21   **A.**    No. Intervenor testimony on the SPP involved many pages of testimony and I could not  
22       reasonably respond to every single statement or assertion and, therefore, I focused on the  
23       issues that I thought were most important in my rebuttal testimony. As a result, my silence

1           on any particular assertion in the intervenor testimony should not be read as agreement  
2           with or consent to that assertion.

3

4   **Q.    Does this conclude your testimony?**

5   **A.    Yes.**

SHT Benefits

▲Juris	Success	CI Saved	CMI Saved	Failed	CI	CMI
DEF	1,378.9	1,243,688	91,487,294	66.1	82,642	3,975,314
Total	1,378.9	1,243,688	91,487,294	66.1	82,642	3,975,314

SHTs Installed

▲Juris	2015	2016	2017	2018	2019	2020	2021	2022	Total
DEF	8	32	29	24	11	8	27	16	155
Total	8	32	29	24	11	8	27	16	155

CMI Saved During Major Event Days

Juris	Colin	Eta	Fred	Hermine	Irma	Izzy	Matthew	Michael	Storm	Total
DEF	2,015,198	1,748,073	1,218,815	3,263,334	5,120,640	645,158	159,467	1,836,134	9,170,422	25,177,241
Total	2,015,198	1,748,073	1,218,815	3,263,334	5,120,640	645,158	159,467	1,836,134	9,170,422	25,177,241

Year and Month Date Range

All

Duke Energy Florida, LLC  
Docket No. 20220050  
Witness: Lloyd  
Exhibit No. \_\_\_\_ (BML-4)  
Page 1 of 1

Jurisdiction

- ☐ Select all
- ☐ DEC
- ☒ DEF
- ☐ DEI
- ☐ DEK
- ☐ DEO
- ☐ DEP

State

- ☒ Select all
- ☒ Florida

MED

- ☒ Select all
- ☒ No
- ☒ Yes

Zone

- ☒ Select all
- ☒ North Central
- ☒ North Coastal
- ☒ South Central
- ☒ South Coastal

Ops Center

- ☒ Select all
- ☒ Apopka
- ☒ Buena Vista
- ☒ Clearwater
- ☒ Clermont
- ☒ Deland
- ☒ Highlands
- ☒ Inverness
- ☒ Jamestown
- ☒ Lake Wales
- ☒ Longwood
- ☒ Monticello
- ☒ Ocala
- ☒ SE Orlando
- ☒ Seven Springs
- ☒ St. Petersburg
- ☒ Walsingham
- ☒ Winter Garden
- ☒ Zephyrhills

County

- ☒ Select all
- ☒ ALACHUA
- ☒ CITRUS
- ☒ FRANKLIN
- ☒ GULF
- ☒ HERNANDO
- ☒ HIGHLANDS
- ☒ JEFFERSON FL
- ☒ LAKE
- ☒ LEVY
- ☒ MADISON
- ☒ MARION FL
- ☒ ORANGE
- ☒ OSCEOLA
- ☒ PASCO
- ☒ PINELLAS
- ☒ POLK
- ☒ SEMINOLE
- ☒ TAYLOR
- ☒ VOLUSIA
- ☒ WAKULLA