



April 2, 2025

VIA: ELECTRONIC FILING

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

**Re: Tampa Electric Company's Petition for Approval of 2026-2035 Storm Protection Plan
Dkt. No.: 20250016-EI**

Dear Mr. Teitzman:

Attached for filing in the above docket on behalf of Tampa Electric Company, is the Rebuttal Testimony of Kevin E. Palladino.

Thank you for your assistance in connection with this matter.

Sincerely,

A handwritten signature in blue ink that reads 'Malcolm N. Means'.

Malcolm N. Means

MNM/bml
Attachment

cc: Walt Trierweiler, Office of Public Counsel
TECO Regulatory



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20250016-EI

TAMPA ELECTRIC COMPANY'S
2026-2035
STORM PROTECTION PLAN

REBUTTAL TESTIMONY

OF

KEVIN E. PALLADINO

FILED: April 2, 2025

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
2 **REBUTTAL TESTIMONY**
3 **OF**
4 **KEVIN E. PALLADINO**

5
6 **INTRODUCTION:**

7 **Q.** Please state your name, address, occupation, and
8 employer.

9
10 **A.** My name is Kevin E. Palladino. My business address is
11 5321 Hartford Street, Tampa, Florida 33619. I am employed
12 by Tampa Electric Company ("Tampa Electric" or "the
13 company") as Manager Storm Protection Plan Engineering
14 and Customer Outreach.

15
16 **Q.** Are you the same Kevin E. Palladino who filed direct
17 testimony in this proceeding?

18
19 **A.** Yes, I am.

20
21 **Q.** Have your duties, responsibilities, or experience changed
22 since the direct testimony was submitted?

23
24 **A.** No.
25

1 Q. What is the purpose of your rebuttal testimony in this
2 proceeding?

3

4 A. The purpose of my rebuttal testimony is to respond to
5 issues raised in the direct testimony of Kevin J. Mara,
6 who is testifying on behalf of the Office of Public
7 Counsel ("OPC").

8

9 My rebuttal testimony will explain why OPC witness Mara's
10 proposed rejections of the Distribution Storm Surge
11 Hardening Program ("DSSH Program") and Transmission
12 Switch Hardening Program ("TSH Program") are based on
13 inaccurate statements about the contents of Tampa
14 Electric's 2026-2035 Storm Protection Plan ("SPP" or
15 "Plan") and would result in reduced storm resiliency
16 benefits for Tampa Electric's customers.

17

18 **PLAN COMPLIANCE WITH RULE 25-6.030**

19 Q. Mr. Mara asserts that Tampa Electric did not provide "a
20 general map" in its 2026-2035 SPP for either the DSSH
21 Program or TSH Program as required by Rule 25-6.030(3)(c)
22 of the Florida Administrative Code ("SPP Rule"). Do you
23 agree with this assertion?

24

25 A. No. I reviewed the SPP Rule while preparing Tampa

1 Electric's 2026-2035 SPP. To my knowledge, the SPP Rule
2 does not require Tampa Electric to prepare a map for each
3 SPP Program. Rule 25-6.030(3)(c) requires the company to
4 provide a "description of the utility's service area" that
5 includes "a general map" and the number of customers
6 served in each area. This part of the SPP Rule does not
7 mention a separate map for each proposed SPP Program.
8 Rule 25-6.030(3)(d)1-5 requires Tampa Electric to provide
9 a description of each proposed SPP Program and then lists
10 five categories of information that the company is
11 required to provide as part of that description. None of
12 the requirements listed include a program-specific map.

13
14 **Q.** Did Tampa Electric provide a description of the utility's
15 service area that includes a map and the number of
16 customers served in each area as required by the SPP Rule?

17
18 **A.** Yes. Tampa Electric provided a description of the
19 company's service area on Bates stamped pages 25 and 26
20 of the 2026-2035 SPP. This description includes both a
21 "general map" and the number of customers served in each
22 of the company's seven service areas.

23
24 **Q.** Mr. Mara further asserts that Tampa Electric did not
25 comply with the SPP Rule because it did not provide the

1 number of customers served by either the DSSH Program or
2 TSH Program. Do you agree with this assertion?

3
4 **A.** No. To my knowledge, the SPP Rule does not require Tampa
5 Electric to identify the number of customers served by a
6 SPP Program. Rule 25-6.030(3)(d)1-5 requires Tampa
7 Electric to provide a description of each proposed SPP
8 Program and then lists five categories of information that
9 the company is required to provide as part of that
10 description. None of those requirements includes the
11 number of customers served by a Program. Additionally, it
12 would be impractical for Tampa Electric to provide a
13 customer count at the Program level for several reasons,
14 including that a Program may extend beyond the ten-year
15 horizon of the current Plan, and because the company has
16 not identified each project that it may complete under a
17 Program during its entire lifespan.

18
19 **Q.** Rule 25-6.030(2)(e)1 requires a utility to provide a
20 description of each project in the first year of the plan
21 that includes "number and type(s) of customers served."
22 Did Tampa Electric provide this information for the TSH
23 Program?

24
25 **A.** No. Tampa Electric is not required to provide this

1 information for the TSH Program because the company does
2 not have any projects planned for that Program in the
3 first year of the plan.
4

5 **Q.** Rule 25-6.030(2)(e)1 requires a utility to provide a
6 description of each project in the first year of the plan
7 that includes "number and type(s) of customers served."
8 Did Tampa Electric provide this information for the DSSH
9 Program?
10

11 **A.** Yes. The company initially provided the number of
12 switchgear replacements it plans to engineer for the DSSH
13 Program in 2026 in Appendix H to the company's 2026-2035
14 SPP and a description of the number of customers that can
15 be served by a switchgear on Bates stamped page 49 of the
16 SPP. Once Tampa Electric completes the detailed
17 engineering work for the replacement of the 174 switchgear
18 planned in 2026, the company will have the information to
19 develop more detailed customer counts for DSSH projects.
20 Since Mr. Mara asserts that the information provided in
21 the plan is insufficient, Tampa Electric developed a more
22 specific customer count estimate for the Program and
23 provided it in the revised Appendix H submitted in this
24 docket on March 31, 2025.
25

1 Q. Mr. Mara asserts that Tampa Electric did not provide a
2 "designation of any areas of the system not feasible,
3 reasonable, or practical [sic]," for either the DSSH
4 Program or TSH Program. Did Tampa Electric include this
5 information in its 2026-2035 SPP?
6

7 A. Yes. Bates stamped page 26 of the 2026-2035 SPP states,
8 "Tampa Electric developed the proposed 2026-2035 SPP and
9 its supporting Programs and initiatives by examining the
10 company's entire service area for the most cost-effective
11 storm hardening opportunities. Tampa Electric did not
12 exclude any area of the company's existing transmission
13 and distribution facilities from the storm hardening
14 evaluation due to concerns regarding the feasibility,
15 reasonableness, or practicality of storm hardening."
16 Bates stamped page 49 of the 2026-2035 SPP also explains
17 that the DSSH Program is limited to replacement of
18 switchgears in flood evacuation zones A, B, and C.
19 Finally, Bates stamped pages 42 and 43 of the 2026-2035
20 SPP explain that the TSH Program will evaluate all manual
21 GOAB switches on the company's system, meaning the entire
22 transmission system is feasible for hardening under that
23 program.
24

25 Q. Mr. Mara also asserts that Tampa Electric failed to

1 provide "a description of implementation alternatives
2 that could mitigate the resulting rate impact for each of
3 the first three years of the SPP" for either the DSSH
4 Program or TSH Program, as required by Rule 25-6.030(3)(i)
5 of the Florida Administrative Code. Did Tampa Electric
6 provide the required description of implementation
7 alternatives?

8
9 **A.** Yes. Tampa Electric provided a description of
10 implementation alternatives on Bates stamped page 76 of
11 the 2026-2035 SPP.

12
13 **Q.** Mr. Mara claims that Tampa Electric did not comply with
14 Rule 25-6.030(3)(a) of the Florida Administrative Code by
15 providing a description of how the TSH Program will
16 strengthen infrastructure to withstand extreme weather
17 conditions because the "description provided by TECO only
18 addresses normal operation of switches." Did Tampa
19 Electric provide this description?

20
21 **A.** Yes. Tampa Electric's 2026-2035 SPP explains how this SPP
22 Program will provide benefits during extreme weather.
23 Bates stamped page 42 of the 2026-2035 SPP states, "Based
24 on the company's experience with Hurricane Milton, Tampa
25 Electric is proposing the replacement of the GOAB switches

1 with automated, remotely controlled switches that will
2 greatly improve isolation and restoration times following
3 extreme weather events.”
4

5 **Q.** Mr. Mara states that Tampa Electric failed to provide a
6 description of how the TSH Program will reduce restoration
7 costs and outage times. Did Tampa Electric provide this
8 description?
9

10 **A.** Yes. Revised Bates stamped page 42 states, “The
11 Transmission Switch Hardening Program is a four-year
12 initiative that aims to evaluate the upgrade of 153 switch
13 locations with modern switches enabled with Supervisory
14 Control and Data Acquisition(“SCADA”) communication and
15 remote-control capabilities. This upgrade will allow for
16 switches to be operated from a control center and avoid
17 sending a technician to a site to operate the switch.
18 This will allow for faster isolation of trouble spots on
19 the transmission system and more rapid restoration
20 following line faults, thereby increasing the resiliency
21 of the transmission system.” Bates stamped page 71 of the
22 2026-2035 SPP also states, “The company expects that the
23 benefits of this program will include faster isolation of
24 trouble spots on the transmission system, fewer truck
25 rolls and less technician time in the field, and more

1 rapid restoration following line faults.”

2
3 **Q.** Mr. Mara asserts that Tampa Electric did not provide a
4 comparison of the costs and benefits of the TSH Program.
5 Did Tampa Electric provide this comparison in its 2026-
6 2035 SPP?

7
8 **A.** Yes. Section 5 of the 2026-2035 SPP, which is titled
9 “Storm Protection Plan Projected Costs and Benefits,”
10 includes approximately seven pages that set out this
11 comparison. The projected costs for the TSH Program are
12 included on Bates stamped page 69 of the 2026-2035 SPP,
13 and the benefits of the program are described on Bates
14 stamped page 71 of the 2026-2035 SPP.

15
16 **TRANSMISSION SWITCH HARDENING**

17 **Q.** Mr. Mara asserts that Tampa Electric offers only a “vague
18 notion of confidence that the [TSH Program] will provide
19 benefits.” Do you agree with this characterization?

20
21 **A.** No. On Bates stamped page 71 of the 2026-2035 SPP, Tampa
22 Electric explained that replacement of manually operated
23 switches with remote operated switches will result in
24 “faster isolation of trouble spots on the transmission
25 system, fewer truck rolls and less technician time in the

1 field, and more rapid restoration following line faults.”
2 On Bates stamped page 42 of the 2026-2035 SPP, Tampa
3 Electric also explained that it can use transmission
4 switches to “section portions of the transmission system”
5 to “isolate trouble spots to minimize impacts to
6 customers.”

7
8 It also takes less time to isolate a trouble spot and
9 restore power to some customers through remote switching
10 than it would take for a technician to travel to the
11 location of that same switch and manually operate it.
12 This is especially true during or immediately after an
13 extreme weather event, when transmission access may be
14 compromised and technicians cannot gain access to the
15 switch to isolate the faulted section. It is also evident
16 that remotely operating a switch avoids the costs
17 associated with a truck roll and the labor cost to
18 manually operate the switch. Tampa Electric has a high
19 level of confidence that this Program will provide
20 restoration cost and outage time benefits in extreme
21 weather conditions.

22
23 The TSH Program will reduce outage times by installing
24 communication and remote-control capabilities on
25 transmission switches that result in quicker response

1 times and sectionalizing. This upgrade will allow Tampa
2 Electric to remotely operate switches from a control
3 center and avoid sending a qualified line technician to
4 a site to operate the switch. This will allow for faster
5 isolation of trouble spots on the transmission system,
6 allowing non-damaged areas of line to be energized.
7

8 **Q.** Mr. Mara asserts that "It is necessary for line personnel
9 to patrol a section of line prior to operating a switch
10 remotely to restore service; therefore, having remote
11 control over the switch limits its effectiveness during
12 major events." Do you agree with this characterization?
13

14 **A.** No. The remote capabilities of the switch are most
15 effective during major events by allowing for quicker
16 isolation of damaged transmission lines. The control room
17 operator can isolate damaged lines remotely without line
18 personnel patrols in the field. Remote operation will
19 allow the company to re-route power around damaged
20 transmission line segments and restore power to the grid
21 even before line crews go into the field.
22

23 **Q.** Mr. Mara asserts that "these remote-controlled switches
24 are required by OSHA to have manual overrides to protect
25 workers who may be working in the vicinity." Please

1 describe the manual override procedure required by OSHA
2 for the remote-controlled switches.

3
4 **A.** The remote-controlled transmission switch has a manual
5 override in which the clutch mechanism is decoupled,
6 effectively disconnecting the motor from the switch. When
7 the workers are working on the line, it is locked and
8 tagged in the disconnected position to eliminate the
9 possibility of reengaging while work is being performed.
10 The control center can still remotely operate a switch,
11 isolate system damage, and restore power if there are no
12 workers in the vicinity of the damage.

13
14 **Q.** Would there ever be a circumstance where automated
15 functionality would not be available under OSHA-regulated
16 circumstances?

17
18 **A.** No. All remote-controlled transmission switches have a
19 clutch assembly to allow for the appropriate manual
20 override, if required, for the automated functionality
21 not to be available. Furthermore, this OSHA requirement
22 is applicable when line technicians are working on an
23 energized line. Since the goal of the program is to
24 expedite and perform switching prior to restoration,
25 without sending personnel on site, the requirement does

1 not apply.

2

3 **Q.** Mr. Mara asserts "during a major event, the effectiveness
4 of remote-control switches is diminished due to the
5 potential for confusion of many different crews working
6 in an area including crews from out of town assisting
7 TECO in restoration efforts." Do you agree with this
8 characterization?

9

10 **A.** No. The remote-control switches are very effective as they
11 are used to isolate the damaged area remotely from the
12 Energy Control Center ("ECC"). Without the remote-
13 controlled switches, identifying and isolating the
14 damaged area takes significantly longer. Additionally,
15 line crews must notify and coordinate with ECC to obtain
16 "clearance" allowing the line workers to perform work on
17 the damaged area. This process ensures the ECC is aware
18 of all line work being performed in that area and avoids
19 any "potential confusion."

20

21 **Q.** Does the company currently "deploy" the same switches
22 proposed in the TSH Program?

23

24 **A.** Yes. However, without the inclusion of the TSH Program in
25 the SPP, these switches would be replaced at end-of-life

1 under the company's asset management program. Therefore,
2 the timeline for completing the replacement would be
3 significantly longer than it would be through the proposed
4 TSH Program and would not provide the benefits of the
5 upgraded switches including quicker isolation of damaged
6 transmission lines during major events. If the Commission
7 rejects the TSH Program, Tampa Electric's customers would
8 not receive the full benefits of remotely operable
9 transmission switches for years or even decades.

10
11 **Q.** If approved, does the company plan to recover the TSH
12 program costs through the company's Storm Protection Plan
13 Cost Recovery Clause?

14
15 **A.** Yes, Tampa Electric plans to recover costs for the TSH
16 Program through the company's Storm Protection Plan Cost
17 Recovery Clause if it is approved by the Commission.

18
19 **Q.** Please explain why the TSH Program should be included in
20 the company's 2026-2035 SPP?

21
22 **A.** The Commission should approve inclusion of the TSH Program
23 in the company's 2026-2035 SPP because it will provide
24 storm resiliency by reducing outage time. The
25 transmission system is the primary feed of all

1 distribution systems, and without it, entire substations
2 and the distribution circuits they power would be left
3 de-energized for longer during outages. Reducing outage
4 time on the transmission system improves resiliency for
5 all downstream systems such as substations and
6 distribution circuits.

7
8 **OTHER TOPICS**

9 **Q.** Mr. Mara raises a concern with Tampa Electric's inclusion
10 of the word "prudent" in the 2026-2035 SPP and supporting
11 testimony. How do you respond to Mr. Mara's concern?

12
13 **A.** Although Tampa Electric disagreed with Mr. Mara's claims
14 since the company used the word "prudent" in its general
15 context, not a legal context, on March 31, 2025 the
16 company filed revised pages to remove all references to
17 "prudent" or "prudence" from the company's direct
18 testimony and exhibits in this docket.

19
20 **Q.** Mr. Mara asserts that utilities "should not be modifying
21 the programs by means of testimony or responses to data
22 requests." Has Tampa Electric proposed any changes to the
23 SPP Programs contained in its 2026-2035 SPP through
24 discovery responses or through testimony?

1 **A.** No. Tampa Electric is not proposing any modifications to
2 the programs included in its 2026-2035 SPP through
3 rebuttal testimony, discovery responses, or any other
4 filing.

5
6 **Q.** Mr. Mara's testimony refers to Staff interrogatories that
7 asked Tampa Electric about "options for delaying" the DSSH
8 and TSH Programs and includes the company's responses in
9 his Exhibit KJM-2. What would be the effects of delaying
10 these programs?

11
12 **A.** Delaying these programs would not be beneficial for Tampa
13 Electric customers. First, slowing the pace of
14 implementation for these programs would delay the storm
15 resiliency benefits of these programs. Second, slowing
16 the pace of work would also result in higher costs in
17 total over time, to complete the same SPP projects, since
18 the current work pace allows for greater efficiency for
19 contractors, which is reflected in lower bids for the
20 work.

21
22 **Q.** If the Commission rejects the DSSH and TSH Programs as
23 Mr. Mara suggests, how would that affect Tampa Electric's
24 customers?

25

1 **A.** The DSSH and TSH Programs are designed to proactively
2 replace portions of our transmission and distribution
3 system with assets that will reduce restoration costs and
4 outage times associated with extreme weather. As I
5 previously explained, Tampa Electric would not replace
6 these assets in the regular course of business unless
7 they have reached the end of their useful life. If the
8 Commission rejects these SPP Programs, Tampa Electric's
9 customers would not receive these benefits for years or
10 even decades.

11
12 **Q.** Should the Commission approve Tampa Electric's 2026-2035
13 SPP?

14
15 **A.** Yes. The Commission should reject Mr. Mara's arguments
16 and find that it is in the public interest to approve
17 Tampa Electric's 2026-2035 SPP without modification. The
18 company's proposed SPP was prepared as a customer-focused
19 program using rigorous analytical tools and engineering
20 and operational judgment. It strikes a reasonable balance
21 between the costs of the SPP, customer benefits such as
22 the reduction in restoration cost and outage time, and
23 the impact on customers' bills.

24
25 **Q.** Does this conclude your rebuttal testimony?

1 **A.** Yes.

2

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