

June 1, 2021

VIA ELECTRONIC FILING

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

Re: Docket No. 20210000-OT

Gulf Power Company 2021 Annual Status Report on

Storm Protection Plan Programs and Projects (Rule 25-6.030(4), F.A.C.)

Dear Mr. Teitzman:

Attached for filing in the above-referenced docket is the **Gulf Power Company** ("Gulf") 2021 Annual Status Report on its Storm Protection Plan Programs and Projects pursuant to Rule 25-6.030(4), Florida Administrative Code. Additionally, at the request of the Florida Public Service Commission Staff, this Report also include details for Gulf's Storm Preparedness/Infrastructure Hardening initiatives previously provided in the Electric Utility Annual Distribution Reliability Report.

If you or your staff have any question regarding this filing, please contact me at (561) 691-7144.

Respectfully submitted,

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GULF POWER COMPANY

2021 Annual Status Report on Storm Protection Plan Programs and Projects

(Rule 25-6.030(4), F.A.C.)

Submitted: June 1, 2021



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I. EXECUTIVE SUMMARY

Florida Power & Light Company ("FPL") d/b/a/ Gulf Power Company ("Gulf") submits its 2021 Annual Status Report on Storm Protection Plan ("SPP") Programs and Projects pursuant to Rule 25-6.030(4), Florida Administrative Code ("F.A.C."). Additionally, this Report provides details for Gulf's Storm Preparedness/Infrastructure Hardening Plan (*e.g.*, pole inspections, system hardening, and Ten-Part Storm Hardening Initiatives) previously provided in the annual Reliability and Storm Hardening Initiatives Report/March 1 filing.¹

On June 27, 2019, the Governor of Florida signed CS/CS/CS/SB 796 addressing Storm Protection Plan and Cost Recovery, which was codified in Section 366.96, F.S. Therein, the Florida Legislature directed each utility to file a ten-year SPP that explains the storm hardening programs and projects the utility will implement to achieve the legislative objectives of reducing restoration costs and outage times associated with extreme weather events and enhancing reliability. *See* Section 366.96(3), F.S. The Florida Legislature also directed the Commission to conduct an annual proceeding to determine the utility's prudently incurred SPP costs and to allow the utility to recover such costs through a charge separate and apart from its base rates, to be referenced as the Storm Protection Plan Cost Recovery Clause ("SPPCRC"). *See* Section 366.96(7), F.S.

Gulf's 2020-2029 SPP was approved by Commission Order No. PSC-2020-0293-AS-EI issued on August 28, 2020, in Docket No. 20200070. Gulf's SPP is a systematic approach to achieve the legislative objectives of Section 366.96, F.S., to protect and strengthen transmission and distribution ("T&D") infrastructure from extreme weather conditions, reduce outage times and restoration costs, and improve overall service reliability to customers.

Gulf's Commission-approved SPP is largely a continuation and expansion of previously approved storm hardening and storm preparedness programs. While Gulf has made significant progress toward strengthening the T&D infrastructure, Gulf must continue T&D storm hardening and storm preparedness plans and initiatives. Storms remain a constant threat and Florida is the most hurricane-prone state in the nation. With the significant coast-line exposure of Gulf's system, and the fact that many customers are in close proximity to the coast or a major body of water, Gulf's SPP is critical to maintaining and improving grid resiliency and storm restoration as contemplated by the Legislature in Section 366.96, F.S. Detailed explanations of the benefits of Gulf's SPP are provided in its Commission-approved 2020-2029 SPP.

Section II provides a status report on the SPP programs and projects performed during 2020, including a comparison of the actual costs and rate impacts with the estimated costs and rate impacts. Program and project level detail for Gulf's 2020 SPP is provided in Appendix A. Section II also identifies the SPP programs and projects planned to be performed during 2021, as well as

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¹ Due to the adoption and implementation of Rule 25-6.030(4), F.A.C., and agreement with Florida Public Service Commission ("FPSC" or the "Commission") Staff counsel and the Florida investor-owned electric utilities ("IOUs"), the details for Storm Preparedness/Infrastructure Hardening (*e.g.*, pole inspections, system hardening, and 10 storm preparedness initiatives) previously provided in the Annual Reliability Report/March 1 filing will now be provided annually as part of the Annual Status Report on SPP Programs and Projects to be submitted by June 1 of each year. This information is provided in Section III below, in the same format previously provided in the Annual Reliability Report/March 1 filing.



the associated estimated costs and rate impacts. Program and project level detail for Gulf's 2021 SPP is provided in Appendix B.

Section III provides the details for the Ten-Part Storm Preparedness/Infrastructure Hardening Initiatives that were previously provided in the Reliability and Storm Hardening Initiatives Report filed annually on March 1 filing.

II. REPORT ON STORM PROTECTION PLAN (SPP) PROGRAMS AND PROJECTS

Pursuant to Rule 25-6.030(4), F.A.C., Gulf is providing an annual status report on its SPP programs and projects performed or planned to be performed during calendar years 2020 and 2021. This section provides the following information required by the Rule: (a) identification of all SPP projects completed or planned for completion during calendar year 2020; (b) the actual 2020 SPP project costs and rate impacts compared with the estimated 2020 SPP project costs and rate impacts; and (c) the estimated 2021 SPP project costs and rate impacts.

A. STATUS OF 2020 AND 2021 SPP PROGRAMS AND PROJECTS

Gulf's 2020-2029 SPP was approved by Commission Order No. PSC-2020-0293-AS-EI issued on August 28, 2020, in Docket No. 20200070-EI. Gulf's Commission-approved SPP includes the following seven SPP programs:

- Distribution Inspection Program
- Transmission Inspection Program
- Distribution Feeder Hardening Program
- Distribution Hardening Lateral Undergrounding Program
- Transmission Hardening Program
- Vegetation Management Distribution Program
- Vegetation Management Transmission Program

A description of each SPP program is provided below, along with the SPP projects completed or planned to be completed in 2020 and the SPP projects planned to be completed in 2021. Project level detail for the 2020 SPP projects is provided in Appendix A and project level detail for the 2021 SPP projects is provided in Appendix B.²

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² Gulf's Distribution Inspection Program, Transmission Inspection Program, Vegetation Management – Distribution Program, and Vegetation Management – Transmission Program are on-going annual inspection and vegetation management programs that do not have project components and, instead, are completed on a cycle-basis throughout Gulf's service area. Thus, project level detail is not available for these annual inspection and vegetation management programs.



1. <u>Distribution Inspection Program</u>

Description:

Gulf's Distribution Inspection Program is a continuation of Gulf's existing Commission-approved distribution inspections which consists of feeder patrols, infrared patrols, wood pole inspections and wood pole remediation and/or replacement. These programs exist to ensure a more storm resilient distribution infrastructure which will result in reductions in wood pole failures, fewer storm-related outages, and reduction in storm restoration time and costs.

The total estimated costs of the Distribution Inspection Program for the ten-year period of 2020-2029 are \$37.5 million with an annual cost of approximately \$3.7 million. Annually, Gulf inspects poles, mainline feeders and associated equipment. Additionally, Gulf is piloting the use of drones in its Distribution Inspection Program.

A detailed explanation of the Distribution Inspection Program, its costs and benefits, is contained in Gulf's SPP, Section IV(A), Distribution Inspection Program.

2020 Projects:

SPP Year 2020 – Gulf projected the inspection of approximately 26,000 wood poles, mainline feeders, and associated equipment during calendar year 2020. As of December 31, 2020, Gulf completed inspections of approximately 25,542 wood poles, and drone patrols of mainline feeders and associated equipment.

2021 Projects:

SPP Year 2021 – Gulf projects it will inspect approximately 26,000 wood poles and perform drone patrols of critical mainline feeders and associated equipment.

2. Transmission Inspection Program

Description:

Gulf's Transmission Inspection Program continues its existing Commission-approved program consisting of inspections of substations and structures. Gulf's inspections of substations include distribution and transmission substations and follows a prescribed set of processes and procedures. Gulf's SPP also includes conducting annual aerial patrols to inspect transmission lines, structures, and circuits. Gulf's transmission structure inspection program is based on two alternating twelve-year cycles, which results in a structure being inspected at least every six years.

The total estimated costs for the Transmission Inspection Program for the ten-year period of 2020-2029 is \$35 million with an annual average cost of approximately \$3.5 million, which is consistent with historical costs for the existing Transmission Inspection Program.



A detailed description of the Transmission Inspection Program is provided in Section IV(B) of Gulf's SPP.

2020 Projects:

SPP Year 2020 – Gulf inspected transmission structures based on alternating 12-year cycles, performed 2 aerial patrols, and completed annual substation inspections during calendar year 2020.

2021 Projects:

SPP Year 2021 – Gulf projects it will continue its aerial patrols, substation inspections, and inspection of its transmission structures based on the alternating 12-year cycles.

3. <u>Distribution Feeder Hardening Program</u>

Description:

Gulf has approximately 269 feeders remaining to be hardened and expects to complete approximately 12 to 18 feeder projects annually, with approximately 50% of Gulf's feeders to be hardened or underground by year-end 2029. Gulf's Feeder Hardening Program includes cost-effective hardening options such as: applying Extreme Wind Loading for the design and construction of new pole lines and certain pole replacements; storm guying; equipment relocation; and the utilization of distribution automation.

The total estimated costs for the Distribution Feeder Hardening Program for the period of 2020-2029 is \$315.3 million with an annual average cost of \$31.5 million. A detailed explanation of the program, its costs and benefits, is contained in Gulf's SPP, Section IV(C), Distribution Feeder Hardening Program.

2020 Projects:

SPP Year 2020 – Gulf projected the completion of approximately 6 feeder hardening projects during calendar year 2020. Due to 2020 storm activity, as of December 31, 2020, Gulf completed 0 feeder hardening projects. However, the 6 projected feeder hardening projects were substantially completed during 2020 and were finalized during the first quarter of 2021.

2021 Projects:

SPP Year 2021 – Gulf projects it will complete approximately 21 feeder hardening projects.



4. <u>Distribution Hardening - Lateral Undergrounding Program</u>

Description:

Gulf's lateral undergrounding pilot program is based upon the experiences of FPL and focuses on targeting certain overhead laterals, *i.e.*, overhead laterals impacted by recent storms and with a history of vegetation-related outages and other reliability issues, spread throughout Gulf's system. Key objectives of the initial program include validating conversion costs and identifying cost savings opportunities, testing different design philosophies, better understanding of customer impacts and sentiments, and identifying barriers (*e.g.*, obtaining easements, locating transformers, and attaching entities' issues) that may differ in the Gulf service area. The evaluation and engineering of Gulf's laterals identified to be converted from overhead to underground began during the fourth quarter of 2020 and continues in 2021.

The total estimated costs for the period of 2020-2029 is approximately \$46.6 million with an annual average cost of approximately \$4.7 million. A detailed explanation of the program, its costs and benefits, is contained in Gulf's SPP, Section IV(D), Distribution Hardening – Lateral Undergrounding Program.

2020 Projects:

SPP Year 2020 – Gulf was in the initial planning and research phase of implementing the Distribution Hardening – Lateral Undergrounding Program during calendar year 2020. The pilot began during the fourth quarter of 2020 with the initial evaluation of lateral projects for conversion and continues in 2021.

2021 Projects:

SPP Year 2021 – Gulf initially projected it would complete approximately 8 lateral projects. Gulf is in the initial planning phase of these laterals and currently is on track to complete these underground lateral projects by year end 2021.

5. Transmission Hardening Program

Description:

Gulf's Transmission Hardening Program contains three components: substation flood monitoring and hardening; transmission and substation resiliency; and transmission structure replacement. In 2019, Gulf began a substation hardening program by implementing flood monitoring on vulnerable substations and reviewing switch house construction standards for possible replacement and strengthening. Gulf's transmission and substation resiliency program invests in the overall strengthening of the electric grid at the transmission and substation level to remove critical single points of failure that have the potential to impact large numbers of customers for extended periods of time. Finally, the transmission wood structure replacement program, which replaces wooden



transmission structures and poles with steel or concrete structures. As of year-end 2019, 62% of Gulf's transmission structures, system-wide, were steel or concrete, with approximately 38% (approximately 4,600) wood structures remaining to be replaced. Gulf expects to replace the approximately 4,600 wood transmission structures remaining on its system by year-end 2029.

The total estimated costs for the period of 2020-2029 is approximately \$488.8 million with an annual average cost of approximately \$48.9 million. A detailed explanation of the program, its costs and benefits, is contained in Gulf's SPP, Section IV(E), Transmission Hardening Program.

2020 Projects:

SPP Year 2020 – Gulf initially projected the hardening of 2 substation control houses, 8 flood monitors, 3 additional transformer banks, and replacement of approximately 70 wood structures during calendar year 2020. As of December 31, 2020, Gulf completed 2 substation control houses, 8 flood monitors, 2 additional transformer banks, and replaced 62 wood structures.

2021 Projects:

SPP Year 2021 – Gulf projects it will harden 372 wood structures, harden 2 control houses, and complete 12 transmission resiliency projects.

6. Vegetation Management – Distribution Program

Description:

Gulf continues its existing Commission-approved Vegetation Management - Distribution Program which includes its system-wide: three-year cycle for feeders; mid-year cycle inspection and maintenance for feeders; four-year cycle for laterals; and continued education of customers through its Right Tree, Right Place initiative. On average, Gulf plans to inspect and maintain, annually, approximately one-third (1/3) of its overhead feeder miles, or 259 miles; approximately one-fourth (1/4) of its overhead lateral miles, or 1,257 miles; and mid-cycle inspection and maintenance of approximately 518 miles for a total estimated inspection and maintenance average of approximately 2,000 miles per year. The primary objective of Gulf's Vegetation Management – Distribution Program is to clear vegetation in areas where Gulf has maintenance permission for the vicinity of distribution facilities and equipment in order to provide safe, reliable and cost-effective electric service to its customers.

The total estimated costs for the Vegetation Management – Distribution Program for the ten-year period of 2020-2029 is \$47.4 million with an annual average cost of \$4.7 million, which is consistent with historical costs for the existing Vegetation Management – Distribution Program.



A more detailed explanation of the program, its costs and benefits, is contained in Gulf's SPP, Section IV(F), Vegetation Management – Distribution Program.

2020 Projects:

SPP Year 2020 – Gulf projected an average inspection and maintenance of approximately 2,000 miles of distribution feeders and laterals during calendar year 2020. As of December 31, 2020, Gulf completed approximately 1,765 miles of vegetation management inspections and maintenance.

2021 Projects:

SPP Year 2021 – Gulf projects it will complete an average of approximately 2,000 miles of vegetation management inspections and maintenance.

7. Vegetation Management – Transmission Program

Description:

Gulf continues its existing Commission-approved Vegetation Management – Transmission Program. This program also complies with the North American Electric Reliability Corporation's ("NERC") vegetation management standards and requirements for Gulf's transmission system. The reliability objective of these standards and requirements is to prevent vegetation-related outages which could lead to a cascading event by utilizing effective vegetation maintenance. Approximately just over one third of Gulf's total transmission system, or approximately 600 miles, fall under the NERC vegetation management standards and requirements. The key elements of Gulf's Vegetation Management – Transmission Program are rights of way ground floor vegetation management, annual ground inspections of transmission rights of way, document vegetation inspection results and findings, and prescribe a work plan and execute the work plan. For those transmission lines which fall under NERC's vegetation management standards and requirements, Gulf plans to pilot and begin using a technology called LiDAR, Light Detection and Ranging. The collected LiDAR data will be used to develop preventative and reactive work plans. Gulf will continue to develop and execute annual work plans to address identified vegetation conditions. Under its 2020-2029 SPP, Gulf plans to continue its current program of identifying and correcting priority vegetation and hazard tree conditions.

The total estimated costs for the Vegetation Management – Transmission Program for the ten-year period of 2020-2029 is \$28.3 million with an annual average cost of approximately \$2.8 million, which is consistent with historical costs for the existing Vegetation Management – Transmission Program. A more detailed explanation of the program, its costs and benefits, is contained in Gulf's SPP, Section IV(G), Vegetation Management – Transmission Program.



2020 Projects:

SPP Year 2020 – Gulf projected approximately 1,675 miles of vegetation maintenance during calendar year 2020. As of December 31, 2020, Gulf completed approximately 1,675 miles of vegetation maintenance at December 31, 2020.

2021 Projects:

SPP Year 2021 – Gulf projects it will inspect and maintain approximately 1,675 miles of transmission lines.

B. COMPARISON OF 2020 SPP ACTUAL AND ESTIMATED COSTS AND RATE IMPACTS

Pursuant to Rule 25-6.030(4)(b), F.A.C., the tables below provide the actual SPP costs incurred during calendar year 2020 and the associated rate impacts as compared to the estimated SPP costs planned to be incurred during calendar year 2020 and the associated rate impacts. The actual and estimated costs shown below are based on total SPP expenditures (capital expense and O&M expense) incurred only during calendar year 2020, irrespective of whether the costs are recovered in base rates or through the Storm Protection Plan Cost Recovery Clause.

2020 SPP Estimated Costs vs. Actual Costs³

2020 SPP Programs	Estimated Costs (\$ in millions)	Actual Costs (\$ in millions)
Distribution Inspection Program	\$3.4	\$4.6
Transmission Inspection Program	\$3.5	\$0.7
Distribution Feeder Hardening Program	\$12.3	\$16.1
Distribution Hardening Lateral Undergrounding Program	\$0.0	\$0.0
Transmission Hardening Program	\$5.3	\$8.3
Vegetation Management – Distribution Program	\$5.0	\$4.8
Vegetation Management – Transmission Program	\$2.5	\$2.1
Total	\$32.0	\$36.6

During calendar year 2020, Gulf was under a general base rate freeze pursuant to a Commission-approved settlement agreement until base rates are next established by the Commission. Additionally, Gulf did not seek recovery of the 2020 SPP project costs through the Storm Protection Plan Cost Recovery Clause pursuant to the settlement agreement approved by

³ Totals might not agree due to rounding.



Commission Order No. PSC-2020-0410-AS-EI issued on October 27, 2020, in Docket No. 20200092-EI. Thus, the 2020 SPP programs had zero bill impacts on customer bills.

The table below provides a comparison of the hypothetical estimated rate impacts of the estimated 2020 SPP costs and actual 2020 SPP costs for Gulf's typical residential, commercial, and industrial customers without regard for the fact that Gulf was under a general base rate freeze. These hypothetical estimated rate impacts are based on the total estimated and actual SPP expenditures incurred only during calendar year 2020 (as shown in the table above), irrespective of whether those costs were recovered in the SPPCRC or through base rates.⁴

2020 SPP Estimated Rate Impacts Estimated Expenditures vs. Actual Expenditures

Customer Class	Based on Estimated 2020 Expenditures	Based on Actual 2020 Expenditures
Residential (RS)	\$0.00111/kWh	\$0.00098/kWh
Commercial (GSD)	\$0.28/kW	\$0.25/kW
Industrial (PX)	\$0.00080/kWh	\$0.00071/kWh

C. 2021 SPP ESTIMATED COSTS AND RATE IMPACTS

Pursuant to Rule 25-6.030(4)(c), F.A.C., the tables below provide the estimated SPP costs projected to be incurred during calendar year 2021 and the associated estimated rate impacts. The costs shown below are based on total SPP expenditures (capital expense and O&M expense) projected to be incurred only during calendar year 2021, irrespective of whether the costs are recovered in base rates or through the SPPCRC.

2021 SPP Estimated Costs

2021 SPP Programs	Estimated Costs (\$ in millions)
Distribution Inspection Program	\$3.0
Transmission Inspection Program	\$3.6
Distribution Feeder Hardening Program	\$35.9
Distribution Hardening Lateral Undergrounding Program	\$5.2
Transmission Hardening Program	\$45.5
Vegetation Management – Distribution Program	\$4.7
Vegetation Management – Transmission Program	\$2.9
Total	\$100.8

⁴ For purposes of estimating the 2020 rate impacts for the estimated and actual 2020 SPP expenditures incurred during calendar year 2020, Gulf assumed 50% of the 2020 expenditures are placed in-service during the calendar year.

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The table below provides the estimated rate impacts of the estimated 2021 SPP costs for Gulf's typical residential, commercial, and industrial customers. These estimated rate impacts are based on the total SPP expenditures projected to be incurred only during calendar year 2021 (as shown in the table above), irrespective of whether those costs will be recovered in in the SPPCRC or through base rates.⁵

2021 SPP Estimated Rate Impacts

Customer Class	Based on Projected Expenditures
Residential (RS)	\$0.00144/kWh
Commercial (GSD)	\$0.37/kW
Industrial (PX)	\$0.00102/kWh

The reasonableness and prudence of the 2021 SPP projected costs, actual/estimated costs, actual costs, and true-up of actual costs to be included in Gulf's SPPCRC are reviewed and approved by the Commission in the SPPCRC docket pursuant to Rule 25-6.031, F.A.C.

III. STATUS REPORT OF IMPLEMENTATION OF STORM HARDENING PLAN

This section provides the details for the implementation of the Storm Hardening Plan that was previously provided in the Annual Reliability Report/March 1 filing.⁶ Initiatives addressed in this Section include: Storm Hardening Activities; Wood Pole Inspections; Ten Storm Preparedness Initiatives; and 2021 Storm Season Readiness.

A. 2020 STORM HARDENING ACTIVITIES

See Section II above for a description of Gulf's storm hardening activities undertaken during calendar year 2020 pursuant to Gulf's Commission-approved SPP. These SPP programs, along with best practices in partnership with FPL, will continue to reduce restoration costs and outage times associated with extreme weather events and improve overall reliability of service to Gulf's customers going forward.

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⁵ For purposes of estimating the 2021 rate impacts for the 2021 SPP expenditures projected to be incurred during calendar year 2021, Gulf assumed 50% of the 2021 expenditures are placed in-service during the calendar year.

⁶ See footnote 1. At the request of Staff, this Section follows the same general format used in the prior Annual Reliability Report/March 1 filings; however, for consistency and to avoid redundancy, Gulf has provided cross-references to the SPP Annual Report in Section II above where appropriate.



B. WOOD POLE INSPECTION PROGRAM

1. Wood Pole Inspection Description

See Section II(A)(1) above for details regarding Distribution Inspection Program. Please refer to Section II(B) for 2020 actuals and Section II(C) for 2021 estimated costs.

Gulf's 2020 Wood Pole Inspection Program was designed to comply with Commission Order No. PSC-06-0144-PAA-EI and Commission Order No. PSC-07-0078-PAA-EU. In 2020, Gulf started the seventh year of the second eight-year inspection cycle, utilizing its existing wood pole inspection matrix. This matrix is based on pole age, treatment type and condition, and allows the selective excavation and boring of newer poles.

2. 2020 Accomplishments

In 2020, a total of 25,542 poles were inspected with a rejection rate of 2.27%. See Appendix D, titled "Annual Wood Pole Inspection Report" for details.

Gulf also changed out 644 poles identified as rejects from all inspections prior to 2020 and began changing out poles identified as rejects in the 2020 inspection.

3. Projected 2021 Goals

1. Wood Pole Inspection Description

See Section II(A)(1) above for details regarding Distribution Inspection Program. Please refer to Section II(B) for 2020 actuals and Section II(C) for 2021 estimated costs.

C. VEGETATION MANAGEMENT PROGRAMS

1. Distribution Vegetation Management Plan Overview

Please refer to Section II(A)(6) for details regarding Vegetation Management - Distribution Program. Please refer to Section II(B) for 2020 actuals and Section II(C) for 2021 estimated costs.

Gulf continued the Vegetation Management ("VM") program approved by Commission Order No. PSC 07-1022-FOF-EI. Gulf's vegetation management program consists of a three-year cycle on main line feeders, four-year cycle on laterals, and an annual cycle of inspections and correction on main line feeders.

2. Transmission Vegetation Management Plan Overview

Please refer to Section II(A)(7) for details regarding Vegetation Management – Transmission Program. Please refer to Section II(B) for 2020 actuals and Section II(C) for 2021 estimated costs.

Vegetation hazard removals continued to be the focus of Gulf's 2020 Transmission VM programs. Detailed ground patrols were performed on the transmission Rights of Way (ROW) in an effort to identify vegetation conditions requiring correction. All vegetation conditions identified by the



2020 patrols were corrected through vegetation removal or pruning activities. In 2020, Gulf was in full compliance with North American Electric Reliability Council (NERC) Standard FAC-003-4.

3. Right-of-Way Acquisition Program

The majority of Gulf's distribution lines are located on public road rights-of-way. Throughout the years, the widening of roads has forced Gulf to relocate its distribution facilities close to the right-of-way edge. As a result, some of Gulf's facilities are now immediately adjacent to privately-owned property where Gulf has no legal rights to manage vegetation.

In conjunction with construction projects, Gulf expanded its storm hardening philosophy by acquiring vegetation management easements from private property owners on select feeders to enhance Gulf's ability to adequately address VM concerns.

During 2020, Gulf acquired easements on 31 miles of line, giving Gulf the right to clear and maintain a 15-ft. wide corridor on private property adjacent to the public rights-of-way and Gulf's distribution facilities. Gulf plans to continue this program through 2021.

4. Company's Overall Vegetation Management Summary

During 2020, Gulf maintained 276 feeder miles. Additionally, 507 miles of feeder primary were inspected, and any vegetation conditions found to be out of specification were pruned or removed. Gulf also maintained 982 miles of lateral primary lines.

5. 2020 Distribution Performance Metrics (System Wide)

Distribution VM Reliability

Outages &	Act	tual	Adjusted		
Interruptions	Feeder	Lateral	Feeder	Lateral	
A) Number of Outages	8	1,835	4	1,261	
B) Customer Interruptions (CI)	11,560	61,073	4,471	34,642	
C) Outages per Mile	0.005	0.435	0.003	0.299	
D) CI per Mile	7.36	14.48	2.85	8.22	
E) Customer Minutes of Interruption (CMI)	5,047,438	8,305,544	54,087	2,824,545	



Distribution Performance

VM Miles Cleared and Contractor Cost	Plan (mi)	Actual (mi)
A) MATS Mainline Annual Trim Schedule (3 Year Cycle)	259	276
B) MICS Mainline Inspect & Correct Schedule (1 Year Cycle)	518	507
C) SALT Scheduled Annual Lateral Trim (4 Year Cycle)	1,257	*982

^{*}includes miles associated with hurricane restoration and inspection, and 3-year average spend requirements

Total Distribution Vegetation Cost

VM Planned Vs Actual Program Costs	Plan (\$)	Actual (\$)
A) VM Contractor Costs (MATS, MICS, SALT, TICKETS, HERBICIDE, MOWING,		
MISCELLANEOUS)	\$5,030,881	\$4,845,102
B) Total Distribution Vegetation Cost	\$5,030,881	\$4,845,102

D. JOINT USE POLE ATTACHMENT AUDITS

Gulf performs its joint use inventory audits (Field Survey), covering the overhead distribution system as required by Commission Order No. PSC-06-0781-PAA-EI every five years. The 2016 Field Survey was completed on October 5, 2016. The next Field Survey will be conducted in 2021.

1. Activity and Costs Incurred For 2020 And 2021 Projections

Costs were minimal for 2020. Gulf will be performing its joint use inventory audit in 2021.



2. Joint Use Attachment Audits – Distribution Poles

Summary of Distribution Poles and Attachments				
A) Company owned distribution poles (See Note 1)	238,520			
B) Company distribution poles leased: 8 Telecom attachers on Gulf's poles (See Note 1)	138,785			
C) Distribution pole attachments on Company Owned poles: 7 CATV, numerous Government and other 3rd party attachers on Gulf's poles (See Note 1)	174,987			
D) Leased distribution pole attachments: Foreign poles Company is attached to (See Note 1)	62,243			
E) Authorized attachments: Sum of all attachments to Company poles (See Note 1)	313,772			
F) Number of unauthorized attachments	0			
G) Number of apparent NESC violations involving electric infrastructure				
H) Number of apparent NESC violations involving 3rd party facilities	Note 2			

Note 1: Data has been updated based on the 2020 year-end GIS data.

Note 2: When Gulf becomes, or is made aware of NESC violations, corrective measures are taken.

E. SIX-YEAR INSPECTION CYCLE FOR TRANSMISSION STRUCTURES

1. Activity and Costs Incurred for 2020

See Section II(A)(2) above for details regarding Transmission Inspection Program. Please refer to Section II(B) for 2020 actuals and Section II(C) for 2021 estimated costs.

Gulf's Transmission Line Inspection Program is a combination of three separate programs: (1) a ground line treatment inspection which is performed by a contractor, (2) a comprehensive walking inspection which is performed both by Company line personnel and contractor line crews, and (3) aerial inspections. Gulf's transmission structure inspection program is based on two alternating twelve-year cycles which result in a structure being inspected at least every six years. As part of the Transmission Line Inspection Standards, Gulf performed two routine aerial patrols in 2020. Gulf is in the process of transitioning to FPL's Transmission Lines Inspection program.

In 2020, Gulf conducted a combination of comprehensive walking, ground line treatment, and ground patrol inspections for transmission structures. All inspections are on schedule to meet the six-year timeline. In addition, 2 aerial patrols were completed during 2020.

In 2020, Gulf spent approximately \$277,077 on a combination of comprehensive walking, ground line treatment, and ground patrol inspections for transmission structures. All inspections are on schedule to meet the six-year timeline.



2. Transmission Circuit, Substation, and Other Equipment Inspections

Gulf has 56 substations which have transmission equipment in service, and at least one inspection of each of these substations was completed during 2020. The costs associated with inspections are not tracked separately from general maintenance expenses. Gulf transmission does not inspect by circuit.



3. Transmission Structure Inspections

The state of the s	2020 Activity		2021 Costs (\$)		2022	
Transmission Structures	Goal	Actual	Budget	Actual	Goal	Budget (\$)
A) Total Number	-	15,427	-	-	_	-
B) Number Inspected	2,400	2,275	250,000	277,077	2,400	\$350,000
C) Number Passing Inspection	-	2,258	-	-	-	-
D) Number Failing Strength Test (Overloaded)	-	N/A	-	-	-	-
E) Number Failing Inspection (Other Reasons)	-	17	-	-	-	-
F) Number Corrected (Strength failure)	-	0		-	-	
G) Number Corrected (Other Reasons)	-	13	-	-	-	-
H) Total Replaced	-	6	-	-	Note 1	-

Note 1: Gulf uses current year inspections and prior years' inspections in determining the poles to be replaced in the current year. Therefore, a goal for structures to be replaced in 2020 is not applicable.



F. STORM HARDENING ACTIVITIES FOR TRANSMISSION STRUCTURES

See Section II(A)(5) above for details regarding Transmission Hardening Program. Please refer to Section II(B) for 2020 actuals and Section II(C) for 2021 estimated costs.

1. Activity and Costs Incurred for 2020

In 2020, Gulf replaced 103 wood structures with concrete or steel structures.

2. Hardening of Existing Transmission Structures (Poles)

	2020 Activity		2020 Activity (\$)		2021	
	Goal	Actual	Budget	Actual	Goal	Budget (\$)
A) Transmission Structures Hardened ⁽¹⁾	70	97	3.5M	3.63M	400	\$20M
B) Percent Transmission Structures Hardening Completed	-	138%	-	-	-	-

⁽¹⁾ Inclusive of SPP and Non-SPP work. This represents the total number of transmission poles/structures replaced not only through Gulf's SPP – Transmission Hardening Program, but also from inspection, relocations, proactive rebuilds and system expansion.

G. DISTRIBUTION SUBSTATIONS

1. Five-Year Patterns/Trends in Reliability Performance of Distribution Substations

Gulf reviews each substation-related outage and actions are taken to reduce the possibility of an outage due to a similar cause occurring in the future. The review of data for the past five years does not show any trends or patterns affecting distribution substation reliability.

2. <u>Distribution Substation Reliability Tracking</u>

Each abnormal substation related outage is reviewed. Analyses are performed and corrections are made to reduce the potential for future outages because of a similar system disturbance.

3. Distribution Substation Reliability Inspection Process

Routine inspections are performed to promote reliability in substations. Inspections include visual checks on all equipment, including breakers, regulators, transformers and battery banks. The substation is verified to ensure proper signage. The fence is checked for security and proper grounding. Security lights are checked and weed problems are noted. Any abnormal condition is scheduled for repair through the Substation Operations group.



A dissolved gas analysis is performed on transformers every year. Power factor testing is performed on transformers as needed based on type and historical test results. Breakers and other equipment are monitored through various alarm points and event data. In addition, abnormal conditions and historical data are utilized to schedule routine testing or monitoring of transformers and breakers.

4. <u>Distribution Substation Inspections During Normal Operations</u>

Gulf inspected each of its distribution substations at least once during 2020.

H. GEOGRAPHIC INFORMATION SYSTEM (GIS)

1. Activity and Costs Incurred for 2020 and 2021 Projections

Gulf completed its transition to the FPL GIS platform in 2020 as part of the NextEra Energy acquisition. Gulf no longer maintains its legacy Distribution Geographic Information System (DistGIS) or Transmission GIS database having validated the information in the new system.

2. Distribution Overhead Data Input

The current system maintains all overhead distribution equipment, including conductors, transformers, regulators, capacitors, and switches. The equipment captured also includes protective devices such as reclosers, sectionalizers, and fuses. The system will continue to be updated with any additions and changes as the associated work orders for maintenance, system improvements, and new business are completed. This information will provide Gulf with sufficient facility information to operate the system and restore the system following a major storm.

3. Distribution Underground Data Input

The current system maintains all underground distribution equipment, including conductors, transformers, regulators, and switches. The equipment also includes protective devices. The system will be updated with any additions and changes as the associated work orders for maintenance, system improvements, and new business are completed. This information will provide Gulf with sufficient facility information to operate the system and restore the system following a major storm.

I. POST STORM DATA COLLECTION AND FORENSIC ANALYSIS

1. Activity and Costs Incurred For 2020 and 2021 Projections

Distribution

Gulf used a similar forensic data collection process to that utilized by FPL for several storm seasons. In September of 2020, the process was activated as part of the Company's storm restoration process for Hurricane Sally. The data collection crews from FPL were mobilized and staged for a quick post-storm response. Data collection crews were among the first responders in the damaged area of Pensacola. Crews collected data on Storm Hardened lines, Interstate



crossings, predetermined areas and random locations. The data was collected electronically and analyzed by Gulf and FPL personnel. Gulf will continue to confirm and test the process in 2021 to ensure Gulf and FPL are ready to perform post-storm forensics, if needed.

Transmission

Gulf's transmission forensic data collection process remains in place for the 2021 storm season. Gulf will partner with FPL to have resources available for the collection of damage data following an event that impacts the transmission system. Once the data is collected for analysis, Gulf and FPL personnel will prepare the data and forensic report.

Gulf had minimal transmission system damage from Category 2 Hurricane Sally, which made landfall on September 16th, 2020, and as such did not engage the data collection process on the transmission system following the event. Physical damage to the phase conductors, shield wires and insulator systems was minimal and consistent with overloading or impacts from flying debris. Gulf had two structures damaged during the storm. One wood pole top was broken by an off right-of-way tree falling on a 46kV transmission line. The other structure failure was the collapse of a guyed wye tower caused by a dam breach causing debris to impact the base of the transmission structure following the heavy rains.

J. DIFFERENTIATING BETWEEN OVERHEAD AND UNDERGROUND SYSTEM DATA

In 2019, Gulf Power adopted FPL's Trouble Call Management System ("TCMS") software following its acquisition by FPL's parent, NextEra Energy, Inc. Reporting practices were changed at that time to be in line with FPL's reporting practices allowing for comparable reporting and use of existing reporting tools.



Five-Year Reliability Performance of Underground, Hybrid, and Overhead Systems

Data	Year	Hybrid	ОН	UG	ALL
	2016	85.23	181.86	0.00	94.80
	2017	111.58	162.16	0.00	116.13
SAIDI	2018	90.28	167.84	0.00	96.82
	2019	58.39	8.78	0.00	67.18
	2020	41.58	126.02	100.00	46.97
	2016	1.051	2.060	0.000	1.138
	2017	1.198	1.516	0.000	1.197
SAIFI	2018	1.238	1.806	0.000	1.257
	2019	0.864	0.109	0.000	0.973
	2020	0.645	1.662	1.000	0.705
	2016	82.31	88.01	0.00	83.34
	2017	96.89	98.05	0.00	97.03
CAIDI	2018	76.55	80.03	0.00	77.04
	2019	67.61	80.64	0.00	69.07
	2020	64.45	75.85	100.00	66.59
	2016	106.69	107.77	0.00	106.91
	2017	124.04	126.77	0.00	124.50
LBAR	2018	116.57	115.84	0.00	116.46
	2019	103.83	101.32	0.00	103.46
	2020	109.26	123.47	100.00	111.61

K. COORDINATION WITH LOCAL GOVERNMENTS

Gulf is committed to coordinating with local governments on major projects and storm preparedness so that customers are well informed, understand the restoration process of the electrical system, and have efficient and effective lines of communication. For all major projects, Gulf meets with governmental entities as appropriate to discuss the scope of the projects and coordinate activities involved with project implementation. Gulf also works very closely with all county Emergency Operation Centers ("EOCs") in its service area for storm preparedness and



restoration activities and actively pursues a positive and cooperative relationship with the leadership in every community served.

Gulf has been involved in several meetings and provided information to the Commission, as well as the State EOC agencies, around coordination of federal and state facilities that may be in its service area. Gulf will continue to work with all governmental agencies to prioritize and communicate outage and restoration information before, during, and following major events.

In addition, Gulf maintains year-round contact with officials to ensure cooperation in planning, open communications, and coordination of activities. Gulf has designated employees in every community whose job is to keep in regular contact with city, county, state, and business leadership.

A list of documented meetings held with city, county, state, or business leadership that were held in 2020 is in the table below. It is not an exclusive list of all communication sessions, only those with some type of documentation.

	Meeting	s with Local Government			
Entity	Date(s)	Topics	Pending Issues/ Follow- up Items		nation led to
Escambia County	1/24/20	Introductory meeting	None	Y	
Escambia County	4/28/20	CIF	None	Y	
Escambia County	7/20/20	CIF listing	None	Y	
Escambia County	7/28/20	CIF listing follow up	None	Y	
Escambia County	9/16- 19/20	EOC Hurricane Sally	None	Y	
Santa Rosa County	3/15/20	EOC personnel/COVID	None	Y	
Santa Rosa County	3/23/20	EOC personnel/COVID	None	Y	
Santa Rosa County	5/12/20	EOC staffing/COVID	None	Y	
Santa Rosa County	6/16/20	Storm shelters/CIF	None	Y	
Santa Rosa County	7/17/20	CIF listing for Santa Rosa	None	Y	
Santa Rosa County	7/22-24	CIF listing for Santa Rosa	None	Y	
Santa Rosa County	9/16- 20/20	EOC Hurricane Sally	None	Y	
Okaloosa County	5/12/20	CIF listing for Fort Walton	None	Y	



Okaloosa County	7/20/20	CIF listing for Okaloosa Co.	None	Y
Okaloosa County	7/23/20	CIF listing for Okaloosa Co.	None	Y
Walton County	6/16/20	Storm Shelters/staffing	None	Y
Walton County	7/21/20	CIF meeting	None	Y
Walton County	7/23/20	CIF meeting	None	Y
Walton County	9/16- 19/20	EOC brief Hurricane Sally	None	Y
Holmes County	5/12/20	EOC staffing	None	Y
Holmes County	6/16/20	Storm Shelters/EOC	None	Y
Holmes County	7/23/20	CIF meeting/EOC	None	Y
Washington County	5/11/20	EOC staffing	None	Y
Washington County	6/16/20	Storm shelters/EOC	None	Y
Washington County	7/21/20	CIF meeting	None	Y
Bay County	6/25/20	Introductory meeting	None	Y
Bay County	7/17/20	CIF meeting/EOC	None	Y
Jackson County	5/12/20	EOC staffing	None	Y
Jackson County	6/16/20	Storm shelters/EOC	None	Y
Jackson County	7/20/20	CIF meeting/EOC	None	Y
Calhoun County	5/12/20	EOC staffing	None	Y

1. Ongoing Programs

Gulf has several employees with local government liaison responsibilities in Northwest Florida. Regional managers are in Pensacola, Ft. Walton, and Panama City. External Affairs managers, who report to the Regional Managers, are in Milton, Crestview, and Chipley. These and other Gulf employees interact with city and county personnel on a daily/weekly basis regarding numerous issues, including emergency preparedness. Gulf employees are also actively involved in specific government/business committees that focus on emergency preparedness needs in Northwest Florida. For example, Gulf's Corporate Emergency Preparedness Specialist is a Board Member of BRACE (Be Ready Alliance for Coordinating for Emergencies). BRACE is an Escambia County organization unique to Florida, but part of a federal government directive that encourages communities to develop more effective preparedness programs for various types of disasters.



Gulf's Utility Arborist and Utility Arborist Technicians communicate routinely with members of the community, government officials, and military leaders concerning area vegetation management projects and other issues such as: (1) new customer and Gulf construction projects; (2) utility rights-of-way maintenance; (3) major initial clearing projects (i.e. road additions and resizing projects, new distribution feeders, water and sewer projects, military projects and missions, etc.); and (4) storm preparation and recovery activities. Routine communications range from office and field visits to phone and radio conversations.

In addition to numerous planning meetings with the EOCs, Gulf personnel also participated in the following hurricane activities with governmental entities in 2020:

- Hurricane Drills
- All Local and State EOC Activations
- EOC Representative Training
- Statewide Exercises

Gulf's 2020 annual storm drill was conducted during the week of June 22nd, and the most recent drill was the week of May 3, 2021.

In 2020, Gulf actively worked with all state and governmental agencies to maintain the communications standards that have historically been provided while at the same time being responsive to COVID protocols and changes in how these groups operated during the pandemic. This is evident in how Gulf maintained communication lines with the above during the Hurricane Sally preparation and restoration.

2. Storm Preparation

Gulf Power employees are assigned to the county EOCs throughout Northwest Florida. Each of these employees has received federal certification under the National Incident Management System ("NIMS") through the Federal Emergency Management Agency ("FEMA"). These EOC Representatives assist city and county agencies and officials during emergencies that warrant activation of the county EOCs. Gulf provides 24-hour coverage throughout the duration of the EOC activation and keeps the agencies and officials informed of the progress of electrical restoration efforts. All actions are based on Gulf Power's Emergency Operations Plan.

Gulf also has representation available at the State EOC to support restoration activities and communicate with state and Commission officials.

Gulf's Emergency Operations Plan includes pre-storm communications, ongoing communications, and post-storm communications supplied by the Marketing and Communications Departments. Gulf representatives are there to keep local government agencies and officials apprised of the latest restoration activities.

3. Storm Restoration

Gulf maintains an active communication link with the activated county and state EOCs for storm events. Gulf EOC representatives coordinate pre-storm activities with the EOCs to establish



emergency communication links with local and state officials, the media, and restoration crews, some of which are assigned to specific EOCs during activations.

Gulf strives to restore electric service as safely and quickly as possible. In addition, Gulf continues to storm-harden critical infrastructure, and implement stronger construction standards as outlined in its Commission-approved SPP.

L. COLLABORATIVE RESEARCH

As a Public Utility Research Center ("PURC") member, Gulf participates in the research activities for Storm Hardening as described by PURC management in Appendix C.

M. DISASTER PREPAREDNESS AND RECOVERY PLAN

Gulf Power continues to maintain a Disaster Preparedness and Recovery Plan ("Gulf's Storm Restoration Procedures Manual").

1. Activity and Costs Incurred for 2020 and 2021 Projections

Gulf continues to provide annual refresher training (instructor-led, computer based, and remote learning) in storm preparedness for various storm roles at minimal cost.

2. <u>Disaster Recovery Plan Activity</u>

Gulf's Storm Restoration Procedures Manual is reviewed annually and revised as necessary before each annual hurricane season. Storm assignments and training schedules are finalized with plans for training to be completed prior to the beginning of each hurricane season.

3. Hurricane Drill

Gulf's hurricane dry-run was held the week of June 22, 2020. The 2020 drill was a company-wide drill held in conjunction with FPL with a full activation of Gulf's Emergency Management Command Center. It was held in partnership with FPL and focused on restoration efforts during a pandemic. The dry-run involved as many employees and functions as possible to test the process and train employees in critical job functions. Both companies derived scenarios that would test the abilities to support each other if both were impacted by events. Additionally, new safety measures and protocols surrounding COVID-19 were in place and put to the test during the annual company dry run. In the past, Gulf activated one command center. For our 2020 dry-run, we tested and activated multiple command centers, allowing some personnel to work remotely, to lessen the impact of a possible contamination of key personnel. Activation of these sites included connectivity, social distancing, mandatory testing protocols, sanitizing protocols, mask mandates, etc. The dry-run also included migration to FPL's Incident Command Structure ("ISC") and restoration process, which focused on simulated restoration efforts. Additional follow-up meetings were held to discuss changes and best practices that needed to be implemented for the 2020 storm season. The dry-run was extremely successful and provided a wide range of participation and interaction between the two companies for all employees.



Gulf's 2021 dry-run was conducted the week of May 3 and was again a joint exercise with FPL focusing on a hurricane event impacting both FPL and Gulf service areas during a pandemic.

N. 2021 STORM SEASON READINESS

Storm Recovery Plan

Gulf uses the strategy described in its Storm Restoration Procedures Manual to respond to any disaster or major interruption of service to customers that may occur in Gulf's service area. This plan continues to function as a framework that allows leadership and employees to make decisions and function in an efficient manner during difficult circumstances. Gulf was extremely successful with the restoration efforts following Hurricane Sally in September 2020 amid COVID 19. Besides Hurricane Sally, Gulf experienced multiple tornados, fires, tropical events, and Hurricane Zeta. In addition to responding to numerous on system events Gulf also provided mutual assistance to other utilities impacted by severe weather in 2020. In all these cases the framework provided by the restoration plan along with previous training and exercises allowed Gulf to restore power in a safe and successful manner. The Company was awarded the Edison Electric Institute Emergency Recovery Award for restoration efforts following Hurricane Sally, as well as the Emergency Response Award for its mutual assistance efforts in 2020.

As part of its annual operations and culture of preparedness, Gulf continues to review and refine its planning and preparations for the possibility of another disaster in Florida. Plans are updated annually to build on the framework that has worked well, incorporate FPL processes, and to review areas that still require additional improvement. In these updates, Gulf strives for continuous improvement by building on experiences from recovery efforts within Northwest Florida as well as from lessons learned while assisting other utilities that have experienced major interruptions of service due to natural disasters.

Gulf's plan has been incorporated within a detailed and proprietary Storm Restoration Procedures Manual. The restoration procedures establish a plan of action to be utilized for the operation and restoration of generation, transmission, and distribution facilities during major disasters. Such disasters include hurricanes, tornadoes, ice, and flood events that could cause widespread outages to Gulf's customers and possible man-made events.

The overall objective is to restore electric service to Gulf's customers as quickly as possible, while protecting the safety of everyone involved.

The Company acquires support from a number of resources, including but not limited to, the Southeastern Electric Exchange ("SEE") Mutual Assistance Group and NextEra Energy for distribution, transmission, and logistics assistance.

In the logistics and support areas, contracts are negotiated and confirmed with vendors for services such as food, lodging, materials, transportation, fuel, and other support functions. Staging sites are secured, and if needed, agreements are negotiated and signed. NextEra's Integrated Supply Chain Department ensures that materials are on hand, along with additional materials available from material vendors, are sufficient to meet the anticipated demands of the storm season.

Appendix A

Appendix A - Gulf 2020 Project Level Detail Distribution Feeder Hardening Program

Feeder Hardening (EWL) - Distribution Program

Region	Substation	Feeder	Projected Start Year ⁽¹⁾	Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾		jected 2020 Costs ⁽³⁾
Gulf Power	Oakfield	907922	2020	2020	2020	2021	\$	1,087,000
Gulf Power	Brentwood	906678	2020	2020	2020	2021	Φ	1,007,000
Gulf Power	Avalon	905792	2020	2020	2020	2021	\$	1,325,000
Gulf Power	Bayou Marcus	905572	2020	2020	2020	2021	\$	925,000
Gulf Power	Turner	905662	2020	2021	2021	2021	\$	867,000
Gulf Power	Hathaway	908642	2020	2020	2020	2021	\$	1,790,000
Gulf Power	Redwood	908722	2020	2020	2020	2021	\$	506,000
Gulf Power	Valparaiso	909242		2019		2021	\$	_
Gulf Power	Brentwood	906662		2020		2022	\$	-
Gulf Power	Chipley	909222		2020		2021	\$	-
Gulf Power	Bay County	907992		2020		2021	\$	-
Gulf Power	Graceville	909112		2020		2021	\$	-
Gulf Power	Bonifay	909832		2020		2021	\$	-
Gulf Power	Beach Haven	906052		2020		2021	\$	_
Gulf Power	South Crestview	909692		2020		2022	\$	-
Gulf Power	Glendale Road	907912		2020		2021	\$	_
otal =			•	•	•	0	-	\$6,500,000

Distribution Automation Program

Distribution	Automation	grain					
Region	Substation	Projected Number of Sites	Installed Number of Sites	Projected Start Year ⁽¹⁾	Actual/Estimated Projected Start Year ⁽¹⁾ Completion Y		Actual/Estimated Completion Year ⁽²⁾
Gulf Power	Fort Walton	31	16	2020	2020	2020	2020
Gulf Power	Panama City	16	4	2020	2020	2020	2020
Gulf Power	Pensacola	35	40	2020	2020	2020	2020
Total =	<u> </u>	82	60	_	<u> </u>		

Notes:

- (1) Start date reflects the projected and estimated/actual year when initial project costs will begin to accrue (e.g., preliminary engineering/design, site preparations, or customer outreach, if applicable).
- (2) Completion year reflects the projected and estimated/actual date when project will be completed.
- (3) Includes all projected and actual capital costs, including cost of removal.

Appendix A - Gulf 2020 Project Level Detail Distribution Lateral Hardening Program (2021 Pilot)

Region	Substation	Feeder	Lateral	Projected Start Year ⁽¹⁾	Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾	Projected 2020 Costs ⁽³⁾	Actual 2020 Costs ⁽³⁾
N.A.	N.A.	N.A.		N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Total =								\$ -	\$ -

Notes:

- (1) Start date reflects the projected and estimated/actual year when initial project costs will begin to accrue (e.g., preliminary engineering/design, site preparations, or customer outreach, if applicable).
- (2) Completion year reflects the projected and estimated/actual date when project will be completed.
- (3) Includes all projected and actual capital costs, including cost of removal.

Appendix A - Gulf 2020 Project Level Detail Transmission Hardening Program

Substation Storm Surge / Flood Mitigation Program

Region	Substation	Substation Type	Projected Start Year ⁽¹⁾	Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾	ected 2020 Costs ⁽³⁾	ctual 2020 Costs ⁽³⁾
Gulf Power	Shalimar	Storm Hardened Control House	2020	2020	2020		\$ 300,000	\$ -
Gulf Power	Hurlburt	Storm Hardened Control House With Flood monitoring	2020		2020	2020	\$ 300,000	\$ 6,583
Gulf Power	Niceville	Storm Hardened Control House	2020	2020	2020		\$ 300,000	\$ -
Gulf Power	NAS North Terminal	Transmission Line Terminal Station Flood Monitoring	2020		2020	2020	\$ 20,000	\$ 7,882
Gulf Power	NAS South Terminal	Transmission Line Terminal Station Flood Monitoring	2020		2020	2020	\$ 20,000	\$ 3,180
Gulf Power	Smith Construction	Substation Flood Monitoring	2020		2020	2020	\$ 20,000	\$ 4,752
Gulf Power	Blountstown	Substation Flood Monitoring	2020		2020	2020	\$ 20,000	\$ 36,976
Gulf Power	Romana	Substation Flood Monitoring	2020		2020	2020	\$ 20,000	\$ 3,957
Gulf Power	Choctawhatchee North Terminal	Transmission Line Terminal Station Flood Monitoring		2020	2020	2020	\$ -	\$ 5,882
Gulf Power	Choctawhatchee North Terminal	Transmission Line Terminal Station Flood Monitoring		2020	2020	2020	\$ -	\$ 7,517
Total =						8	\$ 1,000,000	\$ 76,728

Transmission/Substation Resiliency Program

Region	Substation	Substation Type	Projected	Actual/Estimated	Projected	Actual/Estimated	Projected 2020	A	ctual 2020
Region	Cubstation	oubstation Type	Start Year ⁽¹⁾	Start Year ⁽¹⁾	Completion Year ⁽²⁾	Completion Year ⁽²⁾	Costs ⁽³⁾		Costs ⁽³⁾
Gulf Power	Valparaiso	New Distribution Substation Transformer Bank	2020		2021		\$ 75,000	\$	-
Gulf Power	South Crestview	New Distribution Substation Transformer Bank	2020		2021		\$ 75,000	\$	-
Gulf Power	Hurlburt	New Distribution Substation Transformer Bank	2020		2021		\$ 570,000	\$	60,945
Gulf Power	Shalimar	New Distribution Substation Transformer Bank		2020		2020	\$ -	\$	2,181,168
Gulf Power	Niceville	New Distribution Substation Transformer Bank		2020		2020	\$ -	\$	2,232,897
Total =			•	•		2	\$ 720,000	\$	4,475,010

Wood Structures Hardening (Replacing)

Transmission Line Name	Project	Projected Number of Wooden Structures to be Replaced	Actual/Estimated Number of Wooden Structures to be Replaced		Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾	jected 2020 Costs ⁽³⁾	ctual 2020 Costs ⁽³⁾
Caryville Transmission Line Tap	Caryville Transmission Line Tap	30	21	2020		2020	2020	\$ 1,500,000	\$ 1,090,261
Santa Rosa - Miramar #1 Transmission Line	Santa Rosa - Miramar #1 Transmission Line	40	41	2020		2020	2020	\$ 2,000,000	\$ 2,320,986
Greenwood - Long Beach	Greenwood - Long Beach	19			2020		2021	\$ -	\$ 235
Smith - Greenwood	Smith - Greenwood	17			2020		2021	\$ -	\$ 12,412
Wewa Road - Tyndall #1 (Radial)	Wewa Road - Tyndall #1 (Radial)	52			2020		2021	\$ -	\$ 81,575
Valparaiso - Turner	Valparaiso - Turner	88			2020		2021	\$ -	\$ 173,617
Sunny Hills Tap	Sunny Hills Tap	5			2020		2021	\$ -	\$ 25,555
Total =		70	62					\$ 3,500,000	\$ 3,704,640

Note:

- (1) Start date reflects the projected and estimated/actual year when initial project costs will begin to accrue (e.g., preliminary engineering/design, site preparations, or customer outreach, if applicable).
- (2) Completion year reflects the projected and estimated/actual date when project will be completed.
- (3) Includes all projected and actual capital costs, including cost of removal.

Appendix A - Gulf 2020 Project Level Detail Program Estimated O&M

2020 SPP Programs	Actual Costs (\$ in millions)
Distribution Inspection Program	\$ 0.5
Transmission Inspection Program	\$ 0.3
Distribution Feeder Hardening Program	\$ 0.3
Distribution Lateral Hardening Program	\$ -
Transmission Hardening Program	\$ -
Vegetation Management – Distribution Program	\$ 4.8
Vegetation Management – Transmission Program	\$ 2.1

Appendix B

Appendix B - Gulf 2021 Project Level Detail Distribution Feeder Hardening Program:

Feeder Hardening (EWL) - Distribution Program

Region	Substation	Feeder	Projected Start Year ⁽¹⁾	Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾	Projected 2021 Costs ⁽³⁾
Gulf Power	Valparaiso	909242		2019		2021	
Gulf Power	Oakfield	907922	2020	2020	2020	2021	
Gulf Power	Brentwood	906678	2020	2020	2020	2021	
Gulf Power	Avalon	905792	2020	2020	2020	2021	
Gulf Power	Bayou Marcus	905572	2020	2020	2020	2021	
Gulf Power	Hathaway	908642	2020	2020	2020	2021	
Gulf Power	Redwood	908722	2020	2020	2020	2021	
Gulf Power	Glendale Road	907902	2021	2021	2021	2021	\$ 1,082,000
Gulf Power	Glendale Road	907912	2021	2021	2021	2021	\$ 1,082,000
Gulf Power	South Crestview	909682	2021	2021	2021	2022	\$ 759,000
Gulf Power	South Crestview	909692	2021	2021	2021	2022	\$ 759,000
Gulf Power	Turner	905662	2020	2021	2021	2021	\$ 2,139,000
Gulf Power	Valparaiso	909252	2021	2021	2021	2021	\$ 1,074,000
Gulf Power	Sullivan Street	909622	2021	2021	2021	2021	\$ 1,621,000
Gulf Power	Bonifay	909832	2021	2021	2021	2021	\$ 2,070,000
Gulf Power	Chipley	909222	2021	2021	2021	2021	\$ 449,000
Gulf Power	Graceville	909112	2021	2021	2021	2021	\$ 435,000
Gulf Power	Graceville	909122	2021	2021	2021	2021	\$ 435,000
Gulf Power	Vernon	909522	2021		2021	2022	\$ 923,000
Gulf Power	Bay County	907992		2021		2021	
Gulf Power	Beach Haven	906052	2021	2021	2021	2021	\$ 750,000
Gulf Power	Brentwood	906662	2021	2021	2021	2022	\$ 1,842,000
Gulf Power	Crooked Creek	906212	2021	2021	2021	2021	\$ 1,541,000
Gulf Power	Jay Road	907272	2021	2021	2021	2021	\$ 873,000
Gulf Power	Jay Road	907282	2021	2021	2021	2021	\$ 960,000
Gulf Power	Oakfield	907922	2021	2021	2021	2021	\$ 798,000
Gulf Power	Long Beach	908522		2021		2022	
Gulf Power	Pace	907012	1	2021		2022	1
Gulf Power	Valparaiso	909232	1	2021		2022	1

Region	Substation	Feeder	Projected Start Year ⁽¹⁾	Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾	Projected 2021 Costs ⁽³⁾
Gulf Power	Jay Road	907252		2021		2022	
Gulf Power	Miramar Beach	908872		2021		2022	
Gulf Power	Northside	908852		2021		2022	
Gulf Power	Destin	909132		2021		2022	
Gulf Power	Shipyard	908932		2021		2022	
Gulf Power	Gulf Breeze	907462		2021		2022	
Gulf Power	East Bay	905632	2021	2021	2022	2022	\$ 6,808,000
Gulf Power	Fairfield	907772		2021		2022	
Gulf Power	Vernon	909522		2021		2022	
Gulf Power	Eastgate	907652		2021		2022	
Gulf Power	Redwood	908732		2021		2022	
Gulf Power	Ocean City	909052		2021		2022	
Gulf Power	Greenwood	908482		2021		2022	
Gulf Power	Scenic Hills	907822		2021		2022	
Gulf Power	Honeysuckle	907872		2021		2022	
Gulf Power	Turner	905682		2021		2022	
Total					18	21	\$ 26,400,000

Distribution Automation

Region	Substation	Number of Sites	Projected Start Year ⁽¹⁾	Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾	Projecto	ed 2021 Costs ⁽³⁾
Gulf Power	Fort Walton	45	2021	2021	2021	2021		
Gulf Power	Panama City	18	2021	2021	2021	2021	•	9,500,000
Gulf Power	Pensacola	37	2021	2021	2021	2021	Φ	9,500,000
Gulf Power	To be Determined	37	2021	2021	2021	2021		
Total						4	\$	9,500,000

Notes:

- (1) Start date reflects estimated/actual year when initial project costs will begin to accrue (e.g., preliminary engineering/design, site preparations, or customer outreach, if applicable).
- (2) Completion year reflects the estimated/actual date when project will be completed.
- (3) Amounts reflect SPP totals (base and clause amounts).

Appendix B - Gulf 2021 Project Level Detail

Distribution Hardening - Lateral Undergrounding Program (Pilot)

Region	Substation	Feeder	Lateral	Projected Start Year ⁽¹⁾	Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾	Projected 2021 Costs ⁽³⁾	Actual/Estimated 2021 Costs ⁽³⁾
Gulf Power	Bayou Marcus	7722		2021	2021	2021	2021	\$ 750,000	\$ 750,000
Gulf Power	Pace	7292		2021	2021	2021	2021	\$ 750,000	\$ 750,000
Gulf Power	Jay Road	7262			2021		2021		
Gulf Power	Jay Road	7272			2021		2021		
Gulf Power	Fairfiled	7762		2021	2021	2021	2021	\$ 3,500,000	\$ 3,500,000
Gulf Power	Brentwood	6692		2021	2021	2021	2021	\$ 3,500,000	\$ 3,500,000
Gulf Power	TBD Substation 1	TBD Feeder 1			2021	1	2021	1	
Gulf Power	TBD Substation 2	TBD Feeder 2			2021	1	2021	1	
Total							8	\$ 5,000,000	\$ 5,000,000

Notes:

- (1) Start date reflects estimated/actual year when initial project costs will begin to accrue (e.g., preliminary engineering/design, site preparations, or customer outreach, if applicable).
- (2) Completion year reflects the estimated/actual date when project will be completed.
- (3) Amounts reflect SPP totals (base and clause amounts).

Appendix B - Gulf 2021 Project Level Detail Transmission Hardening Program:

Substation Flood Monitoring and Hardening Program

Transmssion Line/Substation Name	Project	Projected Start Year ⁽¹⁾	Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾	Projected 2021 Costs ⁽³⁾	Actual/Esti Cos	
Phillips Inlet	New Distribution Substation Control House	2021	2021	2021	2021	\$ 500,000	\$	500,000
Hathaway	New Distribution Substation Control House	2021	2021	2021	2021	\$ 500,000	\$	500,000
Total					2	\$ 1,000,000	\$	1,000,000

Transmission/Substation Resiliency Program

Transmission Line/Substation Name	Project	Projected Start Year ⁽¹⁾	Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾	Р	rojected 2021 Costs ⁽³⁾	Actual/Estimated 2021 Costs ⁽³⁾
Valpariso	New Distribution Substation Transformer Bank	2021	2021	2021	2021	\$	2,000,000	\$ 1,900,000
South Crestview	New Distribution Substation Transformer Bank	2021	2021	2021	2021	\$	2,000,000	\$ 1,900,000
Hurlburt	New Distribution Substation Transformer Bank	2020	2020	2021	2021	\$	600,000	\$ 2,400,000
Phillips Inlet	New Distribution Substation Transformer Bank	2021	2021	2021	2021	\$	1,345,000	\$ 1,245,000
Blackwater	New Distribution Substation Transformer Bank	2020	2020	2021	2021	\$	900,000	\$ 1,230,000
Powell Lake	New Distribution Substation Transformer Bank	2021	2021	2021	2021	\$	900,000	\$ 900,000
Avalon	New Distribution Substation Transformer Bank	2021	2021	2021	2021	\$	1,600,000	\$ 1,450,000
Hathaway	Breakers for New Transmission Line	2021	2021	2021	2021	\$	865,000	\$ 2,215,000
Hathaway Tap	New Transmission Line	2021	2021	2021	2021	\$	3,000,000	\$ 2,800,000
Cordova	New Distribution Substation Transformer Bank	2021	2021	2021	2022	\$	2,325,000	\$ -
Innerarity	New Distribution Substation Transformer Bank	2021	2021	2021	2021	\$	2,455,000	\$ 2,355,000
Miramar	New Distribution Substation Transformer Bank	2021	2021	2021	2021	\$	2,455,000	\$ 2,355,000
Honeysuckle	New Distribution Substation Transformer Bank	2021	2021	2021	2021	\$	2,440,000	\$ 2,240,000
Destin & Henderson Park	New Transmission Line		2021		2022			\$ 374,000
Chipley	New Transmission Line		2021		2022			\$ 452,000
Graceville	New Transmission Line	2021	2021	2022	2022	\$	1,615,000	\$ 296,000
Vernon	New Transmission Line	7	2021		2022			\$ 211,000
Milligan	New Transmission Line	7	2021		2022			\$ 177,000
Totals	•	•	•		12	\$	24,500,000	\$ 24,500,000

Transmission Wood Structure Replacement Program

Transmission Line/Substation Name	Project	Projected Number of Wooden Structures to be Replaced	Actual/Estimated Number of Wooden Structures to be Replaced	Projected Start Year ⁽¹⁾	Actual/Estimated Start Year ⁽¹⁾	Projected Completion Year ⁽²⁾	Actual/Estimated Completion Year ⁽²⁾	Projected 2021 Costs ⁽³⁾	Actual/Estimated 2021 Costs ⁽³⁾
Bayou Chico - Devilliers	Bayou Chico - Devilliers	36	36	2021	2021	2021	2021	\$ 1,764,000	\$ 1,749,000
Caryville Tap	Caryville Tap	40	73	2021	2021	2021	2021	\$ 2,038,400	\$ 3,789,000
Crist - Crestview #1	Crist - Crestview #1	90	0	2021		2021		\$ 4,900,000	\$ -
Greenwood - Long Beach	Greenwood - Long Beach	19	19	2021	2021	2021	2021	\$ 931,000	\$ 923,000
Holmes Creek - South Crestview	Holmes Creek - South Crestview	0	57		2021		2021		\$ 2,769,000
Santa Rosa - Miramar #1	Santa Rosa - Miramar #1	30	30	2021	2021	2021	2021	\$ 1,470,000	\$ 1,458,000

Smith - Greenwood	Smith - Greenwood	17	17	2021	2021	2021	2021	\$ 833,000	\$ 826
Valparaiso - Turner	Valparaiso - Turner	88	88	2021	2021	2021	2021	\$ 4,312,000	\$ 4,760
Wewa Road - Tyndall #1 (Radial)	Wewa Road - Tyndall #1 (Radial)	52	52	2021	2021	2021	2021	\$ 2,548,000	\$ 2,526
Gulf Power	Engineering			2021	2021	2021	2021	\$ 803,600	\$ 800
Total			372					\$ 19,600,000	\$ 19,600

Notes:

- (1) Start date reflects estimated/actual year when initial project costs will begin to accrue (e.g., preliminary engineering/design, site preparations, or customer outreach, if applicable).
- (2) Completion year reflects the estimated/actual date when project will be completed.
- (3) Amounts reflect SPP totals (base and clause amounts).

Appendix B - Gulf 2021 Project Level Detail Program Estimated O&M

2021 SPP Programs	Estimated Costs (\$ in millions)
Pole Inspections – Distribution Program	\$ 0.1
Feeder and Infrared Patrol - Distribution Program	\$ 0.1
Structures/Other Equipment Inspections – Transmission Program	\$ 0.4
Feeder Hardening (EWL) – Distribution Program	\$ -
Lateral Hardening (Undergrounding) – Distribution Program	\$ 0.2
Wood Structures Hardening (Replacing) – Transmission Program	\$ 0.4
Vegetation Management – Distribution Program	\$ 4.7
Vegetation Management – Transmission Program	\$ 2.9
Substation Storm Surge/Flood Mitigation Program	\$ -

Appendix C

Report on Collaborative Research for Hurricane Hardening

Provided by

The Public Utility Research Center University of Florida

To the

Utility Sponsor Steering Committee

Final Report dated February 2021

I. Introduction

The Florida Public Service Commission (FPSC) issued Order No. PSC-06-00351-PAA-EI on April 25, 2006 (Order 06-0351) directing each investor-owned electric utility (IOU) to establish a plan that increases collaborative research to further the development of storm resilient electric utility infrastructure and technologies that reduce storm restoration costs and outages to customers. This order directed IOUs to solicit participation from municipal electric utilities and rural electric cooperatives in addition to available educational and research organizations. As a means of accomplishing this task, the IOUs joined with the municipal electric utilities and rural electric cooperatives in the state (collectively referred to as the Research Collaboration Partners) to form a Steering Committee of representatives from each utility and entered into a Memorandum of Understanding (MOU) with the University of Florida's Public Utility Research Center (PURC). In 2018 the Research Collaboration MOU was renewed for an initial term of two years, effective January 1, 2019, and will be automatically extended for successive two-year terms.

PURC performs the administration function for research collaboration, including financial management, logistics, production and distribution of documents, and preparation of reports. PURC also coordinates and performs research as agreed upon with the Steering Committee by facilitating the exchange of information from the Research Collaboration Partners with individuals conducting research projects and facilitating the progress of each research project.. The collaborative research has focused on undergrounding, vegetation management, hurricane-wind speeds at granular levels, and improved materials for distribution facilities.

This report provides an update on the activities of the Steering Committee since the previous report dated February 2020.

II. Undergrounding

The collaborative research on undergrounding has been focused on understanding the existing research on the economics and effects of hardening strategies, including undergrounding, so that informed decisions can be made about undergrounding policies and specific undergrounding projects.

The collaborative has refined the computer model developed by Quanta Technologies and there has been a collective effort to learn more about the function and functionality of the computer code.

In addition, PURC has worked with doctoral and master's candidates in the University of Florida Department of Civil and Coastal Engineering to assess some of the inter-relationships between wind speed and other environmental factors on utility equipment damage. PURC has also been contacted by engineering researchers at the University of Wisconsin and North Carolina State University with an interest in the model, though no additional relationships have been established. In addition to universities, PURC has been in contact with stakeholders in Puerto Rico in light of PURC Director Mark Jamison's appointment to the Southern States Energy Board Blue Ribbon Task Force on the future of Puerto Rico's energy system. The stakeholders, government and task force are concerned with strategies to make Puerto Rico's system more resilient and are interested in the role that the model could play. PURC has been contacted by California stakeholders interested in applying the principles of the model to the mitigation of the interactions between the electricity grid and the surrounding vegetation, potentially reducing the risk of wildfires. Finally, PURC has been contacted by stakeholders in New York with interest to model the impact of storm hardening to winter storms. Despite the outside interest, there are no concrete plans to expand the scope of the model at this time. Every researcher that contacts PURC cites the model as the only non-proprietary model of its kind.

III. Wind Data Collection

The Project Sponsors entered into a wind monitoring agreement with WeatherFlow, Inc., in 2007. Under the agreement, Florida Sponsors agreed to provide WeatherFlow with access to their properties and to allow WeatherFlow to install, maintain and operate portions of their wind monitoring network facilities on utility-owned properties under certain conditions in exchange for access to wind monitoring data generated by WeatherFlow's wind monitoring network in Florida. WeatherFlow's Florida wind monitoring network includes 50 permanent wind monitoring stations around the coast of Florida, including one or more stations located on utility-owned property. The wind monitoring agreement expired in early 2012; however, it was renewed in April 2017 and will renew automatically annually on the effective date for an additional one year period, unless terminated by the parties to the agreement.

IV. Public Outreach

We have previously discussed the impact of increasingly severe storms and the increased population and utility infrastructure along the coast on greater interest in storm preparedness. PURC researchers continue to discuss the collaborative effort in Florida with the engineering departments of the state regulators in New York, New Jersey, and Pennsylvania, and regulators in Jamaica, Grenada, Curacao, St. Lucia, the Bahamas, Samoa, and the Philippines. In 2019, stakeholders in Puerto Rico and California also showed interest in the collaborative's efforts. While all of the regulators and policymakers showed great interest in the genesis of the collaborative effort, and the results of that effort, they have not, at this point, shown further interest in participating in the research effort. In 2020, there continued to be considerable interest in Florida's hardening efforts from the popular media in California, in light of continued wildfire problems in the state and their aftermath. Interest in Florida's storm hardening efforts continued in the popular media with PURC Director of Energy Studies Ted Kury featured in segments on NY1 in New York City and The Weather Channel, where he discussed Florida's Hurricane Season Preparation Workshops and collaborative efforts.

VI. Conclusion

In response to the FPSC's Order 06-0351, IOUs, municipal electric utilities, and rural electric cooperatives joined together and retained PURC to coordinate research on electric infrastructure hardening. The steering committee has taken steps to extend the research collaboration MOU so that the industry will be in a position to focus its research efforts on undergrounding research, granular wind research and vegetation management when significant storm activity affects the state.

Appendix D

APPENDIX D

Gulf Power Company Annual Wood Pole Inspection Report (Reporting Year 2020)

а	b	С	d	е	f	g	h	i	j	k	I	m
Total # of Wooden Poles in the Company Inventory	# of Pole Inspections Planned this Annual Inspection	# of Poles Inspected this Annual Inspection	# of Poles Failing Inspection this Annual Inspection	Pole Failure Rate (%) this Annual Inspection	# of Poles Designated for Replacement this Annual Inspection	Total # of Poles Replaced this Annual Inspection	# of Poles Requiring Minor Follow-up this Annual Inspection	# of Poles Overloaded this Annual Inspection	Method(s) V = Visual E = Excavation P = Prod S = Sound B = Bore R = Resistograph	# of Pole Inspections Planned for Next Annual Inspection Cycle	Total # of Poles Inspected (Cumulative) in the 8-Year Cycle To Date	% of Poles Inspected (Cumulative) in the 8-Year Cycle To Date
210,227 (Note 3)	26,000	25,542 (Note 1)	580	2.27%	494	644 (Note 2)	86		V, E, S, B	26,000	183,746	87%
	0, provide anation	Note 1: Gu	lf started the	seventh ye	ear of the sec	ond eight-ye	ear cycle in 20)20.				
	0, provide anation	Note 2: Po	le inspection	s were pro	cessed in 202	20 and remai	ning repairs h	nave been so	cheduled for 2021			
		Note 3: Thi	s total repre	sents wood	en poles only	<i>1</i> .						
Description of selection criteria for inspections Gulf is systematically moving across its system. Poles are selected for inspection on a geographical basis.												