

79

TECO's Response to Staff's Second Set  
of Interrogatories Nos. 2-3

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 20220048-EI  
STAFF'S SECOND SET OF  
INTERROGATORIES  
INTERROGATORY NO. 2  
BATES PAGES: 1 - 8  
FILED: JULY 12, 2022**

**Please refer to witness Latta's direct testimony, page 10.**

2. Witness Latta provided the estimated rate impacts for 2022 through 2024. What would the estimated rate impacts for the SPP be for 2022 through 2024 if the following components, an average over the first three years of the plan, were completed in lieu of the Utility's current plans:

- a. If 30 feeders were hardened per year;
- b. If 493 laterals were hardened per year;
- c. If 24 transmission assets were upgraded per year;
- d. If 21 transmission accesses were enhanced per year.

A. Tampa Electric presents the rate impacts further below for the scenarios outlined in this request only for illustrative purposes. The company would like to make it clear that it would not be feasible to shift to a Storm Protection Plan ("SPP" or "Plan") based on a target number of projects per year as presented above. This is because, as explained below, the company's plan is not based on a target number of projects per year, rather it is based on a planned investment level for each program for each year.

First, SPP projects are not interchangeable. Each project is unique in terms of size, scope, length of time to complete, and other variables. For example, as shown in Exhibit DAP-1, Appendix B of the company's proposed 2022-2031 SPP, the company's transmission asset upgrade projects range in scope from the replacement of a single transmission pole to a project which will replace 112 transmission poles. As a result, moving to a fixed number of projects per year in each program would not result in levelized costs per year or a fixed quantity/scope of work per year for that program.

Second, it is difficult to "assign" a project to only occur in a defined calendar year. Paragraph 12(a) of Tampa Electric's 2020 Settlement Agreement states that a project is "initiated" when "the first dollar is posted to the project work order as reflected in the company's accounting system..." As a result, the company discloses the number of projects it intends to "initiate" within a calendar year in its SPP and Storm Protection Plan Cost Recovery Clause ("SPPCRC") filings. These project counts do not represent the number of completed projects, nor do they represent the amount of financial investment made. The project is included in the

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 20220048-EI  
STAFF'S SECOND SET OF  
INTERROGATORIES  
INTERROGATORY NO. 2  
BATES PAGES: 1 - 8  
FILED: JULY 12, 2022**

project count whether \$1 or \$1 million is incurred. In addition, many SPP projects require permitting and engineering work in advance of construction. Under an annual project count cap scenario, the company's annual construction activity would be greatly constrained since permitting or engineering work would count as "initiated" projects against the cap.

To assist in this illustration demonstrating the uniqueness of each project, and the difficulty in moving to an annual project count cap, the table below lists two lateral undergrounding projects that were "initiated" at approximately the same time and are similar in terms of length of overhead line converted to underground. However, due to the differences in scheduling between the projects, one project will be complete in 2023 and the other in 2024. These scheduling differences also result in greatly differing projected costs for 2022 - \$33,000 versus \$1,803,592.

**Example Lateral Undergrounding  
Projects from Exhibit DAP-1, Appendix A**

Project Identifier	OH to UG Length Converted (Miles)	Project Start Quarter	Construction Start Quarter	Construction Complete	Project Cost in 2022
LUG SHA 13817.10722417	1.78	Q1 - 2021	Q1 - 2024	Q4 - 2024	\$33,000
LUG PCA 13724.10671319	1.76	Q1 - 2021	Q3 - 2022	Q3 - 2023	\$1,803,592

In addition to the above issues related to the uniqueness of projects, shifting to an annual project-based plan would also greatly disrupt the availability of the external resources necessary to execute the SPP in an efficient and cost-effective manner. As shown on Bate Stamped page 102 of Tampa Electric's proposed 2022-2031 SPP, the company's proposed investment levels for the four programs at issue in this Interrogatory (Distribution Lateral Undergrounding, Overhead Feeder Hardening, Transmission Asset Upgrades, and Transmission Access Enhancements) are relatively consistent and flat over the ten-year planning horizon. This leveling of work provides materials suppliers and external contractor partners with a level of certainty sufficient for development of the supply chain and workforce necessary to execute the company's SPP. Since each project is unique, as described above, moving to a project-per-year plan would result in inconsistent annual budgets and scope of work and disrupt the availability of these resources.

Moving to a project-per-year plan would also delay the benefits that customers would receive from the company's SPP. For example, the company's proposed

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 20220048-EI  
STAFF'S SECOND SET OF  
INTERROGATORIES  
INTERROGATORY NO. 2  
BATES PAGES: 1 - 8  
FILED: JULY 12, 2022**

investment level for the Transmission Asset Upgrades program is designed to result in replacement of all wooden transmission poles by 2029. As mentioned above, these projects can range in scope from replacement of one pole to hundreds of poles. Moving to an annual 24 project cap for this program could materially delay completion of the program, for instance if the company's prioritization process produced a list of 24 projects with only a few poles included in each.

Finally, for each of the four programs identified in this Interrogatory, the company has already "initiated" more projects than the proposed project counts listed for 2022 for those programs. As a result, it would be impossible to reduce the project count for 2022 below the proposed thresholds without halting work on in-progress projects. Tampa Electric would also note that the proposed scope of work for each of these four programs is consistent with the projected scope of work for those programs listed in the company's Commission-approved 2020-2029 SPP. For 2023, the proposed project counts would result in larger investments and larger scope of work for each of the four programs as compared to the company's proposed 2022-2031 SPP. Tampa Electric does not believe this larger scope of work is achievable for 2023.

The tables below provide the estimated rate impacts for the Storm Protection Plan ("SPP") for 2022-2024 with the following adjustments below made to the company's proposed 2022-2031. These rate impacts were calculated using the approved and consistent methodology that was done in the company's proposed 2022-2031 SPP. The rigorous process to identify accurate rate projections includes identifying all of the project's costs, the timing of costs, the timing of the complete project (initiation planning, design, and construction), developing the associated revenue requirements, and finally rate calculations. This process from project cost development to the rate calculations took several months to complete for the company's proposed 2022-2031 SPP. Because of the 20-day discovery period required for this response, the company utilized average values for project costs and associated revenue requirements, along with appropriate escalation rates to shift the proposed project counts to the project counts outlined by this request. The company did not attempt to capture all of the potential changes in costs that would be caused by the leveling of project counts over the first three years for these four programs. In addition, since the company is half-way through 2022, Tampa Electric has initiated much of the work to complete the projected number of projects in these programs for the majority of 2022 and 2023. As explained in the direct testimony of Richard L. Latta, even with these adjustments

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 20220048-EI  
STAFF'S SECOND SET OF  
INTERROGATORIES  
INTERROGATORY NO. 2  
BATES PAGES: 1 - 8  
FILED: JULY 12, 2022**

made for illustrative purposes, the rate impacts calculated will be different than those presented in the rate impact calculations for the Storm Protection Plan Cost Recovery Clause ("SPPCRC") as the rate impacts calculated for the SPP are considered "all-in" costs without any regard to whether the costs are or will be recovered through the SPPCRC or through the company's base rates and charges. For illustrative and comparison purposes the company's estimated rate impacts in dollars for the proposed 2022-2031 SPP is directly below:

Tampa Electric's 2022-2031 SPP Rate Impact in Dollars				
	per 1,000 kWh	per kW		
	RS	GSD	GSLDPR	GSLDSU
Current 2022 rate	\$3.29	\$0.59	\$0.53	\$0.06
SPP 2022 rate	\$3.26	\$0.64	\$0.57	\$0.06
SPP 2023 rate	\$4.99	\$0.70	\$0.63	\$0.09
SPP 2024 rate	\$6.42	\$0.75	\$0.68	\$0.11

Scenario "A" Overhead Feeder Hardening Program levelized to 30 feeders hardened per year in lieu of the company's proposed SPP:

Scenario A Levelizing Overhead Feeder Hardening to 30 Projects per year				
	per 1,000 kWh	per kW		
	RS	GSD	GSLDPR	GSLDSU
Current 2022 rate	\$3.29	\$0.59	\$0.53	\$0.06
Projected 2023 rate	\$3.73	\$0.61	\$0.54	\$0.06
SPP 2022 rate	\$3.21	\$0.64	\$0.57	\$0.06
SPP 2023 rate	\$4.90	\$0.70	\$0.63	\$0.09
SPP 2024 rate	\$6.57	\$0.76	\$0.68	\$0.12

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 20220048-EI  
STAFF'S SECOND SET OF  
INTERROGATORIES  
INTERROGATORY NO. 2  
BATES PAGES: 1 - 8  
FILED: JULY 12, 2022**

Overhead Feeder Hardening Cost		
	2022-2031 SPP Proposed	Scenario A
2022 SPP	\$33,399,511	\$27,832,926
2023 SPP	\$30,733,837	\$29,482,988
2024 SPP	\$30,668,465	\$37,761,042

Scenario "B" Distribution Lateral Undergrounding Program levelized to 493 laterals hardened per year in lieu of the company's proposed SPP:

Scenario B Levelizing Distribution Lateral Undergrounding to 493 Projects per year				
	per 1,000 kWh	per kW		
	RS	GSD	GSLDPR	GSLDSU
Current 2022 rate	\$3.29	\$0.59	\$0.53	\$0.06
Projected 2023 rate	\$3.73	\$0.61	\$0.54	\$0.06
SPP 2022 rate	\$3.08	\$0.64	\$0.57	\$0.06
SPP 2023 rate	\$4.94	\$0.70	\$0.63	\$0.09
SPP 2024 rate	\$6.49	\$0.75	\$0.68	\$0.11

Distribution Lateral Undergrounding Cost		
	2022-2031 SPP Proposed	Scenario B
2022 SPP	\$105,843,387	\$80,775,217
2023 SPP	\$104,718,914	\$114,853,833
2024 SPP	\$105,181,026	\$121,006,442

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 20220048-EI  
STAFF'S SECOND SET OF  
INTERROGATORIES  
INTERROGATORY NO. 2  
BATES PAGES: 1 - 8  
FILED: JULY 12, 2022**

Scenario "C" Transmission Asset Upgrades Program levelized to 24 transmission assets upgraded per year in lieu of the company's proposed SPP:

	Scenario C Levelizing Transmission Asset Upgrades to 24 Projects per year			
	per 1,000 kWh	per kW		
	RS	GSD	GSLDPR	GSLDSU
Current 2022 rate	\$3.29	\$0.59	\$0.53	\$0.06
Projected 2023 rate	\$3.73	\$0.61	\$0.54	\$0.06
SPP 2022 rate	\$3.17	\$0.64	\$0.57	\$0.06
SPP 2023 rate	\$4.82	\$0.70	\$0.62	\$0.09
SPP 2024 rate	\$6.53	\$0.76	\$0.68	\$0.12

	Transmission Asset Upgrades Cost	
	2022-2031 SPP Proposed	Scenario C
2022 SPP	\$16,973,368	\$11,009,752
2023 SPP	\$17,987,701	\$13,258,991
2024 SPP	\$18,074,432	\$28,680,257

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 20220048-EI  
STAFF'S SECOND SET OF  
INTERROGATORIES  
INTERROGATORY NO. 2  
BATES PAGES: 1 - 8  
FILED: JULY 12, 2022**

Scenario "D" Transmission Access Enhancement Program levelized to 21 accesses enhanced per year in lieu of the company's proposed SPP:

Scenario D Levelizing Transmission Access Enhancement to 21 Projects per year				
	per 1,000 kWh	per kW		
	RS	GSD	GSLDPR	GSLDSU
Current 2022 rate	\$3.29	\$0.59	\$0.53	\$0.06
Projected 2023 rate	\$3.73	\$0.61	\$0.54	\$0.06
SPP 2022 rate	\$3.26	\$0.64	\$0.57	\$0.06
SPP 2023 rate	\$4.98	\$0.70	\$0.63	\$0.09
SPP 2024 rate	\$6.42	\$0.75	\$0.68	\$0.11

Transmission Access Enhancement Cost		
	2022-2031 SPP Proposed	Scenario D
2022 SPP	\$2,409,956	\$2,024,363
2023 SPP	\$3,037,446	\$2,459,539
2024 SPP	\$3,006,580	\$3,999,946



**TAMPA ELECTRIC COMPANY  
DOCKET NO. 20220048-EI  
STAFF'S SECOND SET OF  
INTERROGATORIES  
INTERROGATORY NO. 2  
BATES PAGES: 1 - 8  
FILED: JULY 12, 2022**

Scenario "E" all of the above scenarios combined in lieu of the company's proposed SPP

Scenario E Levelizing Overhead Feeder Hardening (30), Distribution Lateral Undergrounding (493), Transmission Asset Upgrades (24), Transmission Access (21) Enhancement Projects per year				
	per 1,000 kWh	per kW		
	RS	GSD	GSLDPR	GSLDSU
Current 2022 rate	\$3.29	\$0.59	\$0.53	\$0.06
Projected 2023 rate	\$3.73	\$0.61	\$0.54	\$0.06
SPP 2022 rate	\$2.97	\$0.63	\$0.56	\$0.05
SPP 2023 rate	\$4.70	\$0.69	\$0.62	\$0.08
SPP 2024 rate	\$6.79	\$0.77	\$0.69	\$0.12

Overhead Feeder Hardening (30), Distribution Lateral Undergrounding (493), Transmission Asset Upgrades (24), Transmission Access (21)Transmission Access Enhancement Costs		
	2022-2031 SPP Proposed	Scenario E
2022 SPP	\$158,626,222	\$121,642,257
2023 SPP	\$156,477,898	\$160,055,351
2024 SPP	\$156,930,503	\$191,447,687

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 20220048-EI  
STAFF'S SECOND SET OF  
INTERROGATORIES  
INTERROGATORY NO. 3  
BATES PAGE: 9  
FILED: JULY 12, 2022**

- 3.** Please indicate the estimated program costs considering the components above.
- A.** The estimated program costs considering the components above are contained in the Response No. 2 above for each scenario.