DUKE ENERGY® FLORIDA

Matthew R. Bernier
Associate General Counsel

April 11, 2025

VIA ELECTRONIC FILING

Adam J. Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Review of Storm Protection Plan, pursuant to Rule 25-6.030, F.A.C., Duke Energy Florida, LLC;* Docket No. 20250015-EI

Dear Mr. Teitzman:

On behalf of Duke Energy Florida, LLC ("DEF"), please find enclosed for electronic filing in the above-referenced docket:

- DEF's Amended Rebuttal Testimony of Alexandra Vazquez and Exhibit No. (AV-1)

Ms. Vazquez's testimony is being amended to include portions of Ms. Howe's Second Amended Rebuttal Testimony, specifically page 10, line 19 through page 12, line 12, from Docket No. 20220050-EI, referenced on page 9 of Ms. Vazquez's Rebuttal Testimony as the above referenced exhibit.

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1428 should you have any questions concerning this filing.

Respectfully,

/s/ Matthew R. Bernier
Matthew R. Bernier

MRB/mh
Enclosures

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CERTIFICATE OF SERVICE
Docket No. 20250015-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished to the following by electronic mail this 11th day of April 2025, to all parties of record as indicated below.

/s/ Matthew R. Bernier
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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. 20250015-EI

AMENDED REBUTTAL TESTIMONY OF ALEXANDRA M. VAZQUEZ

ON BEHALF OF DUKE ENERGY FLORIDA, LLC

APRIL 11, 2025

I. INTRODUCTION AND QUALIFICATIONS.

Q. Please state your name and business address.

A. My name is Alexandra M. Vazquez. My current business address is 3300 Exchange Place, Lake Mary, FL. 32746.

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

A. Yes, I filed direct testimony supporting the Company's SPP on January 15, 2025.

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

A. Yes. My title has changed to Manager, Power Grid Operations Asset Management Governance, but my job responsibilities are the same.

II. PURPOSE AND SUMMARY OF TESTIMONY.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my testimony is to provide the Company's rebuttal to certain assertions and conclusions regarding the Transmission specific aspects of DEF's 2026-2035 Storm Protection Plan ("SPP 2026" or "Plan") contained in the direct testimony of OPC's witness Mara. Mr. Lloyd presents additional rebuttal of Mr. Mara's testimony.

Q. Do you have any exhibits to your testimony?

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

- Exhibit No. (AV-1): Excerpt from Amy Howe's Second Amended Rebuttal Testimony, specifically page 10, line 19 through page12, line 12, regarding Witness Mara's Testimony in Docket No. 20220050-EI.

Q. Please summarize your testimony.

A. My testimony focuses on Witness Mara's testimony as it relates to Transmission specific programs and subprograms and rebuts the incorrect conclusions contained within. In sum, when the Transmission programs are properly understood, it is clear the programs are rightfully included in the Company's SPP and should be approved. OPC's witness' arguments to the contrary demonstrate a lack of understanding of the programs themselves and are based on a narrow interpretation of Rule 25-6.030 (the "SPP Rule") that, in DEF's belief, unnecessarily curtails the scope of the SPP contrary to what appears to be the legislature's intent. Witness Mara's recommendations should be rejected by the Commission.

Q. At a high level, did anything stand out to you in your review of Mr. Mara's testimony?

A. Yes. After reviewing Witness Mara's Curriculum Vitae provided in Exhibit No. (KJM-1), it does not appear that Mr. Mara has experience operating a Transmission system. Based on my experience working on DEF's Transmission assets, I will address why I disagree with Witness Mara's opinion regarding each Transmission subprogram he discussed and further explain how they are designed to accomplish the goals of reducing outages and restoration costs resulting from extreme weather events.

Q. Have you fully described the Transmission programs within the SPP?

A. Yes. The Transmission programs were described in Exhibit No. (BML-1) – Program Descriptions and further explained in my previously filed direct testimony. In this rebuttal testimony, I will only address certain specific contentions raised by OPC's witness, Mr. Mara.

III. INSULATOR UPGRADES

Q. Please describe how the Transmission Insulator upgrades subprogram meets the intent of the SPP Statute and Rule.

A. The Transmission Insulator Upgrades subprogram is intended to upgrade targeted equipment that is more vulnerable during extreme weather events to protect the integrity of the grid. Simply put, this subprogram of Structure Hardening will mitigate outages during extreme weather events. Structure hardening in its entirety is focused on reduction of outage times and restoration costs, however, the primary benefit of the Insulator

upgrades subprogram is reduction in outages, thus improving operation of the grid during extreme weather events.

Q. Does this subprogram's scope include various types of insulators?

A. Yes. DEF's Insulator upgrade subprogram is not limited to a specific type of insulator or application. Criteria for this subprogram is based on material properties and not insulator application or configuration (e.g., post). Post insulator refers to the application and use of the insulator, not the material. Therefore, post insulators are included.

Q. OPC Witness Mara pointed out that DEF did not include certain information regarding this subprogram in its Exhibit No. (BML-1). Do you agree?

A. Yes, Witness Mara is correct. DEF inadvertently omitted the Insulator upgrades subprogram Year 1 location information in its Exhibit No. (BML-1) and filed a revised version on March 13, 2025. The Year 1 Project List for Insulator Upgrades subprogram is included in this corrected version on page 45 of 56.

Q. Can you explain why the Year 1 Project List for Insulator upgrades shows a customer count of 0 for the locations identified?

A. Yes. Service for all customers originates from the transmission system, which acts as a bridge between the generation and the distribution system. The transmission system consists of different voltages with the highest voltage portion (100kv and above) being the bulk electric system ("BES"). The BES is subjected to mandatory reliability standards published and administered by the North American Electric Reliability Council ("NERC")

under the authority of the Federal Energy Regulatory Commission ("FERC"). These standards require sufficient redundancy within the BES to allow continued operation even when one or more elements of the system is out of service.

Therefore, most of DEF's BES assets do not directly serve customers but instead serve as critical infrastructure maintaining power flow within and between DEF, neighboring utilities, and Independent Power Producers. As a result, failure of a single BES element will often not cause a direct outage to our customers but removes a level of resiliency for the entire BES. Sequential failures within the system can cause significant disruption to power flows and cause extensive customer interruptions, including during an extreme weather event.

Imagine a highway facilitating long-distance travel, much like Transmission lines carry power over long distances at higher voltages. Both are designed for high-volume, long-distance transport. The substations are like rest stops along a highway, where the voltage can be adjusted (stepped up or down) to match the needs of the distribution system, similar to how rest stops provide amenities for travelers. If there is an issue along the highway (i.e., accident, closed path, etc.), the driver has alternative exits and routes to continue navigating to their destination; however, the driver is still impacted by the incident. Similarly, if there is a failure on a transmission line, power may have an alternate path, but the grid is still impacted and ultimately the customer may be impacted. Thus, it is critical to harden these facilities against the effects of extreme weather events as the hardening will have a positive impact on the overall level of service provided to our customers even if, as described above, a given line is shown as "serving" 0 customers.

Q. Referencing the Insulator upgrades subprogram, Witness Mara states that "this program replaces a system component with another component with similar strength and purpose" and "this is not an upgrade." Do you agree with Witness Mara's statements?

A. No, I do not agree with Witness Mara's assertions. Mr. Mara may have overlooked the section in Exhibit No. (BML-1) where it states that the line insulator subprogram is targeting porcelain insulators which show pin erosion 'penciling' of the connections between the insulators. The glass replacement insulators utilize a more uniform matrix than porcelain, with a design change that includes a zinc sleeve to mitigate the pin erosion for a better mechanical connection. The implementation of the improved design in the bell and connection is to reduce the effects of penciling over time, ultimately mitigating failure during extreme weather events and minimizing outage events.

Additionally, in DEF's response to Staff's First Set of Interrogatories, DEF shared that ceramic/porcelain is made from a combination of different raw materials, and this affects grain structure, void formation, and consequently long-term performance of porcelain bells. The uniformity of glass insulator material and better control of the manufacturing process produces insulators that do not have as much variation in strength as ceramic/porcelain insulators. This material has lower failure rates during extreme weather events, constituting a major upgrade in resilience during storms. Therefore, Mr. Mara is incorrect to say that the hardened insulators have similar strength.

Q. Can you describe the prioritization methodology for the Insulator upgrade subprogram?

Yes, but first let me state that Mr. Mara is incorrect in suggesting that "DEF did not indicate prioritization." Like other equipment upgrade subprograms within DEF's SPP, the prioritization of the insulators is conducted in a rigorous 2-step process, as documented in Exhibit Nos. (BML-1) and (BML-2). In the first step, the SPP model is run against the existing conditions under simulated weather modeling including extreme weather events and against a hardened condition for every location on the grid in DEF's territory. Failures of all equipment types are calculated, and downstream costs and benefits are estimated quantitatively through this detailed simulation.

The output of the modeling is a data driven list of locations, by sub-program, prioritized by the projects' benefit-cost ratios, such that the most cost-effective locations are placed earlier in time. In the second-step, DEF engineers carefully conduct a desk-review to evaluate the data driven generated prioritization based on their experience and knowledge of the location to determine if there are on-ground conditions that were not captured in the model that would change the rank of the location within the plan. Please see Appendix A of Exhibit No. (BML-2) for further details on this methodology.

Q. Witness Mara also states that DEF "did not provide a comparison of costs and benefits for the new program" and "it is not possible to make a comparison necessary for the PSC to determine if implementation of the program is in the public interest." Do you agree with Witness Mara's claims?

A. No. I do not agree with Witness Mara's claims. Insulator upgrades is a subprogram of the Transmission Structure Hardening program. DEF provided cost and benefit details at the program level, as required by Rule 25-6.030, F.A.C. Furthermore, specifically for the Insulator upgrades subprogram, benefits are described on page 39 of Exhibit No. (BML-1). Additionally, as requested, costs were provided for Insulator Upgrades in response to OPC's First Set of Interrogatories (No. 44).

This subprogram will help to harden the system against the effects of extreme weather and should be included in DEF's SPP.

IV. TOWER UPGRADES AND OVERHEAD GROUND WIRE

Q. Mr. Mara recommends that the Tower Upgrade and Overhead Ground Wire subprograms should be removed from the SPP because, in his opinion, these subprograms are "like for like" replacements that serve the same purpose without improving system performance. Has Witness Mara expressed similar or equivalent sentiments regarding DEF's Transmission Tower Upgrades and Overhead Ground Wire subprograms?

A. Yes. Witness Mara filed testimony in DEF's SPP 2023-2032 docket, Docket No. 20220050-EI. He advocated for similar conclusions based on similar reasoning as in this docket including recommending the Commission eliminate Transmission Tower Upgrades and Overhead Ground Wire from DEF's SPP.

Q. Did DEF file rebuttal testimony in Docket No. 20220050-EI?

A. Yes. DEF's Witness Amy Howe filed extensive rebuttal testimony rebutting many of Witness Mara's assertions.

Q. Do you agree with Witness Howe's previous statements regarding these two subprograms?

A. Yes, Exhibit No. (AV-1) identifies the portions of Ms. Howe's Second Amended Rebuttal Testimony on these points, specifically page 10, line 19 through page 12, line 12,in addition to my testimony below regarding the appropriateness of the subprograms.

Q. Describe why the Transmission Tower Upgrades subprogram meets the requirements of Rule 25-6.030, F.A.C.

A. As stated in Exhibit No. (BML-1), the Transmission Tower Upgrades subprogram will replace tower types that have previously failed during extreme weather events, as well as those identified by inspections. Prior experience has shown that, after wood poles are removed from the system, that next point of vulnerability are the identified towers. As described in Exhibit No. (BML-2), Tower Upgrades is a standards-based activity, in which towers are upgraded to the current design standard. Existing transmission towers will be upgraded with a new steel tower or a steel/concrete structure. Upgrading prioritized steel, wood/steel towers with a new cathodic protection steel tower lowers the risk of in-service failure during extreme weather conditions. The system is also hardened, as the upgraded tower is less susceptible to extreme weather and wind damage.

Q. Witness Mara references the number of towers DEF expects to replace as part of its Tower Upgrade subprogram noting that it appears DEF's current proposed Plan anticipates replacing a greater number of towers, can you explain the change?

A. Yes. As stated in DEF's Response to OPC's First Set of Interrogatories (No. 52), the Transmission Tower Upgrade subprogram's overall intent and selection criteria has not changed over the iterations of DEF's Storm Protection Plan filings. DEF's SPP 2023 stated that there were over 700 towers identified as having a similar design type to those that had previously failed during extreme weather (e.g., hurricanes Irma and Michael) and thus would be prioritized for upgrade under the subprogram. This number represents a subset, not the full complement, of the towers within the subprogram's criteria. DEF believes that Witness Mara's understanding is not complete.

Q. Do you agree with Witness Mara's recommendation that the Transmission Tower Upgrade subprogram should be eliminated from DEF's SPP?

A. No, I do not agree with Witness Mara's recommendation that the Transmission Tower Upgrade subprogram should be eliminated from the SPP because, as I explain below, his conclusion is based upon a number of faulty premises.

First, Mr. Mara states "The replacement of towers is a like-for-like replacement. This is different than replacing a wood transmission pole with a metal or concrete pole with greater resiliency to extreme winds."[1] Mr. Mara fails to recognize that tower upgrades are designed to the latest standards. Equipment standards, both internal and external, are continuously reviewed and updated. Thus, new equipment installations include the improvements as part of DEF's updated standards, meaning the towers are not being replaced "like for like" at all.

[1] Mara Testimony, p. 11, ll. 9-11.

Mr. Mara continues, "If age is a criterion and the towers are beyond their useful life, then replacement of the towers is an aging infrastructure project and therefore should not be included in the SPP."[2] This argument ignores reality by seeming to believe that the resiliency of the system is somehow a static measure that does not change over time, that infrastructure should rationally be expected to retain all its strength throughout its service life. The reality is that resiliency of an aging system decreases over time. Replacing these aging towers to today's design standards increases reliability by reducing risks of infrastructure damage. "Aging" infrastructure, but not yet beyond its useful life (still accomplishing its purpose), performs better when replaced with a new component, thereby strengthening the overall system relative to the status quo, which I believe is the goal of the SPP. Accelerated change outs of aging infrastructure increases resiliency and reliability, as less damage occurs during extreme weather events with upgraded equipment. Finally, DEF inspects its infrastructure pursuant to Commission-approved schedules and towers identified as beyond their useful life would be replaced as part of DEF's standard maintenance work (i.e., base rate work) and not pursuant to this subprogram.

Mr. Mara also states, "Transmission lines have been required by the NESC to be built for extreme wind events since at least 1977. . . . Replacing towers with new towers that meet the same weather loading condition will not add to resiliency."[3] The National Electric Safety Code ("NESC") establishes minimum requirements to ensure safety and reliability. This national standard changes over time and therefore the standards as they existed in 1977 are not identical to the standards adopted in 2023. In some cases, NESC-mandated

[2] *Id.* at ll. 14-15.
[3] *Id.* at ll. 12-17.

wind speed tolerances may decrease. DEF, however, does not decrease wind speed tolerances when the NESC allows. DEF extreme wind design standards meet and exceed the current and past NESC requirements which of course cover more criteria than wind-loading. This assures designs balance meeting safety minimums, construction variables, reliability, costs, and long-term performance based on project locations and circuit criticality. To the extent Mr. Mara is basing his understanding of DEF's design standards on responses provided in Mr. Lloyd's deposition, I would note that I am sponsoring the Transmission-specific portions of the SPP, and that Mr. Lloyd's job responsibilities do not encompass transmission work – as he noted in that deposition.[4]

Witness Mara continues "If the tower design was flawed, it would have been imprudent for DEF to have originally constructed the tower in which case the cost should also be denied from the SPP." To DEF's knowledge, no such towers exist, nor does Witness Mara opine that the design *was* flawed but merely states "if" it was flawed it should not have been accepted. As mentioned above, tower construction has always been and continues to be driven by design standards. This includes designs before and after the adoption of the 1977 NESC extreme wind criteria. Mr. Mara chose to ignore that the lattice towers in question predate 1977, or possibly did not know because he failed to ask. And (by his own admission), there was no NESC extreme wind loading requirement at the time of design. Therefore, the towers do not suffer from a "design" flaw any more than any component that has been updated over time (or which was built to a given standard that has been subsequently modified).

[4] *See, e.g.*, Lloyd Deposition, p. 12, ll. 7-15; p. 33, ll. 4-8; p. 34, ll. 15-21; p. 40, ll. 20-21.

Mr. Mara next states that "Replacing a tower with another tower of the same strength does not increase resiliency. Rather it simply maintains the status quo in terms of strength. . . . Clearly replacing new towers with the same strength and same materials is not a clear improvement in outage cost or times, therefore the project does not meet the requirements" of the Rule. As I previously noted, this opinion ignores reality by assuming the system's strength is static and infrastructure retains its original strength throughout its operational life – unfortunately, that is just not the case. Moreover, as stated above, DEF upgrades towers to DEF extreme wind guidelines that exceed NESC requirements, providing increased strength and resiliency. Additionally, as a result of past extreme weather event performance, DEF engineering criteria for tower construction was enhanced to not only satisfy NESC minimum requirements, but to also mitigate cascading failure.

This subprogram should be retained.

Q. Witness Mara states neither Florida Power & Light nor Tampa Electric include the replacement of lattice towers in their respective SPPs. Do you think this should prevent DEF from including this hardening activity in its own SPP?

A. No. I am not aware of any requirement that all utilities have the exact same programs included in their respective SPPs - for good reason - each utility's system is unique. DEF's SPP is specific to its system's needs and includes programs designed to strengthen *that* system to provide customers the benefits the legislature has identified while meeting the requirements of the SPP Rule.

Q. Describe how the Transmission Overhead Ground Wire subprogram meets the requirements of Rule 25-6.030, F.A.C.

A. As described in Exhibit No. (BML-2), the Transmission Overhead Ground Wire ("OHGW") subprogram is a standards-based activity that targets replacement of transmission OHGW susceptible to damage or failure with optical ground wire ("OPGW"). OPGW provides improved grounding and lightning protection as well as high-speed data transmission for system protection, control, and communications. As stated in Exhibit No. (BML-1), deteriorated OHGW reduces the protection of the conductor and exposes the line to repeated lightning damage and risk of failure impacting the system. By targeting deteriorated OHGW on lines with high lightning events, the benefits of this subprogram will be maximized. Additionally, the redundant sources of fiber optic communications for system protection and control supports faster identification of trouble spots on the transmission system and enables faster restoration following line faults, thus reducing outage restoration times.

Q. Witness Mara asserts DEF is "simply replacing old overhead ground wire with another conductor that serves the same purpose without any increase in performance of the transmission line during extreme weather events." Can you please explain what was meant by the term "deteriorated OHGW" used in Exhibit No. (BML-1) and why the subprogram is appropriate for SPP?

A. Yes, but first I would stress that, in my opinion, programs or subprograms aimed at replacing aging infrastructure – whether due to wear over time or because they have simply been performing as intended but cannot realistically be expected to do so indefinitely – are

properly included in the SPP. The OHGW subprogram is a contributor to system interruptions during extreme weather events and therefore, its enhancement serves to strengthen the system and provide a more resilient grid as intended by the SPP statute and rule.

With that said, deteriorated OHGW is static conductor that has lost some of its strength but still performs the designed function, albeit at reduced capacity. This deterioration occurs when the protective galvanization has been sacrificed; static in this condition is more prone to failure. It is known and accepted that all static sizes and material combinations will lose their galvanization and eventually rust, thus reaching end of life. When this occurs, not only is the static more susceptible to failure from both wind and lightning events, but the grounding qualities become compromised. The OHGW is not "deteriorated" in the sense of having been poorly designed or maintained; rather, it is simply an asset that, when replaced, will strengthen the system against the effects of extreme weather relative to the state of the system as it exists today.

Q. Do you agree with Witness Mara that DEF may or may not use the communication capabilities of the optical overhead ground wire it is installing?

A. No, nor do I know the factual basis upon which Mr. Mara based this speculative conclusion, other than his correct recognition that fiber optic cable must be integrated in a system of like cables – but that is one of the purposes of the subprogram – to accelerate the completion of that system. We have every intention of using the communication capabilities of OPGW. In some cases, we may need other upgrades to occur on adjacent

transmission stations and circuits before allowing use of the communication. Once all upgrades are completed, we will have full communication capability. OPGW serves both purposes of shielding and offering communication, and as previously provided in DEF's response to OPC's First set of Interrogatories (No. 40), OPGW is our standard for new construction and replacements. This fiber optic cable enables the migration to fiber-based protection and control logic which strategically offers short- and long- term infrastructure bandwidth solutions. Fiber enables fast, reliable, and advanced protection and control system functionality for the transmission grid. Additionally, it minimizes the impacts to customers by reducing incidents of grid operations while also reducing grid restoration times. From a construction standpoint, it is more cost effective and less customer invasive to install OPGW while performing other work rather than going back again to install it when the need arises.

Q: Can you describe the prioritization methodology for OHGW?

A: Fundamentally, OPGW aims to increase the resilience of the grid over the existing baseline by improving grounding. The risk of outages due to lightning strikes and mechanical failures are heightened during extreme weather conditions due to higher magnitude and frequency lightning events. Advanced replacement of functional wire that is susceptible to failure (e.g., degraded) under extreme weather conditions with new optical wire provides an effective solution to mitigate these risks.

The prioritization of locations for OPGW follows the two-step methodology described for insulators above and in Appendix A of Exhibit No. (BML-2), which includes rigorous

weather modeling and detailed engineering desk-review. For OPGW, the prioritization modeling focuses on the main purpose of the hardening activity, by modeling benefits from reduction in customer minutes of interruption ("CMI") due to increased resilience to lightning strikes.

Q. Would you characterize the benefits of installing OPGW as "a minor side benefit?"

A. I would not characterize the benefits of installing OPGW as a "minor side benefit."[5] DEF is replacing the existing OHGW following the current Duke Energy OPGW standards, provided in DEF's response to OPC's First Set of Interrogatories (No. 40) and Production of Documents Request (No. 12). These standards are cost-effective, as the additional material cost is negligible compared to the total construction cost and provide additional benefits to the system. Installing OPGW not only provides the benefit of communication, but it also provides additional strength of the element (higher breaking strength). As mentioned above, communication enablement is a large benefit. Fiber optic cable installed in the overhead static wire position on transmission lines enables the migration to a fiber-based protection and control logic. This strategically offers DEF an optimum short- and long-term infrastructure bandwidth solution. Fiber enables fast, reliable, and advanced protection and control system functionality for the transmission grid and strategically impacts reliability by reducing incidences of grid operations, while reducing grid restoration times.

[5] Mara Testimony, p. 13, l. 13.

Q. Do you agree with Witness Mara's allegation "the new OHGW will meet the same NESC loading limits for extreme wind, so there is no increase in strength and thus no reduction in restoration costs."?[6]

A. No. I do not agree with Witness Mara's assertion. Design standards are reviewed and revised over time and components replaced through this program (including OHGW) are reviewed and checked to these current design standards for compliance. Replacing OHGW to today's design standards minimizes the probability of failures during extreme wind events, minimizing future restoration times.

For all these reasons, I disagree with Mr. Mara's conclusion that this subprogram should be removed from the SPP.

Q. Are Transmission Tower Upgrades and Overhead Ground Wire currently included in DEF's SPP approved by the Florida Public Service Commission?

A. Yes. These two subprograms have been approved by the Florida Public Service Commission in both DEF's SPP 2020-2029, Docket No. 20200069-EI, as well as DEF's SPP 2023-2032, Docket No. 20220050-EI.

V. SPP DEPLOYMENT PACE

Q. Does Witness Mara make a recommendation to reduce the pace at which DEF deploys certain SPP subprograms in his testimony?

A. Yes. Witness Mara recommends DEF reduce its deployment of certain SPP subprograms to a level Staff inquired about in its seventh interrogatory.

[6] *Id.* at p. 13, ll. 19-20.

Q. Can you describe Witness Mara's recommendation for Transmission subprogram deployment?

A. Yes. Witness Mara recommended "limiting transmission structure upgrades to 462 structures per year."[7] This translates to a unit deployment reduction of around 75% in 2026 and 2027 for these affected subprograms. Witness Mara seemingly ignores, or at least does not acknowledge, that a roughly 4% reduction in revenue requirements he recommends would be a much more dramatic decrease in subprogram deployment.

Q. Do you agree with Witness Mara's assertion that this reduction will not materially affect the response to major events in the near term?

A. No, I do not. First of all, as I explained in my direct testimony, DEF has not had a hardened transmission structure fail during a storm event. As described in DEF's response to the Staff's Interrogatory, limiting deployment to 462 transmission structures (i.e., poles and towers) over the entire 10-year plan (2026 through 2035) would delay these proven benefits to customers by extending the risk of non-hardened structure failures through an additional 6 to 7 storm seasons and at the conclusion of the first three-years of the proposed SPP (i.e., end of year 2028) this recommended reduction would result in close to 3,000 wood transmission poles remaining on the system rather than 0 as proposed by DEF.

In sum, adoption of this proposed reduction in work scope could lead to prolonged system impacts during extreme weather events, affecting a multitude of critical customers such as urgent care and medical centers, fire stations, law enforcement facilities and prisons, cell

[7] *Id.* at p. 14, l. 8.

towers, fueling stations, and water treatment plants, assisted living and hospice facilities, schools, shelters, and financial institutions – not to mention the impacts to other customers of all classes and types.

VI. CONCLUSION

Q. Ms. Vazquez, your rebuttal covers a lot of ground, but did you respond to every contention regarding the Company's proposed plan in your rebuttal?

A. No. Mr. Mara's testimony involved numerous assertions, opinions and conclusions and I could not reasonably respond to each and, therefore, I focused on the issues that I thought were most important. As a result, my silence on any particular assertion in the intervenor testimony should not be read as agreement with or consent to that assertion, opinion, or conclusion.

Q. Does this conclude your testimony?

A. Yes.

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

SECOND AMENDED REBUTTAL TESTIMONY OF AMY HOWE

ON BEHALF OF DUKE ENERGY FLORIDA, LLC

JUNE 30, 2022

I. INTRODUCTION AND QUALIFICATIONS.

Q. Please state your name and business address.

A. My name is Amy M. Howe. My current business address is 13338 Interlaken Road, Odessa, FL 33556.

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

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

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

A. Yes.

II. PURPOSE AND SUMMARY OF TESTIMONY.

Q. Do you agree with Mr. Mara's assertion that the lattice tower replacement subprogram should be eliminated from the plan?

A. No, absolutely not, nor do I agree with any of the points Mr. Mara relies on in reaching his conclusion. First, Mr. Mara stated "Transmission lines have been required by the NESC to be built for extreme wind events since at least 1977. Failure due to design flaw should not

be a SPP activity."[1] However, Mr. Mara chose to ignore, or possibly did not know because he failed to ask, that the lattice towers in question predate 1977, therefore there was no NESC required extreme wind loading standard at the time (by his own admission) and the towers did not suffer from a "design flaw" any more than any component that has been updated over time (or which was built to a given standard that has been subsequently modified). Thus, this support for his conclusion fails.

He continues, "If DEF owns towers that fail to meet strength requirements when constructed, then replacement costs should not be considered an 'upgrade' and therefore should not be funded through the SPP."[2] It is irrelevant whether DEF agrees with this general proposition or not, as Mr. Mara offers it without identifying any such towers, he believes failed to meet strength requirements when constructed. To DEF's knowledge, no such towers exist, nor does he opine that the design *was* flawed, but merely states "if" it was flawed it should not have been accepted and thus cannot be a proper SPP program (again, with no support). Thus, this contention likewise fails.

Mr. Mara's next attempt at supporting his conclusion fares no better as it is simply a repeat of his contention that a program that replaces aging infrastructure should be excluded, though this time stated as an accepted fact rather than a dubious proposition.[3]

Mr. Mara next claims "Replacing towers with new towers that meet the same weather loading condition will not add to resiliency. Rather it simply maintains the status quo in terms of strength." As discussed generally above, this argument ignores reality by seeming

[1] Mara Testimony, pg. 28, ll. 20-22.
[2] *Id.* at pg. 28, l. 22 – pg. 29, l. 2; *see also id.* at pg. 29, ll. 6-7 ("If the tower design was flawed, it would have been imprudent for DEF to accept the design and construction of the tower in which case the cost should also be excluded from the SPP.").
[3] *See id.* at p. 29 ll. 2-4.

to believe that the resiliency of the system is somehow a static measure that does not change over time, and that somehow a piece of infrastructure should rationally be expected to retain all its strength throughout its service life. While I wish that were the case, it simply is not. In the real world, accelerated change outs of aging infrastructure increases resiliency and reliability as there would be less infrastructure damaged during an extreme weather event, resulting in fewer failures to mitigate and quicker restoration time for DEF customers. Moreover, Mr. Mara fails to recognize that Tower Upgrades are designed to the latest NESC code, which is updated in 5 years cycles. Equipment standards, both internal and external, are continuously reviewed and updated. Thus, new equipment installations include the improvements as part of DEF's updated standards, meaning the towers are not being replaced "like for like" at all.

This subprogram is proper and should be retained.