Susan D. Ritenour
Secretary and Treasurer
and Regulatory Manager

One Energy Place
Pensacola, Florida 32520-0781

Tel 850.444.6231
Fax 850.444.6026
SDRITENO@southernco.com

ORIGINAL

GULF POWER
A SOUTHERN COMPANY

RECEIVED-FPSC
07 AUG 15 AM 9:14
COMMISSION
CLERK

August 14, 2007

Ms. Ann Cole
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0850

Dear Ms. Cole:

RE: Docket No. 070299-EI
Order No. PSC-07-0043A-FOF-EU

Attached are an original and fifteen copies of Gulf Power Company's amended Storm Hardening Plan dated August 14, 2007, to satisfy the requirements of Order No. PSC-07-0043A-FOF-EU. The amended Plan replaces the original Storm Hardening Plan that was filed on May 7, 2007. A summary of the major changes in the amended Plan include the following:

1. Proposal to transition from Grade C construction standards to Grade B construction standards for all new and major planned overhead distribution projects. This change is discussed in Sections 4.0, 5.0 and 9.0 of the amended Plan.
2. Deletion of detailed third-party attacher specification plates not directly impacting storm hardening initiatives. This change deletes Appendix 7 of the original Plan.
3. Incorporated revised cost and benefit data. This data is located in Appendix 7 of the amended Plan.

CMP 5
COM ____
CTR ____
ECR ____
GCL 3
OPC ____
RCA 1
SCR ____
SGA ____
SEC ____
OTH ____

Please give me a call if you have any questions.

Sincerely,

Susan D. Ritenour
bah

lw

cc w/enc: Beggs & Lane
Jefffrey A. Stone, Esq.

07 AUG 15 AM 9:01
DISTRIBUTION CENTER

DOCUMENT NUMBER-DATE
07160 AUG 15 07
FPSC-COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Review of 2007 Electric Infrastructure Storm Hardening Plan filed pursuant to Rule 25-6.0342, Florida Administrative Code, submitted by Gulf Power Company

Docket No.: **070299-EI**
Date Filed: August 14, 2007

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing was furnished by regular U. S. mail, all this 14TH day of August, 2007, on the following:

Embarq Florida, Inc.
Susan S. Masterton
Mailstop: FLTLHO0102
1313 Blair Stone Rd.
Tallahassee, FL 32301

J.Meza/E.Edenfield/J. Kay
c/o Ms. Nancy H. Sims
150 S. Monroe Street, Ste. 400
Tallahassee FL 32301-1556

City of Panama City Beach &
PCB Comm. Redevelop. Agcy.
Richard Jackson
110 South Arnold Road
Panama City Beach FL 32413

North American Wood Pole Council
Dennis Hayward
7017 NE Highway 99, Suite 108
Vancouver WA 98665

Florida Cable Telecommunications Association, Inc.
246 E. 6th Avenue, Suite 100
Tallahassee FL 32303

Douglas J. Sale
Harrison Law Firm
Post Office Drawer 1579
Panama City FL 32402-1579

Robert Scheffel Wright
John T. LaVia, III
Young van Assenderp, P.A.
225 S. Adams Street, Ste. 200
Tallahassee FL 32301

Thomas G. Bradford
Deputy Town Mgr
360 South County Road
Palm Beach FL 33480

Beth Keating
Akerman Senterfitt
105 East College Avenue
Tallahassee FL 32301

Hon. Charles Falcone, Mayor
c/o Donald R. Hubbs, Asst. Town Manager
Post Office Box 7
Hobe Sound FL 33475

Lorena A Holley, Senior Attorney
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0850

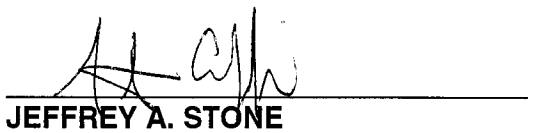
Maria T. Browne
Davis, Wright, Tremaine
1919 Pennsylvania Ave. NW
Suite 200
Washington DC 20006

Keino Young
Florida Public Service Com.
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0850

Colentha Wilson
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0850

H. M. Rollins, P.E.
H. M. Rollins Company, Inc.
P. O. Box 3471
Gulfport MS 39505

Dulaney L. O'Roark III
General Counsel-SE Region
Verizon
Six Concourse Pkwy, Ste. 800
Atlanta GA 30328



JEFFREY A. STONE
Florida Bar No. 325953
RUSSELL A. BADDERS
Florida Bar No. 007455
STEVEN R. GRIFFIN
Florida Bar No. 0627569
BEGGS & LANE
P. O. Box 12950
Pensacola FL 32591-2950
(850) 432-2451
Attorneys for Gulf Power Company

ORIGINAL

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NOS. 060172-EU & 060173-EU
Order No. PSC-07-0043A-FOF-EU

GULF POWER COMPANY

AMENDED
STORM HARDENING PLAN
2007 - 2009

August 10, 2007

GULF POWER
A SOUTHERN COMPANY

ORIGINAL

CONTENTS

1.0 Overview 5

2.0 Ten-Part Storm Preparedness Plan Initiatives 6

2.1 Vegetation Management 6
2.2 Joint-Use Pole Attachment Audits 10
2.3 Inspection Cycle of Transmission Structures 12
2.4 Storm Hardening Activities for Transmission Structures 13
2.5 Geographic Information System (GIS) 13
2.6 Post Storm Data Collection and Forensic Analysis 14
2.7 Outage Data differentiating between Overhead and Underground Systems 15
2.8 Coordination with Local Governments 15
2.8.1 Ongoing Programs
2.8.2 Proposed Program Survey
2.9 Collaborative Research 17
2.10 Disaster Preparedness and Recovery Plan 18
2.10.1 Gulf's Storm Recovery Plan
2.10.2 Gulf's Storm Recovery Preparations
2.10.3 Gulf Power Company Emergency Management Center (CEMC)

3.0 Wood Pole Inspection Plan 21

4.0 Compliance with National Electric Safety Code (NESC) in regards to Storm Hardening 23
4.1 Distribution 23
4.2 Transmission 23
4.3 Substation 23

5.0 Adoption of Extreme Wind Loading standards specified by Figure 250-2(d) of the 2007 edition of the NESC for Distribution Facilities 23

6.0 Mitigation of Damage to Underground Facilities and Supporting Overhead Transmission and Distribution Facilities due to Flooding and Storm Surges 24
6.1 Distribution 24
6.2 Transmission 25

7.0 Placement of New and Replacement Distribution Facilities so as to Facilitate Safe and Efficient Access for Installation and Maintenance 25

CONTENTS

8.0 Other Key Elements 25
8.1 Feeder Patrols 25
8.2 Infrared Patrols 25
8.3 Wind Monitors 25

9.0 Storm Plan Deployment Strategy for Distribution, Transmission and Substation 26
9.1 Description of the facilities affected, including technical design specifications, construction standards, and construction methodologies employed 26
9.1.1 Distribution
9.1.2 Transmission
9.1.3 Substation
9.2 Communities and areas affected and critical infrastructure as illustrated by Gulf Power Company Service Area/DistGIS maps 27
9.2.1 Distribution
9.2.2 Transmission

10.0 Gulf Power Company's Estimate of Incremental Costs and Benefits 28

11.0 Impact to Collocation Facilities 28
11.1 Distribution 28
11.2 Expansion, Rebuild, or Relocation of Distribution Facilities 29

12.0 Third-Party Attachers' Estimate of Costs and Benefits 29
12.1 Seeking Input from Attachers 29
12.2 Input Received from BellSouth/AT&T 31
12.2.1 Estimated AT&T Costs
12.2.2 Estimated AT&T Benefits
12.2.3 Other AT&T Comments
12.3 Input Received from FCTA 32
12.3.1 Estimated FCTA Costs
12.3.2 Estimated FCTA Benefits
12.3.3 Other FCTA Comments
12.4 Input Received from Embarq 33
12.4.1 Estimated Embarq Costs
12.4.2 Estimated Embarq Benefits

APPENDICES

Appendix 1 Map of Northwest Florida with Extreme Wind Loading Standards

Appendix 2 Proposed Overlashing Policy

Appendix 3 Attachment Standards and Procedures Outline

Appendix 4 Attachment Permit and Overlashing Notification Procedure

Appendix 5 Overhead Storm Hardening Specifications

Appendix 6 Underground Storm Hardening Specifications

Appendix 7 Estimated Gulf Power Costs and Benefits Summary

1.0 Overview

Gulf Power Company offers the following Storm Hardening Plan in response to the Commission's request for each investor-owned electric utility to file plans and estimated implementation costs and benefits for storm hardening as set forth in FPSC Order No. PSC-07-0043A-FOF-EU in Docket Nos. 060172-EU and 060173-EU. This proposed Storm Hardening Plan, consisting of 12 sections and 7 appendices, is intended to address the rule requirements set forth in the Order.

Gulf Power views this plan as a starting point of an ongoing process to identify ways to minimize future storm damages and customer outages. Gulf plans to build on what works well and to improve in areas that do not work as well as intended. Gulf is committed to continuous improvement by building on its experiences and is supportive of research to address the potential benefits of initiatives, such as hardening transmission and distribution facilities, which could lead to less-frequent outages and improved continuity of service during major storm-related events.

Gulf Power's Storm Hardening Plan incorporates the 10-Part Storm Preparedness Plan initiatives in Section 2.0 that were originally filed and approved under Docket No. 060198-EI. These initiatives have been updated to reflect approved FPSC changes and the latest company information. In Section 3.0, Gulf describes its wood pole inspection process approved by the FPSC to meet storm hardening requirements. Performance data for Sections 2.0 and 3.0 initiatives are currently filed as a part of the annual March 1 Distribution Reliability Report. These initiatives comprise the foundation of Gulf's Storm Hardening Plan.

In Sections 4.0 through 9.0, Gulf addresses each of the new requirements contained in the storm hardening rules 25-6.0341 and 25-06.0342. Gulf will exceed National Electric Safety Code by proposing a transition to Grade B construction for all new construction, major projects and maintenance work.

Section 5.0 addresses the adoption of extreme wind loading for distribution facilities. Gulf's proposed plan contains projects totaling $1.6 million for three years. Since Gulf lacks the data to support the benefits associated with these hardening initiatives, it was decided to focus on critical infrastructure facilities and major thoroughfares. As storm forensic data is gathered to help determine the benefits, Gulf will review its plan to address new construction, major planned work, including expansion, rebuilding, or relocation of existing facilities.

Section 10.0 summarizes Gulf's incremental cost estimates and benefits contained in the plan. The details are provided in Appendix 7.

Sections 11.0 and 12.0 address storm hardening items concerning joint-use and Third-Party Attachers contained in the rules.

In summary, Gulf Power Company continues to maintain that although the items contained in this plan will certainly result in some mitigation of major storm damage, it will take years to determine their true effect and resulting benefits.

In respect to overhead versus underground construction, Gulf Power Company's position does not favor one over the other as long as Gulf is able to recover associated costs. As data continues to be gathered and research progresses, it will enable Gulf to determine the best approach to storm hardening.

Gulf recognizes the need to address the concerns expressed by both its customers and the FPSC to find ways to storm harden its system. At the same time, Gulf is obligated to balance storm hardening with the need to maintain reasonable costs and still achieve the expected results.

2.0 Ten-Part Storm Preparedness Plan Initiatives

2.1 Vegetation Management Plan

In accordance with FPSC Order No. PSC 06-0351-PAA-EI, Gulf Power assessed the feasibility of a three-year vegetation management cycle and proposed an alternative approach to hardening the distribution systems against future storm caused outages. This proposal was subsequently approved by the Commission.

Gulf Power is incorporating additional enhancements to its reliability-based vegetation management program to improve the program's performance in relation to hardening the distribution system against future storms while continuing to insure day-to-day reliability of the system. These program enhancements enable Gulf Power to establish a cyclical approach to segments of its vegetation management program while retaining the flexibility necessary to target resources on the areas where the greatest cost benefit will be recognized.

Gulf's Vegetation Management program consists of the following items:

- A three year trim cycle on all main line feeders
- An annual inspection and corrective action program for main line feeders not treated by cyclical or other work types to ensure preparedness for storm season

- A program for removing hazard trees located outside the normally maintained pruning zone with heavy emphasis placed on main line feeders
- Increased storm hardening of new distribution lines by modifying initial vegetation clearing practices during construction
- Local coordination with code enforcement officials where customer-owned trees threaten Gulf's facilities but the customer refuses to assist in remediation of the problem
- Forensic forestry following storms
- Public education
- Lateral distribution lines managed on a reliability-based management program to achieve a cycle of six years.

While Gulf is in the first year of program implementation, this program will achieve an effective cycle of less than three years and will expand the scope of Gulf's past vegetation management activities by addressing trees located outside the normally maintained pruning zone which pose a threat to the distribution system under storm conditions.

Vegetation on main line feeders will be managed on a three year cycle. Each year, one third of the main line feeders will be systematically pruned, while the remaining two-thirds are either inspected with follow-up pruning to correct deficiencies or inspected and worked for hazard tree removal. This will focus program resources on the areas where tree-caused outages have the greatest impact on Gulf's customers.

Lateral distribution lines will be managed through the use of reliability-based vegetation management. Circuits will be categorized based on tree-caused outages and customer density. Field inspections will determine the amount and type of vegetation management needed to improve reliability. This program will maintain the flexibility to allow work on heavily forested areas that are experiencing reliability issues more frequently than sparsely forested areas where reliability is acceptable.

Laterals that do not present themselves as problem areas in the reliability statistics will be inspected a minimum of once every six years to ensure no unknown hazardous vegetative conditions exist. This provides a safety net by insuring that every lateral is either pruned or inspected with follow-up corrective action a minimum of once every six years.

Gulf is also incorporating an education component into its proposed program. Educational material on planting trees to avoid power outages will be developed and made available to our customers. Gulf's arborists

are actively working with the municipalities we serve to educate public officials on the need for hazard tree removal and overall management of street trees with a goal of reducing storm damage to power lines and other public infrastructure.

In addition to its normal maintenance of existing lines, Gulf is implementing a hazard tree program to address trees located outside the normally maintained and established pruning zone. As noted in earlier filings, most of Gulf's vegetation-caused storm outages result from right-of-way trees falling into its facilities. Gulf will work in cooperation with local municipalities and customers to facilitate the removal of the trees or large overhanging limbs to insure they no longer present a threat to Gulf's facilities. Since it is impractical to remove all trees that have the potential to fall into Gulf's lines, trees will be prioritized based on the level of threat they impose and focus will be on the highest threat first. Gulf will prioritize its distribution feeders based on customer density, forest type, and tree-caused outage data. Initially, trees that pose an imminent threat to high priority circuits will be addressed. Heavy emphasis will be placed on main line feeder sections, but the program may also treat high priority laterals feeding critical infrastructure, such as sewage lift stations.

A large majority of Gulf's distribution lines are on franchise roadside easements, and hazard trees are normally on private property where Gulf does not have pruning rights. In those cases where a tree presents an imminent threat to facilities but the owner refuses to allow corrective action, Gulf will work cooperatively with local code enforcement officials to insure every effort is made to remediate the threat.

Gulf is also modifying its initial clearing of right-of-way for new overhead construction. In the past, Gulf has focused its clearing activities to the franchise-granted portion of the easement. Gulf is now incorporating the removal of hazard trees outside the normally established and maintained right-of-way when initially clearing for new lines. This will ensure the hardening of all new lines from the day they are built. This activity will impact between 20 and 30 miles of new overhead line each year.

With regard to cost and storm outage avoidance, it is estimated this program will reduce storm Customer Minutes of Interruption (CMI) by at least 4,000,000 CMI per storm event. Storm outage avoidance was calculated using the following assumptions and 2005 data:

Number of distribution feeders on system	277
Total Gulf Customers	408,641
Average Customers per feeder	1,475
Average time to remove failed tree	60
Average cost per hazard tree removal	$300
Trees removed per year	5,000
Assume 1% of removals are avoided outages	50
Avoided CMI @ 1% = 50*60*1,475	4,425,000
Assume 10% avoided outage rate	500
Avoided CMI @ 10% = 500*60*1,475	44,250,000

Every attempt has been made to show a very conservative estimate of avoided outage time and to show the incremental improvement in outage reduction. CMI was used instead of Customer Interruptions (CI) for storm-related outage reduction. Under storm conditions, a feeder may have multiple trees down, so an avoided failure may not prevent an outage from occurring somewhere else on the feeder. However, by reducing the number of failed trees that require removal from Gulf's lines, CMI will be significantly improved.

The removal of hazard trees will have a cumulative positive effect on outage avoidance in subsequent years. Trees removed during year one will continue to represent an avoided outage in year five of the program whereas trees that are pruned on a cyclical basis will grow back and once again represent a potential outage. While the program may have less impact in its early stages, the positive impacts will be significant in future years as the number of hazard tree removals continues to increase.

Avoidance Rate	Year 1 Avoided CMI	Year 2 Avoided CMI	Year 3 Avoided CMI	Year 4 Avoided CMI	Year 5 Avoided CMI
1%	4,425,000	8,850,000	13,275,000	17,700,000	22,125,000
10%	44,250,000	88,500,000	132,750,000	177,000,000	221,250,000

Considered in the context of Hurricanes Ivan and Dennis, this would have resulted in a 20% reduction in CMI for Dennis and 7% for Ivan during year 5 of the program.

This program will also provide an improvement in the day-to-day reliability of the company's distribution system. While data does not exist to allow a full analysis of the impact, it has been determined that a minimum of 15% of Gulf Company's main line feeder interruptions

under normal day-to-day operation were caused by tree failures outside the pruning zone.

In order to refine the selection of hazard trees, Gulf will employ the use of forensic foresters in future storms to analyze tree-caused outages. Tree failures will be analyzed to insure the trees being selected for removal fit the characteristics of actual tree failures.

Gulf will evaluate the overall program on an annual basis through the analysis of annual reliability data. In addition, Gulf will monitor vegetation management related research activities for possible program improvements.

2.2 Joint-Use Pole Attachment Audits

Gulf Power Company has in its current joint-use contracts an agreement to conduct a field audit of the joint-use poles every five years. These field audits have been in effect since at least 1991. The field audit includes both poles owned by the electric utility to which other utility attachments are made (i.e., telecommunications and cable) and poles not owned by the electric utility to which the electric utility has attached its electrical equipment. The table below provides an overview of the scope of items collected in the 2006 Joint-Use field audit.

Data Item:	Description:
X,Y Pole Location on Map:	*Plot location of poles owned by Gulf Power/BellSouth/Sprint-Florida or poles with Gulf Power / BellSouth / Sprint-Florida attachments on map. The map X,Y will be derived by where the pole is placed relative to the map landbase.*
X,Y Pole Location (GPS):	*GPS measurements are specified for the location of facilities. Factory-specified 3-10 meter GPS equipment will be utilized to obtain readings (actual accuracy is usually 1-3 meters). The GPS X,Y measurements will be stored as attributes on each pole visited.*
Pole Owner:	*Verify pole owner from ownership identification matrix to be defined at project start.*

County Location:	*Assign the county of location for each pole. This will be an automated geospatial operation to ensure accuracy and completeness and will not be an attribute collected in the field.*
Gulf Power Map ID:	*Assign the Map ID of location for each pole. This will be an automated geospatial operation to ensure accuracy and completeness and will not be an attribute collected in the field.*
Pole Type:	*Type will be field-determined from a pick list to be defined at project start. Typical values are wood, concrete and steel.*
Original Pole Treatment:	*Pole Treatment will be field-determined from a picklist to be defined at project start.*
Pole Height:	*Height of pole as read from brand.*
Pole Class:	*Class of pole as read from brand.*
Pole Manufacture Date:	*Date of pole manufacture as read from brand.*
Collect attachment types:	*Collect the presence of an attachment and the attachment type.*
Collect attachment owners:	*Determine and collect ownership information for each attachment.*
Pole Number	*Enter the number from the tag on the pole. Each pole tag attached will be per customer specification.*
Comments/Notes	*Enter information of interest about the current pole location. For example; customer comments, hazardous conditions, safety concerns (bad dogs), etc.*

Any dangerous situations identified in the field during the joint-use field audit will be immediately reported to the pole owner. Dangerous conditions may include buckling, splitting or broken poles.

With completion of the 2006 Joint-Use field survey, Gulf Power Company has the capability to extract joint-use attachment data. From this data, a contractor for Gulf Power Company can take a random sampling of each Gulf Power Company owned joint-use pole with three

(3) or more third party attachments and a manufactured date of twenty (20) or more years to determine whether a pole has sufficient strength to adequately support the attached facilities.

A Pole Strength/Load Assessment will commence in 2007 based on the 2006 Joint-Use Field Audit survey. Gulf Power Company is in the process of sending out the Request for Proposal and Pricing to vendors. Gulf expects to have a contractor in place to begin this work by mid-2007.

Gulf Power recommended and received approval from the Commission for a random sampling for Pole Strength/Load Assessment on 5% of the Gulf-owned joint-use poles meeting the following criteria: pole date of at least twenty (20) years in age and at least three (3) third parties attached.

2.3 Inspection Cycle of Transmission Structures

Gulf Power's current transmission inspection plans meet or exceed the newly-approved 6-year inspection cycle by the FPSC. In 2004, Gulf adopted the Southern Company Transmission Line Inspection Standards as its program. The details of the program have been filed with the Commission per FPSC Order No. PSC-06-0144-PAA-EI in Docket No. 060078-EI. In general, Gulf contracts ground line inspections and uses a combination of company employees and contractors to perform comprehensive walking and aerial inspections. 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.

Historically, Gulf has not inspected a set number of poles each year. Annual inspection rates have varied as the Company responded to its various needs. Gulf plans to utilize the same flexible approach to ensure the Company completes its inspection cycle as required.

Gulf Power currently inspects all its substations at least once annually. These inspections include visual inspection of all structures, buss work, switches and capacitor banks for defects. Current design standards for new substations include 150 mile per hour wind loading for structures inside the substation.

2.4 Storm Hardening Activities for Transmission Structures

Gulf feels that existing facilities should be governed by the version of the NESC in effect at the time of initial construction; however, to the extent practical and feasible, consideration should be given to upgrading when capital maintenance is performed on existing transmission facilities.

It is Gulf's position that the adherence to current design and construction standards, using generally accepted engineering practices in conjunction with the recommended 6-year structure inspection program, will maintain adequate hardening of the system in all areas.

In 2007, Gulf will continue to:

1. Install storm guys on H-frame transmission structures not currently guyed over five (5) years. Estimated capital cost for this total project is $1.5 million.
2. Replace wooden H-frame cross-arms with steel cross-arms over ten (10) years. Estimated capital cost for total project is $3.0 million.
3. Ensure bulk power transmission line design standards have "loss of conductor" contingency for all new construction.

Gulf Power currently designs all new transmission construction using extreme wind loading criteria found in the NESC with 1.1 overload factor.

2.5 Geographic Information System

Gulf Power's Geographic Information System (GIS) is a database for distribution, transmission, and land records across the service area. The distribution side of the system is using **DistGIS**, which is the abbreviation for the company's Distribution Geographic Information System. The system is designed to be a complete electronic model of Gulf Power's electrical system overlaid on a representation of the land base. DistGIS is actually a system composed of many parts. The base GIS software is ArcGIS/ArcMap from Environmental Systems Research Institute (ESRI). It also provides consistent, high-quality data to other systems. For example, it feeds data to the outage management systems (TCMS) in place at Gulf Power to ensure optimum response to incidents, such as the recent hurricanes. In addition, the ArcGIS platform serves as an enabling technology for addressing future Gulf Power Company business needs.

Transmission uses the same software as distribution to map the GIS data. All data that is mapped on the transmission mapping tools is pulled from the Common Transmission Database (CTDB). Transmission collects data for the CTDB through various means. The method in which the majority of our data is collected is through inspections on field computers using the Transmission Lines Inspection System (TLIS). This data is transferred into the CTDB and then extracted into various mapping programs. Transmission uses Transview, TLIS Maps, and individual ESRI Maps. All updates made to the transmission system are captured in the CTDB and are then available in GIS format. At the current rate of data collection and population of the CTDB, Gulf estimates completing the initial mapping of its transmission system into the GIS within the next six (6) years.

2.6 Post-Storm Data Collection and Forensic Analysis

Gulf Power will employ contractors that will be staged out of harms way and mobilized as soon as it is safe to do so after the storm. Once on the system, the crews will survey a percentage of the lines in the storm damaged areas. Percentages will vary depending on how many miles of distribution lines in the company are affected by the storm. The crews will be spread across hard hit areas to areas with less severe damage to ensure a sampling of data from areas which experienced various wind field strengths. Data will be collected in hand held computers in which system maps have already been stored.

The forensic data collection process will occur independently of, but simultaneously with, the restoration process to facilitate a rapid recovery response. Gulf's asset management coordinator will be responsible for managing the forensic data collection process and will not have additional storm assignments until the forensic data collection process is complete.

Crews will be assigned work by circuit and will inventory all damage on the entire circuit, including main line feeders and laterals. The data will be downloaded into a database for analysis.

Data will be collected on pole location, type and extent of damage, contributing factors to damage, such as pole defects, vegetation conditions, construction type, all materials and equipment on the pole including joint use attachments, conductor sizes and types, fuse sizes, etc.

Since the forensic data collection process has not been utilized or tested at Gulf Power, a dry run is being planned prior to the 2007 storm season.

2.7 Outage Data Differentiating Between Overhead and Underground Systems

Gulf will record the number of overhead (OH) and underground (UG) customers on its system at the end of each year. This will allow Gulf to calculate the SAIDI and SAIFI indices as experienced by overhead and underground customers.

Gulf will also collect the following data on outages as they occur:

- UG cable is:
  - Direct Buried
  - Direct Buried but Cable Injected
  - In Conduit
- Pole type is:
  - Concrete
  - Wood

Gulf Power has begun collecting Pole & U/G Cable outage data for future analysis as recommended by the FPSC.

2.8 Coordination with Local Governments

2.8.1 Ongoing Programs

Gulf Power Company currently has several employees that have liaison responsibilities with local governments in NW Florida.

District Managers are located in Pensacola, Ft. Walton, and Panama City. Local Managers, who report to the District Managers, are located in Milton, Crestview, Niceville, and Chipley. These positions interact with city and county personnel on a daily/weekly basis regarding numerous issues, including emergency preparedness as needed. These Gulf Power employees are also actively involved in joint government and business committees that focus on emergency preparedness needs in NW Florida. Examples of those include:

- Executive 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. The federal government organization is called COAD (Communities Organized and Active in Disasters). BRACE meets on a monthly basis.

- Member of Okaloosa County Emergency Management Committee. This Committee is a coordinated effort between government and business to address emergency preparedness issues on a monthly basis.
- Member of Walton County Mitigating Committee. This Committee provides an interactive dialogue between Walton County officials and businesses in order to coordinate efforts on many issues, including emergency preparedness and infrastructure needs.

Gulf Power's Line Clearance Specialists and Forest Services Technicians communicate on a daily basis with local governmental officials, community groups, and homeowner associations to ensure local area involvement and communications regarding vegetation management projects are effectively maintained.

Gulf Power representatives are assigned to County Emergency Operations Centers (EOCs) in NW Florida. The EOC representatives assist city and county agencies and officials during emergencies that warrant activation of the County EOCs. Gulf Power provides extensive coverage throughout the duration of the EOC activation.

Gulf Power will provide ongoing communications, pre-storm communications, and post-storm communications through the Corporate Communications Department. Company news releases are delivered to the County EOCs at least twice daily during storm restoration events to keep local government agencies and officials apprised of the latest company restoration activities.

2.8.2 Proposed Program Survey

As a new program, annual survey questions will be sent to the NW Florida County EOC Directors at the end of each year to gauge Gulf Power's cooperation and coordination with local governments. Gulf will submit the results of the annual survey to the FPSC by March 1 of each year as a part of the Reliability

and Storm Hardening Initiatives Report. Survey questions include the following:

1. Did Gulf Power participate in all county hurricane drills during the year? How many were held?
2. Is Gulf Power responsive to emergency operation requests for critical facility restorations?
3. Does Gulf Power have an ongoing presence in the Emergency Operation Center when a hurricane threatens?
4. Has Gulf Power identified specific personnel as contacts for the county EOC?
5. Does Gulf Power participate in public information releases and press briefings with the county during hurricane operations?
6. How do you rate Gulf Power's storm and restoration coordination efforts -- poor, good or outstanding?
7. In what areas do you think Gulf Power can improve its coordination with local government?

Responses to the following quantitative metrics will also be submitted in Gulf's March 1 Reliability Report to help gauge the Company's coordination efforts with local governments:

1. How many emergency operations drills were conducted by local government in the previous year? How many did Gulf Power actively participate in?
2. How many Community Leader Forums did Gulf Power participate in the past year?

2.9 Collaborative Research

Gulf Power is supportive of a collaborative effort to conduct research and development (R&D) on the effects of major hurricanes on the electrical systems throughout the state of Florida. The Public Utility Research Center (PURC) located at the University of Florida is qualified to provide the leadership necessary to serve as the R&D coordinator. PURC already has a strong working relationship with Florida's investor-owned utilities, cooperatives and municipals.

Gulf Power is participating in the process for the R&D effort that PURC has initiated. This process involves utility managers and hazard research professionals discussing means to prepare Florida's electrical infrastructure to better withstand and recover from hurricanes.

As stated above, Gulf Power believes that PURC's position allows it to

locate the resources necessary and otherwise unknown to the state of Florida utilities. However, Gulf plans on continuing to participate as appropriate within Southern Company and its own R&D efforts in this and other areas of its business. Gulf may choose to also engage in R&D through a local university in Northwest Florida.

2.10 Disaster Preparedness and Recovery Plan

2.10.1 Gulf's Storm Recovery Plan

Gulf Power Company uses the plans described in its Storm Recovery Plan to respond to any natural disaster that may occur within its service area. These plans have proven to be very effective during 2004 and 2005 in recovering from the multiple storms that have impacted Gulf Power and its customers. As part of its annual operations, Gulf Power has developed and refined its planning and preparations for the possibility of a natural disaster within the area Gulf serves. This planning is updated annually to build on what works well and to improve in areas that do not work as well as intended. In these updates, Gulf strives for continuous improvement by building on its experiences while working recovery efforts within its own service areas and when serving to assist other utilities that have suffered weather-related natural disasters. In the past, Gulf's plan has been encapsulated within a detailed and proprietary Storm Recovery Procedure Manual. Gulf has pulled this information together in a separate document which forms the basis for its Storm Recovery Plan. The Manual follows the guidelines and philosophy set forth in the Storm Recovery Plan.

2.10.2 Gulf's Storm Recovery Preparations

All Gulf Power employees are given a specific storm assignment as a part of the planning process. The Company Emergency Management Center (CEMC) specialist works with Human Resources to ensure that each restoration area is staffed with the appropriate number of employees and that every employee has the proper skill set to perform their storm assignments. In many cases, employees have a storm assignment which may be significantly different from their normal job. Storm training handbooks are updated and distributed as needed. Additionally, training is conducted to ensure that employees are competent to perform the job to which they are assigned. Prior to the storm season,

informational meetings are held and internal communications focus on storm preparedness.

Members of the CEMC leadership team attend conferences each year in an effort to benefit from lessons learned by others. In the past, these have included: the Southeastern Electric Exchange (SEE) Mutual Assistance meetings, the National Hurricane Conference, and the Governor's Hurricane Conference. Gulf Power also participates in the yearly statewide storm drill under the direction of the State Emergency Operations Center (SEOC).

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. Gulf Power's Supply Chain Management department ensures that materials on hand, along with available supplies from the material vendors, are sufficient to meet the anticipated demands of the storm season.

2.10.3 Gulf Power Company Emergency Management Center (CEMC)

The objective of the CEMC is to provide overall direction in the restoration of electric service to Gulf's customers as quickly as possible, while protecting the safety of everyone involved. In order to provide a coordinated response and to maximize the restoration effectiveness, the Company organizes into three major restoration areas headquartered in Pensacola, Fort Walton Beach, and Panama City. The CEMC consists of functional teams which provide support to Power Generation, Transmission and Distribution as they restore their respective systems. The three primary leaders working in the CEMC are the CEMC Manager, the Resource Director, and the Logistics Director, who report directly to the Power Delivery General Manager. On a daily basis, these three leaders work with each other to insure the CEMC is providing the proper administration and support necessary for the restoration efforts in the field. The functional teams that are represented in the CEMC and that report to the CEMC manager are as follows: CEMC Staff; Distribution; Distribution Operations Center; Transmission, System Control, and System Protection; Power Generation; Contractor Coordination; Logistics; Aircraft Operations; Supply Chain Management; Customer Service; EOC Coordination; Corporate Security and Risk Management; Safety and Health;

Public Affairs; Human Resources; Fleet Services; Information Technology; Corporate Real Estate and Quality (Facilities); Accounting and Treasury; and Environmental.

When the National Weather Service announces a tropical storm or hurricane has entered the Gulf of Mexico, the System Operator will notify the CEMC leadership, appropriate management and the Company's executives. Private weather services used by Gulf Power also issue notifications to selected Company officials. The storm is monitored as it develops, and if there is a possibility Gulf Power's service area will be affected, the CEMC at the Company's Pace Boulevard building is set up and readied for activation. The hurricane is closely monitored when it may threaten Gulf Power's service area within 36 hours.

After evaluation of wind profiles and consultation with private weather services, a decision is made as to when it will be unsafe for employees to travel. At that time, and after consultation with senior Company management, the Project Services Manager (CEMC Manager), the Power Delivery Services Manager, or the CEMC specialist will determine when the CEMC will be formally activated. Once activated, the CEMC, which is located at the Pace Boulevard Building, is staffed by a core group that will remain for the duration of the storm.

CEMC leaders are notified of the activation plan and are responsible for ensuring their respective areas are in a state of readiness and are properly staffed. The CEMC remains operational 24 hours a day, 7 days a week, until such time the power is substantially restored to all customers who are able to receive service. Depending on the severity of the storm, repair work on the system may continue after the CEMC is deactivated.

3.0 Wood Pole Inspection Plan

Gulf Power has been evaluating its distribution poles through ground-line inspection since the early 1990's. Gulf's distribution pole inspection program was based on a ten-year cycle, completing its first cycle in 2002. The inspection methodology utilized sound and bore with excavation to a depth of 18 inches. Decayed wood was removed from the outside of the pole, and measurements were taken to determine the poles remaining strength. The poles were then treated with preservatives. Reject poles were scheduled for replacement or reinforcement.

Gulf Power rate of rejection for distribution wood poles has fallen from approximately 15% on its first inspection cycle to approximately 5% on it second inspection cycle.

In order to provide additional protection, Gulf Power is moving from its past ten-year cycle to an eight-year cycle beginning in 2007. Historically, Gulf has not inspected a set number of poles each year. Annual inspection rates have varied as the Company responded to its various needs. Gulf plans to continue this flexible approach to ensure the Company completes its next inspection cycle within eight years, while also insuring other programs meet the needs of our customers each year.

Based on the lessons learned during it first pole inspection, Gulf has refined its pole inspection process for distribution wood poles. During its first inspection cycle, Gulf inspected all Creosote and Penta poles, but also excavated and bored a sample of CCA poles to determine if these poles required excavation and boring. Gulf learned that CCA poles provide superior decay resistance when compared to Creosote and Penta poles. Based on the findings of these inspections, Gulf refined its inspection process and developed an inspection matrix based on pole age, treatment type, and condition. This matrix also brought all CCA poles into the inspection process.

Under this matrix, all poles (Creosote, Penta, and CCA) receive a visual inspection with sounding, boring and excavation as appropriate.

Pole Inspection & Treatment Matrix for Gulf Power Company

	Visual	Sound	Bore Inspection	Partial Excavate	Full Excavate	Type of Treatment
Inaccessible poles	Yes	No	No	No	No	No
Concrete poles	n/a	n/a	n/a	n/a	n/a	n/a
Metal Poles, towers, or structures						
OpCo-owned transmission poles with distribution facilities attached	Yes	Yes	No	No	No	No
CCA 0-14 yrs old	Yes	Yes	Sel	No	No	No
Non-CCA 1-4 yrs since prior treatment	Yes	Yes	Sel	No	No	No
CCA 0-14 yrs old	Yes	Yes	Sel	Yes	If Need	Ex
CCA 15-25 yrs old						
CCA 25 yrs or older with prior treatment						
Non-CCA 1-4 yrs since prior treatment	Yes	Yes	Sel	Yes	If Need	Ex
Non-CCA 5 yrs or greater since prior treatment						
CCA 25 yrs or older with no prior treatment	Yes	Yes	Sel	Yes	If Need	Ex
Non-CCA with no prior external treatment	Yes	Yes	Man	No	Yes	Ex
Non-CCA – relocated						
Riser Pole, CCA 0-14 yrs old	Yes	Yes	Sel	No	No	No
Excavatable Riser Pole, CCA 0-14 yrs old	Yes	Yes	Sel	No	IF Need	Ex
Excavatable Riser Pole, CCA 15 yrs or older	Yes	Yes	Sel	No	No	Fu
Excavatable Riser Pole, Non-CCA	Yes	Yes	Sel	No	If Need	Ex
Non-Excavatable Riser Pole, CCA 0-14 yrs old	Yes	Yes	Sel	No	No	Fu
Non-Excavatable Riser Pole, CCA 15 yrs or older	Yes	Yes	Sel	No	No	Fu
Non-Excavatable Riser Pole, Non-CCA	Yes	Yes	Yes	No	No	Ex, Fu
Non-Excavatable Pole	Yes	Yes	Man	No	No	Fu
Poles unable to excavate minimum 75%	Yes	Yes	Man	Yes	No	Fu
Previously reinforced pole	Yes	Yes	Man	No	Yes	Ex, In, Fu
Pole with obvious internal sapwood decay						
Foreign owned pole	n/a	n/a	n/a	n/a	n/a	n/a

Gulf will continue to incorporate a sampling on non-excavated poles into its present inspection process to insure on-going statistical validity of its inspection matrix. A sample of poles that would not normally qualify for full excavation under the present matrix will be fully excavated and inspected to determine if any modifications need to be made to the present inspection process.

In order to ensure proper oversight of its pole inspection program, Gulf has hired an Asset Management Coordinator (AMC) to oversee the entire pole inspection program. The AMC will insure program enforcement is accomplished through random spot checks of inspected poles to insure the inspection process meets Gulf's specifications. The AMC will also insure annual reporting on pole inspection activities are accurately completed in accordance with PSC requirements.

Gulf will continue to require quality control programs from its inspection contractors as a standard part of its contract for pole inspection services.

4.0 Compliance with the National Electric Safety Code (NESC) in regards to Storm Hardening.

4.1 Distribution

Gulf Power's distribution system complies with all applicable sections of the National Electric Safety Code and will exceed the NESC by transitioning to Grade B construction on all new construction, major projects and maintenance work. In addition, Gulf plans on applying the extreme wind criteria to targeted facilities serving critical loads.

4.2 Transmission

Gulf Power's transmission system complies with all applicable sections of the National Electric Safety Code.

4.3 Substation

Gulf Power uses the ASCE 7 extreme wind criteria for structure design and selection, which complies with the National Electric Safety Code extreme wind loading requirements for Gulf's service area.

5.0 Adoption of Extreme Wind Loading standards specified by Figure 250-2(d) of the 2007 Edition of the NESC for Distribution Facilities.

Appendix 1 shows the communities within Gulf's service area and the extreme wind loading standards as specified by figure 250-2(d) of the NESC. Gulf Power will exceed the National Electric Safety Code by transitioning to Grade B construction on all new construction, major projects and maintenance work. In addition, Gulf Power Company intends to apply the extreme wind loading standards to targeted facilities serving critical loads. As a part of this process, Gulf solicited input from the County Emergency Operating Centers to help determine where to begin focusing its storm hardening efforts.

Gulf feels it is prudent to move cautiously into the application of the extreme wind loading standards until it is able to determine the cost and outage benefits. Since Gulf lacks the data to support the benefits associated with applying extreme wind loading standards to distribution poles, it was decided to focus first on critical infrastructure facilities and major thoroughfares. As storm forensic data is gathered to help determine the benefits and effectiveness of the targeted storm hardening initiatives, Gulf will review its plan to address new construction and major planned work, including expansion, rebuilding, or relocation of existing facilities.

The chart below shows the planned projects for applying extreme wind loading to distribution facilities. Gulf's plan focuses on those feeders which serve

critical loads, such as hospitals, major sewage treatment plants, fuel depots, and storm hardening Interstate road crossings.

2007	District	Critical Load	Feeder ID	Total Main Miles	Estimated Cost
	Central	Hospital	8162	0.27	$34,038
	Eastern	I-10 Crossings	Various	N.A.	$52,000
	Central	I-10 Crossings	Various	N.A.	$45,500
	Western	Sewage Plant	5912	0.37	$46,645
	Western	Sewage Plant	7402	1.36	$171,453
	Western	Fuel Depot	6522	1.38	$173,974
TOTAL 2007					$523,610
2008	District	Critical Load	Feeder ID	Total Main Miles	Estimated Cost
	Central	Hospital	9132	1.13	$142,457
	Central	Fuel Depot	9252	2.83	$356,772
TOTAL 2008					$499,229
2009	District	Critical Load	Feeder ID	Total Main Miles	Estimated Cost
	Western	Hospital	7512 & 7522	1.06	$133,633
	Central	Sewage Plant	9342	2.43	$306,346
	Western	I-10 Crossings	Various	N.A.	$123,500
TOTAL 2009					$563,479
	Company	Three Year Plan Totals			$1,586,318

6.0 Mitigation of Damage to Underground Facilities and Supporting Overhead Transmission and Distribution Facilities due to Flooding and Storm Surges

6.1 Distribution

Gulf Power has developed overhead and underground storm hardening specifications (Appendices 5 and 6) to address minimization of this type of damage in areas subject to flooding and storm surges. Gulf recognized and piloted underground system storm hardening design changes in response to lessons learned from Ivan in 2004. These specifications will continue to evolve as Gulf continues to seek out best practices and learns from the review of gathered forensic data. Gulf will be systematically training engineering personnel on the application of these new specifications in 2007.

6.2 Transmission

Gulf Power transmission utilizes overload and strength factors greater than or equal to those required in Section 26 of the National Electric Safety Code. Gulf's loading criteria for new line design is derived from Section 25 of the National Electric Safety Code. At this time, Gulf is not designing transmission for any type of storm surge or flooding damage.

All future Gulf Power underground transmission projects located within the possible storm surge area will be engineered to consider the impact of flooding or storm surge from weather events. Gulf Power does not currently have any such new projects planned.

7.0 Placement of New and Replacement Distribution Facilities so as to Facilitate Safe and Efficient Access for Installation and Maintenance

Gulf Power has always recognized that accessibility to distribution facilities is essential to safe and efficient maintenance and storm restoration. Therefore, Gulf continues to strive to promote placement of facilities adjacent to public roads; to use easements, public streets, roads and highways; obtain easements for underground facilities; and to use road right-of-ways for conversions of overhead to underground.

8.0 Other Key Elements

8.1 Feeder Patrols

By June 1 of every year, all critical lines will be inspected up to the first protective device for loose down guys, slack primary and leaning poles.

8.2 Infrared Patrols

Annually, infrared inspections of critical equipment on main line three phase feeders will be performed by June 1. This data will be utilized in repairing feeder switches, capacitors, regulators and automatic over current protective devices.

8.3 Wind Monitors

Gulf Power believes Forensic Data Analysis will be critical to determining the effectiveness of the Storm Hardening Plan. A key part to the data gathering is obtaining "granular" storm wind speeds at strategic locations which would otherwise be unavailable from the National Weather Service. Gulf plans on installing a total of 19 monitors in this three year plan: 6 in 2007, 6 in 2008 and 7 in 2009. These monitors will be strategically located at substations nearest to the planned projects for applying the extreme wind loading standards. The wind speed data gathered from these monitors, along with forensic data

gathered after a major storm event, will help determine the effectiveness of these storm hardening projects.

9.0 Storm Plan Deployment Strategy for Distribution, Transmission and Substation

9.1 Description of the facilities affected, including technical design specifications, construction standards, and construction methodologies employed

9.1.1 Distribution

Gulf Power has developed overhead and underground storm hardening specifications which are contained in Appendices 5 and 6. These specifications will continue to evolve as Gulf continues to seek out best practices and learns from the review of gathered forensic data. In addition, Gulf will transition to Grade B construction, which will exceed NESC, on all new construction, major projects and maintenance work. Gulf will systematically train engineering personnel on the application of these new specifications during 2007. Gulf Power will apply these specifications to areas subject to flooding and storm surges.

In respect to applying extreme wind loading standards, Gulf's plan focuses first on those main feeders which serve critical loads such as hospitals, major sewage treatment plants and fuel depots, and storm hardening Interstate road crossings. The chart below lists the projects, the district locations and estimated number of poles to be impacted from the proposed critical infrastructure hardening projects.

2007	District	Critical Load	Feeder ID	Total Main Miles	# of poles - assuming 150 Ft. spacing
	Central	Hospital	8162	0.27	9
	Eastern	I-10 Crossings	Various	N.A.	16
	Central	I-10 Crossings	Various	N.A.	14
	Western	Sewage Plant	5912	0.37	13
	Western	Sewage Plant	7402	1.36	48
	Western	Fuel Depot	6522	1.38	49
TOTAL 2007					149
2008	**District**	**Critical Load**	**Feeder ID**	**Total Main Miles**	**# of poles - assuming 150 Ft. spacing**
	Central	Hospital	9132	1.13	40
	Central	Fuel Depot	9252	2.83	100
TOTAL 2008					140

2009	District	Critical Load	Feeder ID	Total Main Miles	# of poles - assuming 150 Ft. spacing
	Western	Hospital	7512 & 7522	1.06	37
	Central	Sewage Plant	9342	2.43	86
	Western	I-10 Crossings	Various	N.A.	38
TOTAL 2009					161
	Company	Three Year Plan Totals			450

The total estimated poles which may be subject to replacement based on applying the extreme wind loading standards and possible impact from Joint-Use Assessments are as follows:

Year	Extreme Wind Loading	Joint-Use Assessments	Total Estimated Poles Impacted
2007	149	500	649
2008	140	500	640
2009	161	500	661

9.1.2 Transmission

Gulf Power transmission utilizes overload and strength factors greater than or equal to those required in Section 26 of the National Electric Safety Code. Gulf's loading criteria for new line design is derived from Section 25 of the National Electric Safety Code. These design criteria are used on all new installation and complete rebuild projects throughout Gulf's service area.

9.1.3 Substation

Once information is gathered from the SLOSH program, each substation on Gulf's system which could be affected by storm surge will be evaluated to determine any corrective or hardening measures that may be required.

9.2 Communities and areas affected and critical infrastructure as illustrated by Gulf Power Company Area Territory/DistGIS maps

9.2.1 Distribution

Please see Appendix 1.

9.2.2 Transmission

The storm hardening steps of installing storm guying on un-guyed structures and the replacement of wooden cross arms with steel cross arms on H-frame structures will be implemented on the entire Gulf Power transmission system.

10.0 Gulf Power Company's Estimate of Incremental Costs and Benefits

The total estimated incremental cost for Gulf Power's Three-Year Storm Hardening Plan is approximately $16.7 million. The 10 initiatives described in Section 2.0, along with the eight year wood pole inspection initiative discussed in Section 3.0, represent a $10.8 incremental cost.

As discussed in Section 4.0, Gulf will be transitioning to Grade B construction. Section 5.0 and Section 8.0 address the adoption of extreme wind loading for distribution facilities and other key elements. Gulf's proposed extreme wind loading plan projects, feeder patrols and wind monitors are expected to cost approximately $2 million from 2007 through 2009.

Gulf has calculated preliminary high level estimates of possible benefits for its Vegetation Management Plan, transitioning to Grade B construction and its Critical Infrastructure and major thoroughfare projects. These are contained in Appendix 7. Since Gulf has no forensic data from past storms, these estimates are based on using what Gulf has determined to be reasonable assumptions and available data from its Trouble Call Management System. Gulf Power cannot estimate all of the reductions in storm restoration cost and outages that will result from the proposed storm hardening initiatives. The effectiveness of the proposed Storm Hardening initiatives will be evaluated through the proposed forensic data gathering process, following future major storm events to better make those beneficial determinations.

See Appendix 7 for an itemized summary of Gulf's incremental storm hardening costs.

11.0 Impact to Collocation Facilities

11.1 Distribution

Several elements will be revised in Gulf Power's approach to attachments made to its poles, towers, and structures in order to provide better storm hardening for the future. These changes include:

- Pole Strength and Loading Engineering calculations will be performed and provided before any pole, tower or structure is attached to, or any existing cables are upgraded or overlashed. The results of these engineering calculations may show that increased pole loading capacity would be required, resulting in consideration of pole modification possibilities.
- A new process will be required to provide for pre-notification by Attacher of plans to attach, upgrade, or overlash cables to any Gulf Power poles, towers, or structures. This new process will include:

- Pre-inspection
- Make-ready considerations and measurements, pole strength and loading calculations, and work order preparation
- Post-inspection required of all work. The Attacher planning to attach, upgrade, or overlash shall be responsible for the costs of post-inspection and timely corrective actions, if any.

- Expanded language to cover the above revisions may be added to affected specification plates.
- Gulf Power desires to collaborate with Attachers to develop an identification tag that would be placed on the Attachers' existing cables if they do not already have one. This retro-fit tagging and labeling of existing cables with the owners' name is for ease of contacting the Attachers when supporting poles or facilities are damaged and the Attacher is needed to help remove, clear the right-of-way, or transfer their cables to a new pole in emergencies, such as storm restoration.
- Clarification of language in agreements under the "Interference" section in the future will include wording that prevents cables, conductors, and equipment from encumbering (boxing or bracketing) a pole, tower, or structure on both sides. This practice inhibits Gulf from providing reliable service and considerably slows down the restoration process by encumbering the climbing space and the ability to straighten a leaning pole in a timely manner.

11.2 Expansion, Rebuild, or Relocation of Distribution Facilities

See Appendix 3 for Gulf Power Company's Attachment Standards and Procedures Outline, and Appendices 2 and 4 for information governing safety, reliability, pole loading capacity and engineering standards and procedures for third party attachments. Each Attacher should refer to the contract they have with Gulf Power Company for details on notification protocol and construction coordination. Gulf Power Company uses the National Joint Use Notification System (NJUNS) for joint-use notifications and coordination of construction with affected parties as necessary.

12.0 Third Party Attachers' Estimate of Costs and Benefits

12.1 Seeking Input from Attachers

Gulf Power sought input from numerous Third Party Attachers in the development of its Storm Hardening Plan. The following five Attachers

immediately requested to participate in Gulf's plan upon issuance of the final rules:

- Embarq
- Cox Communications
- Comcast Cable
- Bright House Communications
- Florida Cable Telecommunications Association (FCTA)

Gulf Power then sent out letters seeking input from other Attachers with whom Gulf has a signed agreement with for placing and attaching facilities on the Company's distribution poles, towers, and structures. This letter was sent to the following Attachers:

- AT&T
- Knology
- Fairpoint Communications
- Springfield Cable
- Mediacom SE
- City of Valparaiso
- Madison River Communications
- Southern Light
- Cambellton Cable
- TelCove/Level 3
- Santa Rosa County
- Florida Dept. of Transportation
- Verizon
- Walton County
- City of Pensacola
- Escambia County School System

In response to the letter above, Gulf Power received an additional five (5) requests from the following Attachers to participate in the Storm Hardening Plan development:

- AT&T
- Knology
- Fairpoint Communications
- Verizon
- Walton County Dept. of Public Works

As indicated above, a total of ten (10) Attachers participated in the development of Gulf's Storm Hardening Plan. Three draft plans were forwarded to those Attachers from March 29, 2007, to April 19, 2007, to solicit their input and comments. Gulf requested that each Attacher provide an estimate of costs and benefits they expected as a result of the

proposed plan. Gulf received constructive and timely comments and suggestions from the participating Attachers via several letters, a conference call, and telephone conversations during this time period.

12.2 Input Received from BellSouth/AT&T

Formal comments to Gulf's draft Storm Hardening Plan were received from BellSouth/AT&T in a letter dated April 30, 2007. The following BellSouth/AT&T input was based on the following assumptions from Gulf's Storm Hardening Plan:

- 2007 – Gulf to replace 162 joint-use poles related to the proposed critical infrastructure hardening projects and replace approximately 500 joint-use poles based on the results of its Pole Strength Assessments described in Section 2.2.
- 2008 – Gulf to replace 139 critical infrastructure joint-use poles and 500 joint-use poles as part of pole strength assessments.
- 2009 – Gulf to replace 169 critical infrastructure joint-use poles and 500 joint-use poles as part of pole strength assessments.

12.2.1 Estimated AT&T Costs

AT&T cannot accurately estimate costs without knowing how many attachments would be impacted and the type of work that would need to be performed on those attachments, but they did provide the following rough estimates. AT&T assumed it would have aerial facilities on 100 of the 162 poles to be hardened, and that the transfers would cost $500 per pole ($50,000). AT&T estimated that its transfer costs arising from Gulf's proposal to replace an additional 500 poles as a result of the 2007 pole strength assessments would be $250,000, for a total 2007 estimated cost of $300,000. Using these same guidelines for the proposed pole replacements for 2008 and 2009, AT&T estimated its transfer costs to be approximately $293,000 and $302,000, respectively.

12.2.2 Estimated AT&T Benefits

AT&T stated the most significant benefit they may recognize from Gulf's Storm Hardening Plan would be from the potential reduction of commercial power outages. As a customer of Gulf Power, AT&T relies on electric service to power its remote terminals. AT&T cannot quantify this potential benefit as it would be difficult to determine how many remote terminals are served by the circuits that will be hardened at this time.

12.2.3 Other AT&T Comments

AT&T's input was limited by the scope of the information provided and the timeframe in which AT&T had to respond.

AT&T looks forward to continuing a dialogue with Gulf Power regarding its hardening efforts so that the most accurate cost information and feedback can be provided to the FPSC prior to its review of the Hardening Plan. Gulf Power agrees with AT&T that a continuing dialogue on the details of these issues is critical to the success of the storm hardening program.

12.3 Input Received from FCTA

Formal comments to Gulf's draft Storm Hardening Plan were received from FCTA in letters dated March 20, 2007; April 6, 2007; April 27, 2007; and May 2, 2007. In addition, FCTA participated in a conference call with Gulf Power on April 13, 2007 to discuss comments to the draft plan.

12.3.1 Estimated FCTA Costs

FCTA's cost estimates and underlying assumptions and comments for the specified Gulf program are as follows:

Gulf's Pole Inspection Program:

- Estimated 240 pole replacements per year (2007, 2008, and 2009) that will impact CATV
- $100 transfer cost per pole for CATV
- Estimated impact of $24,000 per year for 2007, 2008, and 2009
- 3-Year cost impact = $72,000

Gulf's Proposed Extreme Wind Load Projects:

- Estimated pole replacements that impact CATV include 149 poles in 2007, 140 poles in 2008, and 161 poles in 2009
- $100 transfer cost per pole for CATV
- Estimated cost impact of $14,900 in 2007, $14,000 in 2008, and $16,100 in 2009
- 3-Year cost impact = $45,000

Gulf's Third-Party Attachment Audits:

- Gulf will conduct engineering assessments of pole strength and loading on 500 poles per year.
- FCTA is unable to determine a cost impact at this time due to insufficient data.
- FCTA stated that pole strength and loading calculations are not necessary or not normally done on every pole for new attachments and certainly not on every pole for all overlashing.

Gulf's Permitting Requirements for Attachers (Pre-inspections, Post-inspections, etc.) for New and Modified Attachments:

- FCTA stated that cost impacts are impossible to quantify at this time but will be many times historical costs. The delay of time to deliver services to consumers may be the greatest cost.
- FCTA further stated that Gulf's intentions outlined in Section 11.0 of its storm hardening plan are excessive beyond what is reasonably necessary to manage joint use attachments.

12.3.2 Estimated FCTA Benefits

FCTA stated in their April 27, 2007 comments that the greatest benefits to CATV operators will be a result of the increased level of pole inspection and replacement of rotten or damaged poles and defective guy wires. FCTA suggested that additional, cost-effective benefits to a very significant number of poles can be gained if Gulf adds storm guying to poles where practical within its identified storm hardening zone. In addition, FCTA stated that increased vegetation management will improve power reliability and pole line integrity.

12.3.3 Other FCTA Comments

FCTA stated that their members would like to work with Gulf to ensure that distribution pole infrastructure is hardened to withstand stronger winds and to improve storm restoration. FCTA members strongly believe that continued open lines of communication in which additional storm hardening details are provided would significantly contribute to the state's efforts to ensure the availability of power and communication services in extreme weather conditions. Gulf agrees with FCTA that a continuing dialogue on the details of these issues is critical to the success of the storm hardening program.

12.4 Input Received from Embarq

The following comments to Gulf's draft Storm Hardening Plan were received from Embarq in a letter dated May 2, 2007.

12.4.1 Estimated Embarq Costs

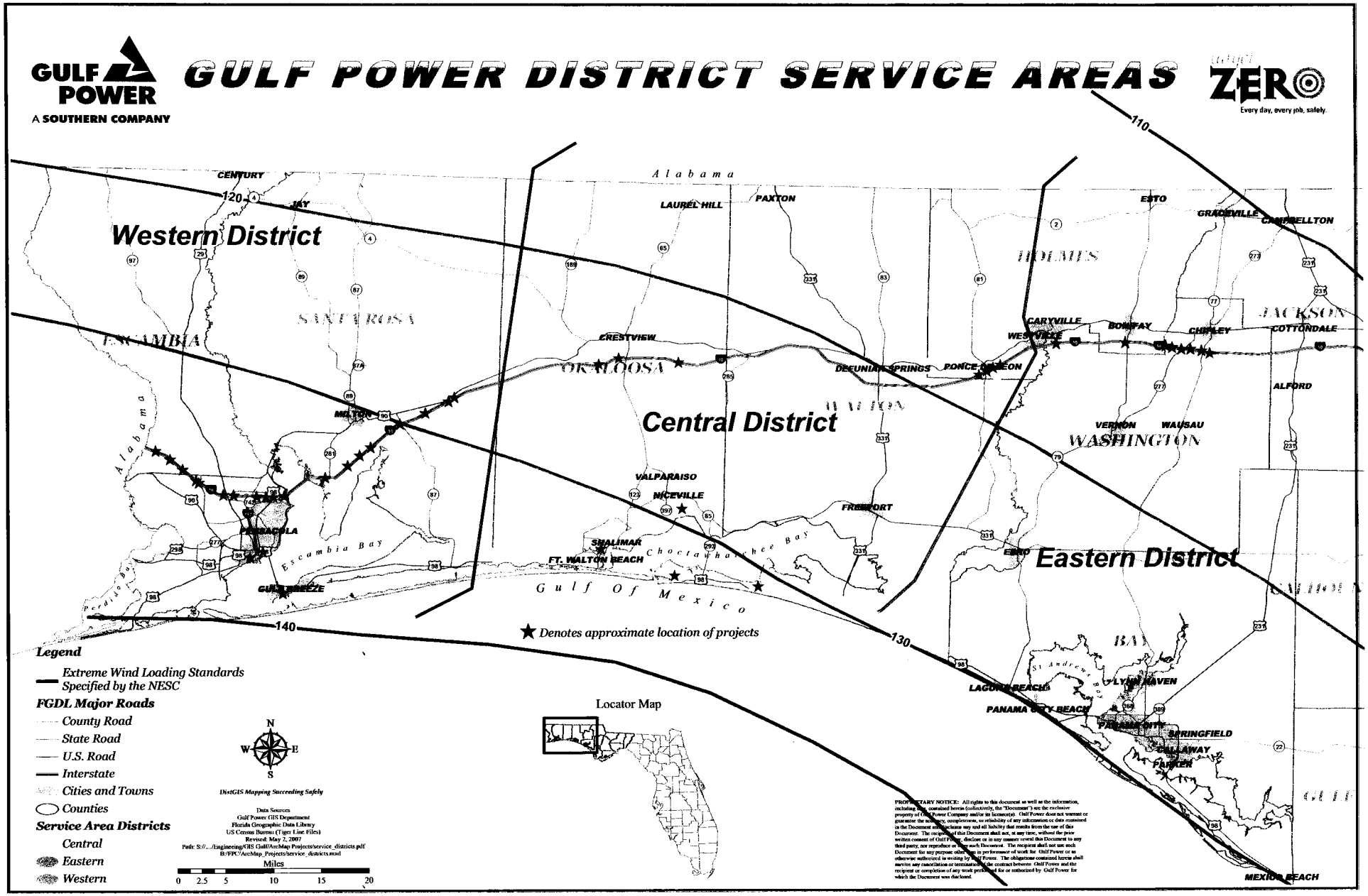
Embarq estimated its cost impact from Gulf's proposed Storm Hardening Plan to be approximately $394,000 over the 3-year period from 2007 to 2009. This estimated cost would be for transfers of the Embarq facilities on approximately 1,970 Gulf poles that may be replaced over this time period. Embarq

further noted that a more targeted estimation of cost and benefits would be supplied as additional details are provided regarding specific storm hardening activities.

12.4.2 Estimated Embarq Benefits

Embarq stated in its May 2, 2007 comments that the greatest benefit will be possibly reducing the amount of damage to their facilities, thereby reducing the number of customer outages and reducing the time to restore service. Embarq further stated the extent of this benefit will not be known until the next storm and cannot be readily quantified in dollar savings at this time.

APPENDIX 1


GULF POWER
A SOUTHERN COMPANY
GULF POWER DISTRICT SERVICE AREAS
ZERO
Every day, every job, safely.
Western District
Central District
Eastern District
Alabama
Gulf Of Mexico
Escambia Bay
Choctawhatchee Bay
CENTURY
JAY
MILTON
PENSACOLA
GULF BREEZE
SANTA ROSA
ESCAMBIA
CRESTVIEW
OKALOOSA
LAUREL HILL
PAXTON
VALPARAISO
NICEVILLE
SHALIMAR
FT. WALTON BEACH
FREEPORT
DEFUNIAK SPRINGS
PONCE DE LEON
HOLMES
WASHINGTON
CARYVILLE
WESTVILLE
BONIFAY
CHIPLEY
ESTO
GRACEVILLE
CAMPBELLTON
COTTONDALE
JACKSON
ALFORD
VERNON
WAUSAU
EBRO
LYNN HAVEN
PANAMA CITY BEACH
LAGUNA BEACH
SPRINGFIELD
CALLAWAY
PARKER
MEXICO BEACH
110
120
130
140
★ Denotes approximate location of projects
Locator Map
Legend
Extreme Wind Loading Standards Specified by the NESC
FGDL Major Roads
County Road
State Road
U.S. Road
Interstate
Cities and Towns
Counties
Service Area Districts
Central
Eastern
Western
N
W
E
S
DistGIS Mapping Succeeding Safely
Data Sources
Gulf Power GIS Department
Florida Geographic Data Library
US Census Bureau (Tiger Line Files)
Revised: May 2, 2007
Path: S:\...\Engineering\GIS Gulf\ArcMap Projects\service_districts.pdf
B:\FPC\ArcMap_Projects\service_districts.mxd
Miles
0 2.5 5 10 15 20
PROPRIETARY NOTICE: All rights to this document as well as the information, including data contained herein (collectively, the "Document") are the exclusive property of Gulf Power Company and/or its licensor(s). Gulf Power does not warrant or guarantee the accuracy, completeness, or reliability of any information or data contained in the Document and disclaims any and all liability that results from the use of this Document. The recipient of this Document shall not, at any time, without the prior written consent of Gulf Power, disclose or in any manner reveal this Document to any third party, nor reproduce or use such Document. The recipient shall not use such Document for any purpose other than in performance of work for Gulf Power or as otherwise authorized in writing by Gulf Power. The obligations contained herein shall survive any cancellation or termination of the contract between Gulf Power and the recipient or completion of any work performed for or authorized by Gulf Power for which the Document was disclosed.

APPENDIX 2

Gulf Power Company

Overlashing Policy

Overlashing

Overlashing is the process of wrapping a new cable or fiber around an existing cable. Attachers who have pole attachment agreements with Gulf Power ("third-party attachers) normally use overlashing to deploy new services faster and/or to avoid vertical clearance problems that may require costly make-ready.

For purposes of determining whether a given pole or pole line is of sufficient strength to accommodate an overlashed cable or fiber, Gulf Power is requiring thirty (30) days advance notice of all overlashing. This allows Gulf Power or its contractor to perform the pole strength and loading analysis that Gulf Power is requiring prior to all new burdens on the pole to ensure, as far as is reasonably practicable, that third-party attachers' facilities do not impair electric safety and reliability or exceed pole loading capacity. *See Florida Administrative Code*, Rule 25-6.0342(5). The cost of the pole strength and loading analysis will be paid by the company who gives notice of proposed overlashing. Regardless of its implications on pole attachment rental rates, overlashing presents a burden on the pole in much the same way as any other new attachment or other stressor on the pole. For this reason, it must be pre-engineered. The only way pre-engineering can occur is through advance notice.

Gulf Power recognizes the competitive concerns that may arise through advance notification of an existing third party attachers plans to overlash. To this end, Gulf Power is committed to maintaining strict confidentiality of the advance notice. The information provided by a prospective overlasher will be used by Gulf Power or its contractor solely for the purposes of conducting the necessary pre-engineering (pole strength and loading analysis) and make-ready engineering, if necessary. The identity of the entity providing advance notice of overlashing will be circulated within Gulf Power or among its contractor only on a "need-to-know" basis, and all persons receiving such information will be advised of the importance of maintaining confidentiality.

Gulf Power is committed to working with attachers and overlashers to implement other reasonable means of protecting confidentiality of overlashing plans or other information deemed commercially sensitive by the attacher and/or overlasher.

APPENDIX 3

Gulf Power Company

Attachment Standards and Procedures

Amended Outline

Gulf Power Company's Attachment Standards and Procedures are designed to govern safety, reliability, pole loading capacity, and engineering standards and procedures for third-party attachments. Gulf Power Company's attachment standards and procedures are comprised of, and for future storm hardening initiatives will be, a combination of its:

- Current contracts with telephone companies and third party attachers
- Overlashing Policy
- Attachment Permit & Overlashing Notification Procedure
- Gulf Power joint-use spec plates

Going forward, Gulf Power Company intends to move to an even more managed pole attachment process. This will include engineered pole strength and loading calculations, make ready inspections, pre- and post-inspections of all new attachments, and other functions vital to the integrity of our system.

Some of the key items which are currently part of Gulf Power's contracts with third-party attachers, and which will remain as parts of the attachment process are the following:

- Application and Permits for Pole attachments and Service Drops
- Attachment Identification
- No Interference Provision
- Requirement of following Rules and Procedures
- Order on the Pole
- Process for Make Ready, Substitutions, Changes and Rearrangements
- Use of Qualified Employees and Contractors
- Damage to Facilities

APPENDIX 4
Attachment Permit & Overlashing Notification Procedure

Gulf Power district engineering offices will receive forms called "APPLICATION AND PERMIT FOR POLE ATTACHMENT" ("Permit") and "OVERLASHING NOTIFICATION" ("ON") from attaching companies. For illustration, see *Examples One and Three.* These will consist of a one-page form and a drawing(s) of the pole location(s) or line to which the attaching company wishes to make attachments or overlashing. The following is the step-by-step method of how to progress through these procedures.

I. Assign the Permit

Select the next available "Permit #" on the ATTACHMENT PERMIT RECORD (APR). Write in the attaching company's abbreviated name under column 1, "No. of Pole attachments" under column 2, and the date that the Permit was received (Date App. Received) under column 3 on the APR.

Lastly, appropriately fill in the "Permit No:" and "Number of Pole Attachments:" on the original Permit (Example One or Exhibit B) received from the attaching company at the bottom right-hand corner.

Overlashing does not require a Permit, but does require submission of an ON not less than thirty (30) days prior to the proposed overlashing. Upon receipt of the ON form, verify the completeness of the form, note the date of receipt on the form, and proceed directly to Step III below.

II. Prepare "JETS Job"

Input the "JETS Job" as follows:

a) Fill in the "headquarters" and "engineer".
b) "Applicant Name": Fill in the attaching company name.
c) "Job Description": Fill in the number of poles and the Permit number.
d) "Address": Fill in the location of the work given on the Permit.
e) "Type": Fill in C03,
f) "Type Customer": Fill in commercial.
g) Change "Type Service" to "None".
h) Give a copy of the "JETS Job" and the Permit (with the attachers drawing) to the appropriate engineer.

III. Engineer Field Checks the Permit or ON

A Gulf Power engineer or Gulf Power contractor will decide if the attachment location described on the Permit has appropriate clearances (meets all NESC and Gulf Specifications etc.) and whether poles are of sufficient strength to support the proposed attachments or overlashing. **Each new Permit and ON**

will require a strength and loading analysis, the cost of which will be paid by the attaching company. The pole strength and loading analysis for proposed overlashing should be completed as soon as practicable, but not later than thirty (30) days from receipt of the ON.

The engineer will make one of the following three choices:

a) No-Work-Required (NWR)

The Engineer states that it is safe (no NESC or Gulf Specification violations and pole is of sufficient strength) for the attaching company to attach or overlash.

1. **APR** (ATTACHMENT PERMIT RECORD)
   (a) Fill in a NO under column 4 on the APR.
   (b) Fill in the Date that the Permit is mailed back to the attaching company under column 10 on the APR.
   (c) Not necessary for ON.
2. **Permit or ON**
   (a) Check the "No make ready required" box.
   (b) Fill in the date on the "Permit granted on" or "Engineering completed on" line (next to the "No make ready required" box).
   (c) Make sure that engineer signed (Signature, Printed Name and Title) the Permit or ON where it says "Signature" at the bottom left corner of the page under "Gulf Power Company".
   (d) Fill-in the cost of performing the pole strength and loading analysis to be paid by the attaching company in the blank provided on the Permit or ON.
3. **Copies**
   (a) Send the original Permit to Corporate Accounting, Bin #732. DO NOT SEND ONs TO CORPORATE ACCOUNTING.
   (b) Send 1 copy of the Permit or ON to the attaching company (this is the attaching company's notification to proceed, and notification of the amount payable for the strength and loading analysis).
   (c) Stamp completed on Gulf Power's copy and file it in the "Completed Attachment Permit File" or "Completed Overlashing Notification File."

b) Make-Ready Needed (DSO)

If line work on Gulf's poles is needed for the attaching company to safely attach or overlash, then the Engineer will promptly prepare a DSO. If line work is needed to safely accommodate a proposed overlashing, prepare a DSO and proceed directly to Step III.b.3. below.

APPENDIX 4
Attachment Permit & Overlashing Notification Procedure

1. **APR** (ATTACHMENT PERMIT RECORD)
   (a) Write in <u>YES</u> under column 4.
   (b) Write in the <u>DSO #</u> under column 5.
   (c) Write in the <u>DSO Amount</u> under column 6.
   (d) Write in the <u>Date</u> that the attaching company was actually notified of the make-ready amount under column 7 (Gulf Power will fax or mail a copy of the Permit and/or the drawing if requested).
   (e) Place a copy of the Permit with the DSO (which will be put in the suspense file) and hold the original Permit until payment is received.
   (f) **After Payment is Received and Permit is Signed:**
      (1).Write in the date that the check is received on the APR under column 8.
      (2).Release DSO to the Line Department to work,

   (g) **After the DSO is completed:**
      (1) Write in the <u>date</u> the DSO was completed on the APR under column 9.
      (2) Write in the <u>date</u> that the attaching company was notified that it can attach to Gulf Power poles on the APR under column 10.
      (3) Complete the Permit as explained below.

2. **Permit**
   Fill out the Permit as described below after columns 8, 9 and 10 of the APR have been filled in.
   (a) Write in the <u>date</u> where it says, "Permit granted on _____". This date must be the same date that is in column 10.
   (b) Write in the <u>dollar amount</u> of the DSO on the "$ _____" line.
   (c) Write in the <u>DSO number</u>.
   (d) Make sure the engineer's *supervisor* signed the Permit where it says "Signature" at the bottom of the page under "Gulf Power Company".
   (e) A copy of the Permit, copy of the check, and a copy of the DSO (face sheet, material sheet and drawing) must be placed in the "Attachment Permit Completed" file.
   (f) The original Permit must be mailed to Corporate Accounting (Bin #732).

3. **Overlashing**
   - **(a) Place a copy of the ON and DSO in the suspense file and hold original ON until payment is received**
   - **(b) Advise attaching company in writing of cost of pole strength/loading analysis, as well as the need for, nature of, and cost of make ready necessary to accommodate the proposed overlashing.**
   - **(c) Upon receipt of amount stated above, release DSO to Line Department to work**
   - **(d) Upon completion of work, fill-in date on "Overlashing Notification Returned on" line and send a copy to attaching company.**

4. **Copies**
   The following copies are needed: 2 copies of the check, 2 copies of the DSO (2 face sheets, 1 material sheet and 1 drawing), and 2 copies of the Permit or ON.
   - (a) A copy of the check and a copy of the Permit or ON are to be filed in the suspense DSO.
   - (b) The original check and a copy of the DSO (Face sheet only) are to be delivered to the Treasury Department (Bin #781).

c) Permit Denied or ON Rejected

The Engineer states that the Permit is denied or ON rejected for safety, reliability, insufficient capacity or engineering reasons.

1. **APR** (ATTACHMENT PERMITTING RECORD)
   - (a) Fill in NO/ Denied under column 4 on the APR.
   - (b) Fill in the date that the Permit is mailed back to the attaching company under column 10 on the APR.
   - (c) Not applicable to ON

2. **Permit or ON**
   - (a) Fill today's date on the Permit or ON
   - (b) Fill in a zero for the Estimated cost.
   - (c) Fill in N/A for the DSO number space.
   - (d) Make sure that engineer signed the Permit or ON where it says "Signature" at the bottom of the page under "Gulf Power Company".

3. **Copies**
   (a) Send the original Permit or ON to the Project Service Manager, Bin #302
   (b) Send 1 copy of the Permit or ON to the Attaching company (this is their notification).
   (c) Stamp completed on Gulf Power's copy and file it in the "Permit Denied" file or "Overlashing Notification Rejected" file.

IV. **Notes:**

a) CATV Companies are *required* to have a completed and approved Permit from Gulf Power engineering before they are authorized to attach any main line cable to Gulf Power's poles (per the CATV contract and Gulf's "Management Procedure" 710-009).

b) CATV Companies can and will permit *service drops after* they have attached to Gulf Power's poles, for illustration see ***Example Two***. The procedure should be to follow section "a) No-Work-Required (NWR)" above for handling the APR, Permit, and copies.

Gulf Power engineering should check these permits also for NESC and Gulf Power Specification violations. If any violations are found they should notify the attaching company for immediate correction.

c) Overlashing does not require a Permit, but does require pole strength and loading analysis before the overlashing is allowed and made. Notices of proposed overlashings are to be treated as CONFIDENTIAL and disclosed within Gulf Power only as required, and in no circumstances disclosed to others outside of Gulf Power (with the exception of a Gulf Power Contractor, who may perform the pole strength and loading analysis).

d) Dates for calculating Interim-Billing should be as follows:

(1) For ***Exhibit B*** use the date in the Permit granted field. If this date is missing, call the clerk at the office from which the Permit originated for clarification.

(2) For ***Exhibit D*** use the date field called "Date of Attachments" (old Form) or "Date Attached" (new form); both fields are found in the same area on Exhibit D. If this date is missing, use the date at the top of the Exhibit D (under County).

If you have any questions, please call Ben Bowen at (850) 444-6726.

GULF POWER
A SOUTHERN COMPANY

APPENDIX 4
Attachment Permit & Overlashing Notification Procedure

Example One

EXHIBIT B

APPLICATION AND PERMIT FOR POLE ATTACHMENT

	City of	
	State of	
	County	
	Date	

NAME OF LICENSEE:

In accordance with the terms of Agreement effective **July 1, 2005,** application is hereby made for permit to make pole attachments to the following poles:

No.	P # and, TLN # (if available)	No. of Pole Attachments	Service Address or Location
1.	-		
2.	-		
3.	-		
4.	-		
5.	-		
6.	-		
7.	-		
8.	-		
9.	-		
10.	-		
11.	-		
12.	-		
13.	-		
14.	-		
15.	-		
16.	-		

Licensee Signature:		
Print Name:		
Title:		

☐ No make ready required. Permit granted on _____, _____.

☐ Make ready required.
Estimated make-ready costs required to provide space for Licensee's pole attachments as shown on DSO No. _____, _____ is $_____. Licensee accepts these charges by signing below:

☐ **Permit Denied** (for one or more of the following: safety, reliability, insufficient capacity or engineering reasons)

Licensee Signature: _____ Printed Name: _____

Title: _____

GULF POWER COMPANY

- Make-ready payment paid by Licensee on _____, _____.
- Make-ready work completed by Gulf Power Company on _____, _____.
- Permit granted on _____, _____.

Signature _____

Print Name: _____

Title: _____

Permit No: _____

Number of Pole Attachments: _____

GULF POWER
A SOUTHERN COMPANY

APPENDIX 4
Attachment Permit & Overlashing Notification Procedure

Example Two

EXHIBIT D

APPLICATION AND PERMIT

FOR SERVICE DROP POLE ATTACHMENT EXCEPTIONS

	City of	
	State of	
	County	
	Date	

NAME OF LICENSEE:

In accordance with the terms of Agreement effective **July 1, 2005** application is hereby made for permit to make pole attachments to the following poles:

No.	P # and, TLN # (If available)	Service Address or Location	No. of Poles	Date Attached
1.	-			
2.	-			
3.	-			
4.	-			
5.	-			
6.	-			
7.	-			
8.	-			
9.	-			
10.	-			
11.	-			
12.	-			
13.	-			
14.	-			
15.	-			
16.	-			

Licensee certifies that the above pole attachments have been installed on Gulf's poles in strict compliance with the National Electrical Safety Code, Gulf Power Specifications and any other applicable codes, rules, or regulations of any governing body having jurisdiction.

Licensee Signature::	
Printed Name:	
Title:	
	Licensee

GULF POWER COMPANY

Permit granted this day of _____, _____

Day, Month | Year

Signature:		Permit No:	
Print Name:		Number of Pole Attachments:	
Title:			

GULF POWER
A SOUTHERN COMPANY

Example THREE

OVERLASHING NOTIFICATION

City of
State of
County
Date

NAME OF LICENSEE:

In accordance with the terms of Agreement effective [illegible], notice is hereby given of proposed overlashing impacting the following poles:

No.	P # and, TLN # (if available)	No. of Poles	Service Address or Location
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Licensee Signature
Print Name
Title

[illegible]

Make ready required

[illegible]

LICENSEE

Licensee Signature   Printed Name
Title   Date

GULF POWER COMPANY

- Make ready payment paid by Licensee [illegible]
- Make ready work completed by Gulf Power Company [illegible]
- Overlashing Notification Returned to Licensee [illegible]

Attachment Permit Record

-Pensacola South 2007 APR-

Permit #	Co Name (COX, CS, MC, SL, TC, BH)	No. of Pole Attachments	Date App. Received	Make Ready Yes/No/ Denied	DSO #	DSO Amt. (Send to Treas. *with* copy of Face Sheet Bin #781)	Date Notified (Of make ready Amt.)	Date Check Rec. (Release DSO to Line Dept.)	Date Comp. (DSO)	Date CATV Notified to attach
Column #	1	2	3	4	5	6	7	8	9	10
PS07-1						$				
PS07-2						$				
PS07-3						$				
PS07-4						$				
PS07-5						$				
PS07-6						$				
PS07-7						$				
PS07-8						$				
PS07-9						$				
PS07-10						$				
PS07-11						$				
PS07-12						$				
PS07-13						$				
PS07-14						$				
PS07-15						$				
PS07-16						$				
PS07-17						$				
PS07-18						$				
PS07-19						$				
PS07-20						$				

COX = Cox Comm., ***CS** = CableSouth, Inc., **MC** = Mediacom, **SL** = Southern Light, ****TC** = Telcove Investment, LLC, *****BH** = Brighthouse

NOTE: *CableSouth, Inc. was Torrence, **TC was both Adelphia Business Solutions and KMC Telecom II, Inc., & ***BH was Time Warner Cable & TCI Cablevision

All white areas will be used for each permit. Gray area to be filled in only if make-ready is involved. Each column should be filled in with the underlined description found in the Column Headings.

GULF POWER
A SOUTHERN COMPANY

Page 1

APPENDIX 5

SECTION V
OVERHEAD STORM HARDENING

Gulf Power Company Electrical Distribution Facilities shall be storm hardened to the extent practical using the methods described or shown in the specification plates in this section.

The definition of "Storm Guying" is as follows and is used throughout this section:

Storm type down guys are additional down guys and anchors, positioned perpendicular to the path of conductors. These storm type down guys are not normally needed for support of the structure but provide support in the event of high winds. They are installed in pairs with as much anchor lead as possible and have the same requirements as any other down guy as far as insulating and grounding.

The following storm hardening methods shall be utilized:

Main feeder lines shall be located as far away as practical from the source of any storm surge and shall have storm guys on every pole where practical. The use of laterals from the main feeder to the coastline is highly encouraged.

Any controls for OCRs, capacitor banks, voltage regulators shall be placed as high as practical to avoid flooding with a storm surge. The use of wireless accessing is encouraged.

Any poles with OCRs, voltage regulators, capacitor banks, and underground riser poles shall be storm guyed where practical.

Pole Foreman shall be utilized to determine proper pole selection and proper anchoring. Emphasis needs to be placed upon the correct lead lengths for anchoring.

APPENDIX 5

SECTION V
OVERHEAD STORM HARDENING

Continued from plate OZZ-1.

Poles set in flood prone/storm surge areas shall be set using Pole Foam to strengthen the base to lessen leaning after the flooding. This is commodity number 05-5014-8 and is located in JETS under Misc. UG.

In these areas, shorter spans should be utilized to strengthen the system. This involves the use of more poles especially in main line construction.

As a means to strengthen existing poles, Osmose or equivalent pole bracing can be used.

In a flood/storm surge prone area, customers must install meters and metering equipment above the expected maximum flood level. Where this results in meters or metering equipment being above the standard specified heights above the ground, the customer will need to build permanent platforms and stairs to allow reading and servicing of the meters and equipment, unless the location of the equipment coincides with existing porches or platforms with ready access by Gulf Power employees. The platform must extend at least three feet out from the wall and at least 18" to either side of the metering equipment. Refer the customer to the local building inspector for other requirements for the platform and stairs.

Under normal circumstances, rear lot line construction shall be avoided and metering equipment shall not be placed on the rear of buildings.

APPENDIX 5

SECTION V
OVERHEAD STORM HARDENING

Joint-Use attachments

Third party attachers shall use proper anchoring and guying techniques to ensure that strength and integrity of the system is maintained.

Proper installation techniques shall be used. EX. Stringing of messengers shall be done between anchors.

Third party anchors shall be no closer than 4' from Gulf Power Company anchors to ensure integrity of the soil surrounding the anchors.

SUBJECT OVERHEAD DISTRIBUTION

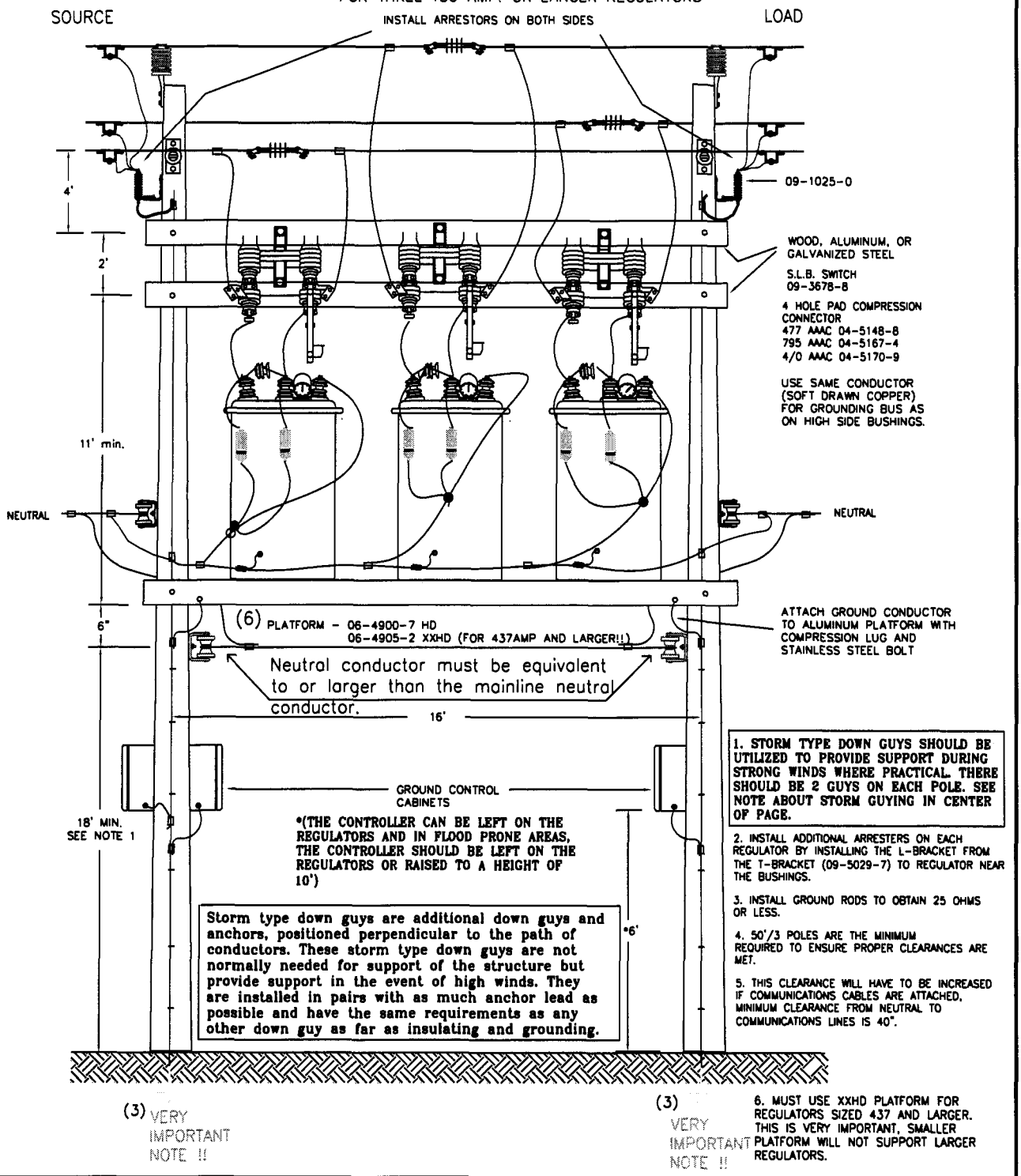
DETAIL STORM HARDENING

Date 3-14-2007	SUPERSEDES DATE	SHEET 1 OF 1 SHEETS	Gulf Power A SOUTHERN COMPANY	A- OZZ-3

Section V Overhead Storm Hardening

12 KV REGULATOR PLATFORM

FOR THREE 150 AMP. OR LARGER REGULATORS



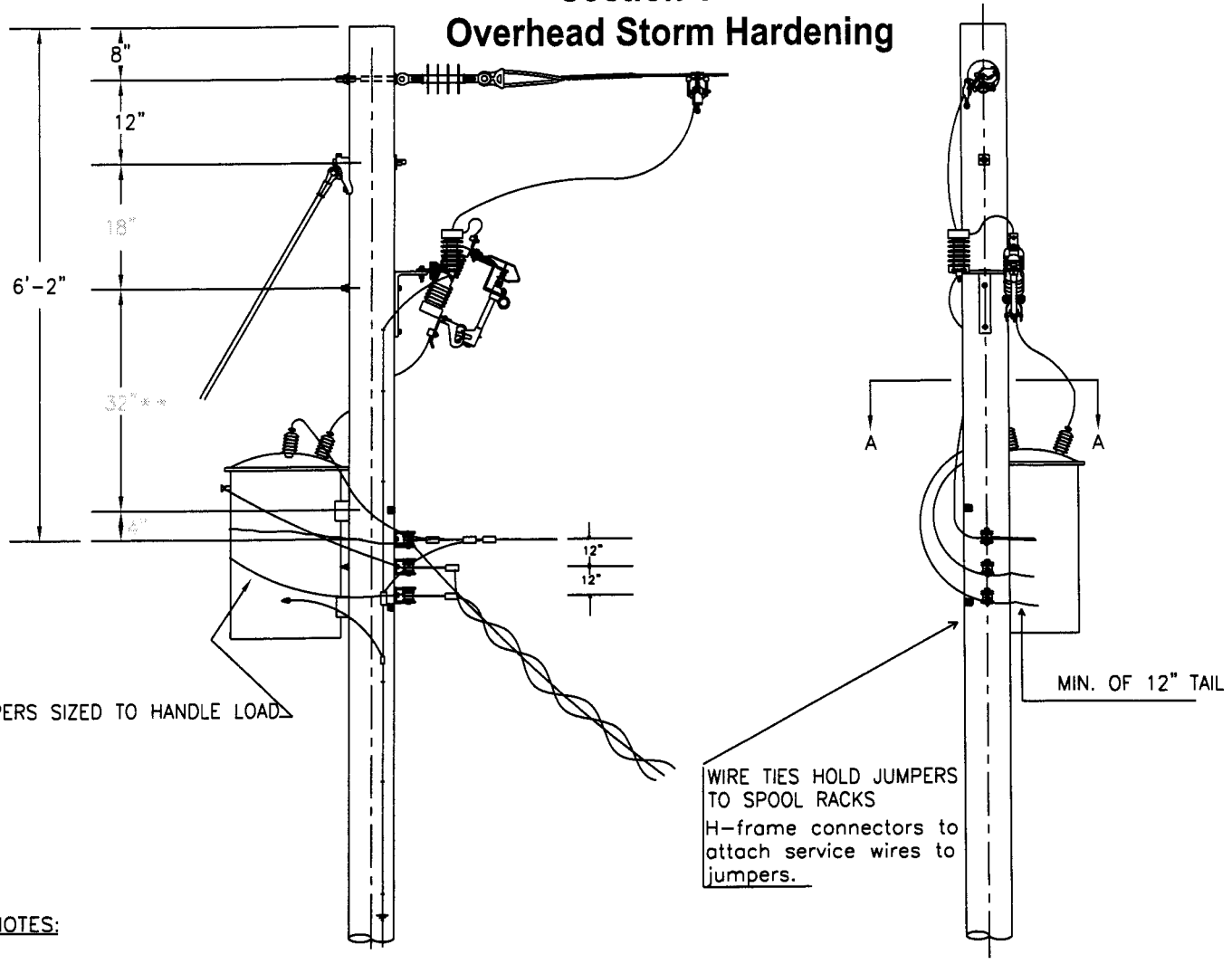
1. **STORM TYPE DOWN GUYS SHOULD BE UTILIZED TO PROVIDE SUPPORT DURING STRONG WINDS WHERE PRACTICAL. THERE SHOULD BE 2 GUYS ON EACH POLE. SEE NOTE ABOUT STORM GUYING IN CENTER OF PAGE.**
2. INSTALL ADDITIONAL ARRESTERS ON EACH REGULATOR BY INSTALLING THE L-BRACKET FROM THE T-BRACKET (09-5029-7) TO REGULATOR NEAR THE BUSHINGS.
3. INSTALL GROUND RODS TO OBTAIN 25 OHMS OR LESS.
4. 50'/3 POLES ARE THE MINIMUM REQUIRED TO ENSURE PROPER CLEARANCES ARE MET.
5. THIS CLEARANCE WILL HAVE TO BE INCREASED IF COMMUNICATIONS CABLES ARE ATTACHED. MINIMUM CLEARANCE FROM NEUTRAL TO COMMUNICATIONS LINES IS 40".
6. MUST USE XXHD PLATFORM FOR REGULATORS SIZED 437 AND LARGER. THIS IS VERY IMPORTANT, SMALLER PLATFORM WILL NOT SUPPORT LARGER REGULATORS.

SUBJECT 12KV REGULATOR PLATFORM

DETAIL STORM HARDENING

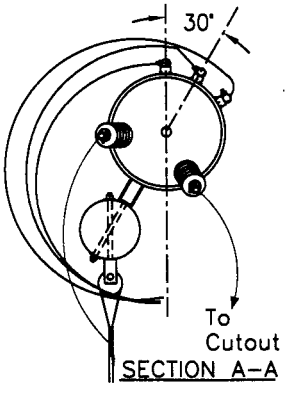
Date 3-12-2007	SUPERSEDES DATE	SHEET 1 OF 1 SHEETS	Gulf Power A SOUTHERN COMPANY	A- OZZ-4 A

Section V
Overhead Storm Hardening



NOTES:

1. This example shows a one phase transformer. The same method is to be used for three phase installations as well.
2. Connect transformer secondary neutral lead to system neutral and leave approximately 12 inch tail for service neutral connections.
3. Use wildlife guards and covered riser wire in areas where wildlife is expected.
4. Avoid placing cutout directly above transformer.
5. If secondary is to extend in line, extend primary wire if practical to eliminate conflict between secondary and anchor guy.
6. "FLAG" connectors may be used instead of pin-type connectors at the transformer.



SECTION A-A

SUBJECT OVERHEAD DISTRIBUTION

DETAIL STORM HARDENING

Date 3-14-2007	SUPERSEDES DATE	SHEET 1 OF 1 SHEETS	Gulf Power A SOUTHERN COMPANY	A- OZZ-5 A

Underground Storm Hardening

Gulf Power's Underground Distribution Facilities shall, where practical, be storm hardened to the extent practical using the methods described in this section.

Underground circuits and feeders shall, where practical, be designed and built in the road right-of-way. In a flood/storm surge prone area, customers must install meters and metering equipment above the expected maximum flood level. Where this results in meters or metering equipment being above the standard specified heights above the ground, the customer will need to build permanent platforms and stairs to allow reading and servicing of the meters and equipment, unless the location of the equipment coincides with existing porches or platforms with ready access by Gulf Power employees. The platform must extend at least three feet out from the wall and at least 18" to either side of the metering equipment. Refer the customer to the local building inspector for other requirements for the platform and stairs.

Under normal circumstances, rear lot line construction shall be avoided and metering equipment shall not be placed on the rear of buildings.

Padmounted equipment that utilize (primary) live front connections and/or air break switches shall not be used in areas prone to flooding.

Consideration should be given to installing switchgear below grade, inside boxes or vaults. Consideration should also be given to anchoring these boxes or vaults with pilings.

Underground feeders, especially those with large conductors (600 amp or 900 amp systems), utilizing a duct system, should be concrete encased and should be installed as far as practical from seacoasts, lakes, rivers, bays and other low lying areas to protect them from washouts and flooding. If possible the feeder should be built several blocks from these areas and the use of laterals, from the main feeder, should be used to serve the seacoast.

Padmounted equipment (such as transformers, pedestals, feed-thru cabinets, etc) should be located in places that naturally provide storm surge protection. Examples include: behind buildings, behind trees, high areas, etc.

3Ø transformers serving Gulf Front condo's, motels, restaurants, etc., shall, where practical, be installed on the opposite side of the building to the Gulf and as close to the center of the building as practical. The transformer should never be installed between two buildings, due to the extreme erosion of sand during a storm surge.

Where practical, underground circuits should be looped.

SUBJECT UNDERGROUND STORM HARDENING

DETAIL GENERAL STATEMENTS

Date 03-14-07	SUPERSEDES DATE	SHEET 1 OF 1 SHEETS	Gulf Power A SOUTHERN COMPANY	A- UZZ-1

Concrete Duct Banks

600/900 amp circuits shall be designed with concrete encased duct banks in order to better protect these circuits from storm surges.

The concrete used should be 1:3:5 mix with 1/2 inch or smaller gravel or crushed stone aggregate. This mix should have a nominal compressive strength of 3000 psi. All concrete should be poured within 1-1/2 hours of mixing.

When placing concrete around the conduit adjust the delivery chute so that the fall of the concrete into the trench is as short as possible. Use a splash board to divert the flow of the concrete away from the trench sides to avoid dislodging soil.

(Con't on next sheet)

SUBJECT UNDERGROUND STORM HARDENING

DETAIL CONCRETE DUCT BANKS

Date 03-14-07	SUPERSEDES DATE	SHEET 1 OF 2 SHEETS	Gulf Power A SOUTHERN COMPANY	A- UZZ-2

Concrete Duct Banks (con't)

Use a vibrator (one inch maximum), slicing bar or equivalent to work the concrete down the sides of the conduit bank and between the conduits. It should be possible to see the concrete flowing along the of the trench just ahead of the point where the concrete falls from the chute.

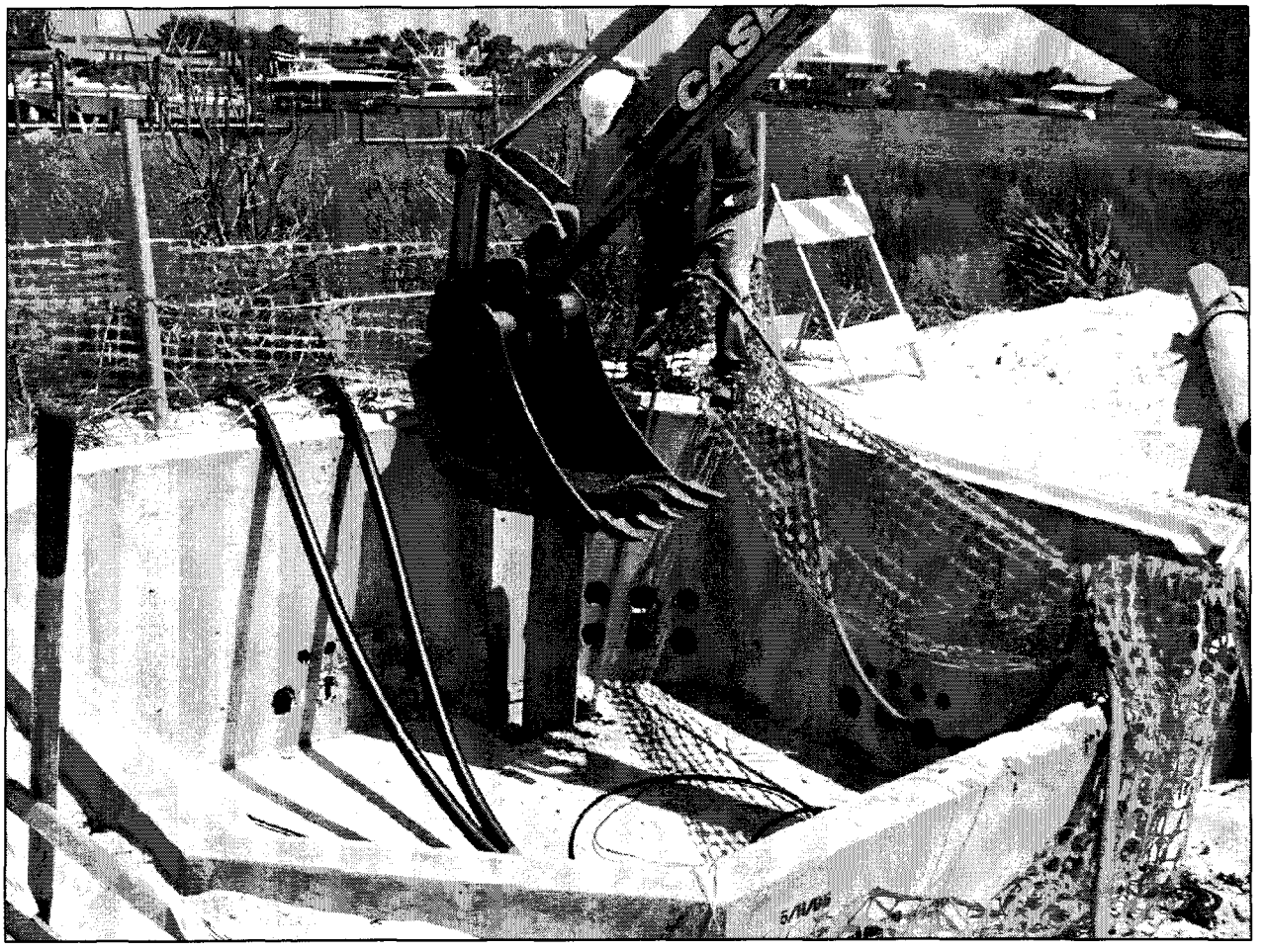
The trench can be back filled any time after the concrete has been poured and leveled. The concrete should be covered with a minimum of six inches of selected backfill. Spoils from the trench can be used for the remaining backfill.

On warm sunny days, if the concrete can not be covered immediately after leveling, one or two inches of fine soil or sand should be placed over the concrete. This cover prevents rapid evaporation of water from the surface of the concrete, allowing the concrete to cure properly.

When necessary to stop construction, plastic plugs should be used to temporarily seal the conduit end against mud, dirt, and debris. If conduit is to be left uncovered over night, tie down only at one end.

Duct banks should be inspected by an operating Company representative before being covered with backfill or encased in concrete.

Anchoring Vaults



Consideration should be given to anchoring vaults/boxes with two 10' pilings.

These pilings should be installed on the front left and back right corners of the vault/box.

Pilings shall be 10' long and can be made out of 10" conduit filled with concrete or any preformed circular or square concrete at least 10" in diameter or square. After piling has been installed the area around the piling shall be filled with concrete to unitize the structure and vault/box.

Rule 25-6.0342 - **Gulf Power Company** Storm Hardening Plan

				Actual/Estimated Utility Costs						Estimated Benefits to Utility Customers									Estimated Benefits to Third Party Attachers					
										Impact on Storm Restoration Costs			Impact on Storm Caused Outages - avoided CMI			Other Estimated Company Benefits			Impact on Storm Restoration Costs			Impact on Storm Caused Outages		
	Activity		Docket No.	2004	2005	2006	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009	2007	2008	2009
(a)	**Wooden Pole Inspections.**		060078-EI	$288,109	$988,971	$595,146	$830,000	$850,000	$850,000	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
	Ten Storm Hardening Initiatives.		060198-EI																					
(b)	1	A Three-Year Vegetation Management Cycle for Distribution Circuits		$2,821,245	$3,617,018	$2,180,416	$4,638,139	$4,907,005	$4,906,189	$500,000	$500,000	$500,000	4,425,000	8,850,000	13,275,000	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
(c)	2	An Audit of Joint-Use Attachment Agreements	See Note 6	$0	$0	$0	$384,000	$420,000	$460,000	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
(d)	3	A Six-Year Transmission Structure Inspection Program		$330,974	$78,346	$245,181	$475,552	$481,335	$485,086	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 12	See Note 12	See Note 12	See Note 12	See Note 12	See Note 12
(e)	4	Hardening of Existing Transmission Structures		$1,797,840	$2,052,497	$1,829,361	$3,900,000	$3,000,000	$3,000,000	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 12	See Note 12	See Note 12	See Note 12	See Note 12	See Note 12
(f)	5	Transmission and Distribution GIS		$0	$0	$0	$75,000	$75,000	$75,000	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
(g)	6	Post-Storm Data Collection and Forensic Analysis	See Note 5	$0	$0	$0	$205,000	$100,000	$100,000	0	0	See Note 5	See Note 7	See Note 7	See Note 7	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
(h)	7	Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems		$0	$0	$0	$0	$0	$0	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
(i)	8	Increased Utility Coordination with Local Governments		$0	$0	$0	$0	$0	$0	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
(j)	9	Collaborative Research on Effects of Hurricane Winds and Storm Surge		$0	$0	$0	$15,000	$17,000	$17,000	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
(k)	10	A Natural Disaster Preparedness and Recovery Program		$0	$0	$0	$0	$0	$0	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
	Compliance with National Electric Safety Code's adoption of Extreme Wind Loading Standards.		070xxx-EI																					
(l)	1	New Distribution Facilities - incremental	See Note 8	0	0	0	$30,400	$121,500	$121,500	$611,891	$611,891	$611,891	35,975	35,975	35,975	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
		Base amount		$4,583,494	$4,995,443	$5,594,281	$4,558,770	$4,152,510	$4,145,850	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
(m)	2	Major planned expansion, rebuild, or relocation of distribution facilities	See Note 8	0	0	0	$25,900	$103,500	$103,500	$510,241	$510,241	$510,241	30,646	30,646	30,646	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
		Base amount		$2,802,490	$3,884,056	$4,930,651	$2,159,000	$3,978,000	$4,108,000	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
(n)	3	Critical infrastructure and major thoroughfares	See Note 10	0	0	0	$523,610	$499,229	$563,479	$271,180	$254,800	$293,020	23,095	21,700	24,955	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
		Wind Monitors to provide needed wind data		0	0	0	$43,000	$36,000	$45,000	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 2	See Note 2	See Note 2	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
	Mitigating flood and storm surge damage to underground and supporting overhead facilities.		070xxx-EI																					
(o)	1	Transmission		See Note 3																				
(p)	2	Distribution - piloted project incremental costs	See Note 4	$0	$71,680	$446,000	$181,000	$100,000	$100,000	See Note 4	See Note 4	See Note 4	See Note 4	See Note 4	See Note 4	See Note 4	See Note 4	See Note 4	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
		Distribution - use of SS equipment	See Note 9	$993,555	$1,057,308	$1,380,338	$1,143,733	$1,143,733	$1,143,733	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 7	See Note 4	See Note 4	See Note 4	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11	See Note 11
(q)	**Placement of new and replacement distribution facilities to facilitate safe and efficient access for installation and maintenance.**		070xxx-EI	See Note 1																				
	TOTALS			$13,617,707	$16,745,319	$17,201,374	$19,218,504	$20,106,312	$20,345,837	$1,893,312	$1,876,932	$1,915,152	4,514,716	8,938,321	13,366,576									
	SH Cost per customer using 2006 YE customers of 418,892									**$46 per customer**														

Notes:

1 Gulf has always recognized that accessibity to distribution facilities is essential to safe and efficient maintenance and storm restoration. Since this activity is already integral to our construction practices, there is no added cost impact nor can these costs be determined. There is no incremental cost impact or benefits associated with this activity.

2 Until the program is complete and a storm hits it is not possible to estimate benefits resulting from this activity.

3 Gulf does not have underground transmission/substation facilities.

4 Gulf recognized and piloted underground system storm hardening design changes in response to lessons learned from Ivan in 2004. Gulf has not determined a methodology at this time for determining the benefits of undergrounding in coastal areas as a storm hardening technique.

5 Cost for 2007 includes setting up the computer code, the database, and testing. Post storm forensic data collection and analysis will initially increase the cost of the storm due to cost associated with collection and analysis of data. System storm hardening improvements identified through data analysis will not occur until improvements can be budgeted the year after the storm strikes and implemented during the year in which they are budgeted. This time lag for initiating system improvements will be approximately two years after a storm strike. Cost fo Forensic data collection will vary greatly depending on the size of the storm and extent of storm damage.

6 Gulf performs these audits every five years across the system, therefore no dollars are shown for 2004 to 2006.

7 It is not possible to estimate benefits at this time.

8 Transitioning to Grade B construction.

9 Gulf has historically used stainless steel transformers within coastal areas which mitigates damage after a storm surge. Estimates for 07, 08, and 09 based on 3 year average of actuals.

10 Applying Extreme Wind Loading to targeted projects.

11 Estimates to be determined and provided by Third Party Attachers.

12 There are no Third Party Attachers on transmission structures.

Gulf Power Company Three Year Storm hardening Plan
Summary of Estimated Costs and Benefits

Section Number	INITIATIVE	TOTAL COSTS 2007	2008	2009	Estimated Cost Benefits	Estimated Outage Benefits	Comments
2.1	Three Year Vegetation Cycle	$1,540,000.00	$1,540,000.00	$1,540,000.00	$500,000.00	See Section 2.1	
2.2	Joint-Use Pole Attachment Audits for the Year	$384,000.00	$420,000.00	$460,000.00	Unknown	Unknown	Gulf performs these audits every 5 years across the system.
2.3	Six Year Inspection Cycle for Transmission Structures	N.A.C.	N.A.C.	N.A.C.	Unknown	Unknown	Already in place
2.4	Storm Hardening Activities for Transmission Structures	$600,000.00	$600,000.00	$600,000.00	Unknown	Unknown	
2.5	Geographic Information System (GIS)	$75,000.00	$75,000.00	$75,000.00	Unknown	Unknown	Better access to data about facilities
2.6	Post Storm Data Collection and Forensic Analysis	$100,000.00 (See Note 1)	$100,000.00	$100,000.00	Unknown	Unknown	
2.7	Outage Data differentiating between Overhead and Underground Systems	N.A.C.	N.A.C.	N.A.C.	Unknown	Unknown	
2.8	Increase Coordination with Local Governments	N.A.C.	N.A.C.	N.A.C.	Unknown	Unknown	Add annual EOC survey
2.9	Collaborative Research	$15,000.00	$17,000.00	$17,000.00	Unknown	Unknown	
2.10	Disaster Preparedness and Recovery Plan	N.A.C.	N.A.C.	N.A.C.	Unknown	Unknown	Minimizes restoration times with an efficient plan.
3.0	Wood Pole Inspection	$830,000.00	$850,000.00	$850,000.00	Unknown	Unknown	
4.0	National Electric Safety Code (NESC) Compliance - exceed NESC by	$56,300.00	$225,000.00	$225,000.00	$1,122,132.00	$66,621.00	
	transitioning to Grade B construction						
5.0	Extreme Wind Loading standards for Distribution	$523,610.00	$499,229.00	$563,479.00	$271,180.00	$23,095.00	
6.0	Mitigation of damage to flooding and storm surges - use of ss steel transformers	$1,143,733.00	$1,143,733.00	$1,143,733.00	Unknown	Unknown	Overhead portion within Section 5.0
	Piloted Underground Projects	$181,000.00	$100,000.00	$100,000.00	Unknown	Unknown	
7.0	Placement of distribution facilities to facilitate safe and efficient access	N.A.C.	N.A.C.	N.A.C.	Unknown	Unknown	
8.1	Feeder Patrols	$100,000.00	$100,000.00	$100,000.00	Unknown	Unknown	
8.2	Infrared Patrols	N.A.C.	N.A.C.	N.A.C.	Unknown	Unknown	
8.3	Wind Monitors	$43,000.00	$36,000.00	$45,000.00	Unknown	Unknown	
9.0	Storm Plan Deployment Strategy	N.A.C.	N.A.C.	N.A.C.	Unknown	Unknown	
	Total Estimated Plan Costs	$5,410,643.00	$5,605,962.00	$5,719,212.00			

Note 1 – Cost of forensic data collection will vary greatly depending on the size of the storm and extent of storm damage.

Notes: N.A.C. = No Additional Cost

Gulf Power Company Three Year Storm Hardening Plan Total Costs		**$16,735,817.00**