GULF POWER COMPANY

Reliability

and

Storm Hardening Initiatives

Report

March 1, 2011

GULF POWER
A SOUTHERN COMPANY

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1.0 Status Report of Implementation of Storm Hardening Plan

This section is intended to fulfill the requirement for filing a status report of Gulf Power Company's Storm Hardening Plan. A "Stipulation and Agreement" was signed between Gulf Power Company (Gulf) and the Florida Cable Telecommunications Association (FCTA) on November 9, 2010.

On May 1, 2010, Gulf filed its 2010-2012 Storm Hardening Plan update as required by Rule 25-6.0342 FAC. Docket No. 100265-EI was opened to address the updates. On June 10, 2010, the Florida Public Service Commission (FPSC) Staff conducted a workshop to better understand Gulf's plan. In addition to the workshop, the FPSC Staff sent data requests to obtain clarification and additional information. On November 15, 2010 the Florida Public Service Commission approved Gulf's 2010-2012 Storm Hardening Plan.

1.1 2010 Storm Hardening Activities

The following storm hardening activities were initiated and/or completed in the field during 2010:

Distribution
Gulf continued to hold meetings in order to enhance communications between Gulf's field personnel and third party attachers. Meeting notifications were sent to the following third party attachers: AT&T, Cox Communications Gulf Coast , MediaCom, Southern Light, LLC, TelCove, GTC, Comcast Joint Holdings, Inc., Springfield Cablevision, Inc., Knology, Embarq/CenturyLink, Brighthouse Networks, LLC, Century Tel/Madison River Communication, Escambia County School Board, Valparaiso Broadband Communications, Walton County, The Crest Corporation of Panama City, Campbellton Cable TV, Level 3 Communications, LLC, ICON Communications, Community Cable Corporation, Peoples First Community Bank, Pineapple Beach Villas, and Stone Container Corporation. Increased communication between these parties is vital to the success of Gulf's storm hardening initiatives since detailed information on actual or proposed attachments is required to complete computer modeling of poles to determine the type and class of pole required.

During these meetings, Gulf reviewed (1) planned major projects related to the scope of work and the location; (2) questions related to designing to Grade B standards; (3) the ongoing pole inspection program (Osmose); and (4) any operational issues.

Organizational charts and maps identifying Gulf field personnel responsibility areas were provided to the third party attachers. All participants had the opportunity to ask questions and to clarify any issues. The 2010 meetings were held in February and August. Attendees at the meetings held on February 19th in Pensacola and February 25th in Panama City included:

- Gulf field personnel, special project engineers, technical services engineers, and their respective supervision and management
- AT&T
- Mediacom
- Cox Communications Gulf Coast
- Brighthouse Networks, LLC
- Escambia County Schools
- Southern Light
- Alpine Communication Corporation

Attendees at the meetings held on August 26th in Panama City and August 27th in Pensacola included:

- Gulf field personnel, special project engineers, technical services engineers, and their respective supervision and management
- Embarq/Century Link
- AT&T
- ICON Consulting
- Mediacom
- Cox Communications Gulf Coast
- Escambia County School District
- Southern Light

Prior to the 2010 hurricane season, Gulf, Southern Linc, and AT&T representatives held telephone updates to discuss their respective storm plans in the event of a major event. Since February 11, 2008, Gulf has assigned a liaison to AT&T during storm events. This initiative will continue in 2011 and will facilitate a smooth and timely flow of information that indicates when Gulf has neared completion of restoration efforts in a particular area so that AT&T can then begin their own restoration work.

Gulf is on schedule and in some instances ahead of schedule with the following projects in its 2010 – 2012 Storm Hardening Plan and has completed the 2010 portions.

Distribution

- Critical infrastructure and major thoroughfares.
- Underground Network Improvements.
- Conversion of 4kV Distribution Feeders.
- Automated Overhead Faulted Circuit Indicators.
- Distribution Supervisory Control and Data Acquisition (DSCADA).

Transmission

- All critical lines were aerially inspected.
- Five separate aerial patrols of the total system were completed.
- Comprehensive walking/climbing and groundline inspections as part of the six-year inspection program were completed.

2.0 Wood Pole Inspection Program

2.1 Wood Pole Inspection Description

Gulf's 2010 Wood Pole Inspection Program was designed to comply with FPSC Order No. PSC-06-0144-PAA-EI (eight-year inspection cycle) and FPSC Order No. PSC-07-0078-PAA-EU (allowed certain deviations regarding CCA poles less than 15 years in age and poles surrounded by concrete and asphalt). In 2010, Gulf completed the fourth year of the eight-year inspection cycle, utilizing its existing wood pole inspection matrix. This matrix is based on pole age, treatment type and condition, and allows the selective excavation and boring of newer poles.

2.2 2010 Accomplishments

In 2010, a total of 32,016 poles were inspected with a rejection rate of 3.31%. See Appendix 2, titled "Annual Wood Pole Inspection Report" for details.

In the 2009 pole inspection, Gulf identified 418 reject poles. Gulf changed out 386 of these rejects and reinforced 32 poles during 2010. Gulf also began to change out poles identified as rejects from the 2010 inspection and had completed 54.7% of the repairs before the end of 2010.

2.3 *Projected 2011 Goals*

Gulf intends to continue its pole inspection program in 2011 to ensure the Company remains on target to achieve an eight year inspection cycle. In addition, the remaining poles identified in the 2010 pole inspection as rejects will be changed out or reinforced in 2011. These poles are now being engineered and will be upgraded to Grade B construction standards.

3.0 Vegetation Management Programs

3.1 *Distribution Vegetation Management (VM) Plan Overview*

In 2010, the Company implemented the revised Vegetation Management (VM) programs approved in FPSC order No. PSC-06-0947-PAA-EI. The 2010 programs continued to employ many of the successful performance and reliability based elements in the Company's 2007-2009 VM programs. One of the objectives in the 2007-2009 programs was to continually analyze Feeder and Lateral results achieved through the current annual VM programs. After studying trends on our lateral circuits, it was noted that hot spot corrective work was beginning to increase.

To address this trend and facilitate further reliability gains, the Company requested and received Commission approval to shorten its average lateral pruning cycle from six years to four years. The Company began transitioning to the shorter lateral cycle in its 2010 VM programs. The combination of the three year cycle on main line feeders, four year cycle on laterals, and an annual cycle of inspections and correction on main line feeders will ensure the approved cycles are achieved.

The use of the **D**istribution **L**ock-**O**ut **R**eport, **DLOR**, a tracking process developed by the Company to document and track distribution feeder lock-outs, continued to be an effective VM tool throughout 2010. The data collected during field evaluations by our Company engineers, foresters, and arborists helped identify the root causes of feeder breaker lock-outs. This enabled us to modify and improve our VM management practices employed on Gulf's distribution system. The use of DLOR will continue to be a valued element of our future VM programs.

3.2 *Transmission Vegetation Management Plan Overview*

Vegetation hazard removals continued to be the focus of the Company's 2010 Transmission VM programs. Detailed ground patrols were performed on of the Company's transmission ROW corridors in an effort to identify vegetation conditions requiring correction. All vegetation conditions identified by the 2010 patrols were corrected through vegetation removal or pruning activities.

3.3 Tree Gulf

"Tree Gulf" was continued throughout 2010 as a tool to proactively report and address problem vegetation conditions that could pose a future threat to system reliability. "Tree Gulf" streamlined the internal reporting process and electronically produced work-orders directly to Forestry Services to inspect and correct potential vegetation related risks. This tool enabled every Company employee, including non-field personnel, the ability to easily report vegetation concerns through phone, radio, or email communication. "Tree Gulf" generated 417 field work orders during 2010, all of which were appropriately addressed.

3.4 Company's Overall Vegetation Management Summary

During 2010, Gulf pruned 281 miles of main line primary on its scheduled three-year cycle. The remaining 562 miles of main line primary were inspected and any vegetation conditions found to be out of specification were pruned or removed. Gulf also pruned 1,060 miles of laterals as it transitioned to an average four year lateral cycle.

When comparing present and past years' reliability data, benefits and outage reductions were realized through decreases in customer interruptions (CI) and customer minutes of interruption (CMI). The Company's Vegetation Management Feeder Programs, Mainline Annual Trim Schedule and Mainline Inspect & Correct Schedule (MATS & MICS), continued to improve system reliability as shown below:

Reduction	2007- 2008	2008-2009	2009-2010	2007-2010
1) In CI	40%	(5%)	37%	60%
2) In CMI	49%	25%	5%	63%
3) # Outages	29%	0%	40%	57%

With regard to lateral performance, the Company began transitioning to a four year cycle in 2010. A total of 1,060 lateral miles were pruned. The first year's performance with the four year trim cycle resulted in a 14% decrease in customer outages on laterals. While the number of tree-caused outages decreased, adjusted tree-related Customer Interruptions (CI) and adjusted customer minutes of interruption (CMI) increased. The unadjusted CI and CMI continued to decrease (improve). Unadjusted CI decreased by 6.9% while the unadjusted CMI decreased by 1.7%. The Company expects to realize future improvements in CI and CMI as the four year lateral cycle continues. Gulf will continue to closely monitor VM reliability performance indicators and adjust its VM program as necessary.

Centralized oversight for these VM programs is achieved through the Company's Contract Services and Forestry Services section. Forestry Services, staffed by degreed Foresters and/or ISA Certified Arborists, develops, plans, and manages all VM programs and the contract resources responsible for performing the Company's transmission and distribution vegetation maintenance activities. Forestry Services personnel also assist in the Company's efforts to provide safety and educational information to the public. A bill insert was developed to help Gulf Power customers become more aware of safety and reliability issues related to tree planting near power lines. Company employees continued to speak at various grammar school classes educating students on how electricity is delivered to their homes and schools, and the importance of power line safety (including the risks of planting and maintaining trees near power lines).

3.5 2010 Distribution Performance Metrics (System Wide)

1. Distribution VM Reliability

		Feeder			Lateral	
Outages & Interruptions	**Unadjusted**	**Adjusted**	**Diff.**	**Unadjusted**	**Adjusted**	**Diff.**
A) Number of Outages	12	12	0	850	850	0
B) Customer Interruptions	18,024	18,024	0	52,972	52,972	0
C) Outages Per Mile	0.014	0.014	0	0.169	0.169	0
D) Vegetation CI Per Mile	21.38	21.38	0	10.50	10.50	0
E) Customer Minutes of Interruption	1,254,032	1,254,032	0	6,926,175	6,926,175	0

2. Distribution Performance

VM Miles Cleared and Contractor Cost	Plan (mi)	Actual (mi)	Plan ($)	Actual ($)
A) **MATS** Mainline Annual Trim Schedule (3 Year Cycle)	281	281	544,221	534,000
B) **MICS** Mainline Inspect & Correct Schedule (1 Year Cycle)	562	562	131,970	165,718
C) **SALT** Scheduled Annual Lateral Trim (4 Year Cycle)	1,261	1,060	3,207,097	3,499,500
D) **TICKETS** Hot Spot Tickets Completed with Contract Cost	**Feeder** (T)	**Lateral** (T)	**Feeder** ($)	**Lateral** ($)
	6	2,056	1,619	406,508

(Tickets Worked = T, Costs = $)

3. Total Distribution Vegetation Cost

VM Planned Vs Actual Program Costs	Plan ($)	Actual ($)
A) **VM Contractor Costs** (MATS, MICS, SALT, and TICKETS)	4,887,644	4,857,868
B) **VM Other Program Costs** (Internal Labor and Miscellaneous)	30,456	49,362
C) **Total Distribution Vegetation Cost**	4,918,100	4,907,230

4.0 Joint Use Pole Attachment Audits

Gulf performs its joint use inventory audits, covering the overhead distribution system as required by FPSC Order No. PSC-06-0781-PAA-EI every five years. The next audit is scheduled to begin in March 2011.

- 100% of System Audited
- Audit conducted May 1, 2006 through September 30, 2006
- Previous audit date 2001
- Audits conducted on 5 year cycle

4.1 Activity and Costs Incurred for 2010 and 2011 Projections

1	2010 Joint Use Pole Audit (projected costs)	N/A
2	2010 Pole Strength and Loading Engineering and Replacements (actual costs)	(Note 1)

NOTES:

Note 1: Based on field results from the previous 3 years, the FPSC approved Gulf's 2010-2012 Storm Hardening Plan which discontinued the pole sampling program.

4.2 Joint Use Attachment Audits – Distribution Poles

(A) Number of company owned distribution poles (See Note 1)	253,365
(B) Number of company distribution poles leased: 7 Telecomm attachers on Gulf's poles (See Note 2)	132,695
(C) Number of owned distribution pole attachments: 7 CATV, numerous Government and other 3rd party attachers on Gulf's poles (See Note 3)	134,849
(D) Number of leased distribution pole attachments: Foreign poles Gulf Power is attached to (See Note 4)	64,148
(E) Number of authorized attachments: Sum of all attachments to Gulf Power Company poles (See Note 4)	266,096
(F) Number of unauthorized attachments: Gulf's best estimate based on Joint Use Pole Inventory results (See Note 5)	6,379
(G) Number of apparent NESC violations involving electric infrastructure	Note 6
(H) Number of apparent NESC violations involving 3rd party facilities	Note 6

NOTES:

Note 1: As of December 2010.
Note 2: Numbers based on permitting, ATT's forecast of attachments in 2010 and the 2006 pole count.
Note 3: Numbers based on 2010 permitting and the 2006 pole count.
Note 4: Data based on the 2006 pole count and ATT's forecast of attachments for 2010.
Note 5: Data based on the 2006 pole count.
Note 6: Gulf Power does not collect this type of data as part of the Joint Use process. When Gulf becomes or is made aware of NESC violations, Gulf takes corrective measures.

5.0 Six-Year Inspection Cycle for Transmission Structures

5.1 Activity and Costs Incurred for 2010 and 2011 Projections

In 2004, Gulf adopted the Southern Company Transmission Line Inspection Standards. Gulf contracts ground line inspections and uses a combination of Company employees and contractors to perform comprehensive walking and aerial inspections. Gulf Power Company's transmission inspection program is based on two alternating twelve-year cycles which result in a structure being inspected at least every six years. As part of the Transmission Line Inspection Standards, Gulf performs at least 4 routine aerial patrols each year.

In 2010, Gulf Power spent a total of $215,019 on a combination of comprehensive walking and ground line treatments for metal poles and towers. In addition to this amount, Gulf spent $453,350 on a combination of comprehensive walking inspections and ground line treatments for wood and concrete poles. These amounts are shown in Section 5.3 and 5.4 respectively. All inspections are on schedule to meet the six-year timeline. Additionally, Gulf completed 5 aerial inspections of its entire system with an actual cost of $116,380.

5.2 *Transmission Circuit, Substation and Other Equipment Inspections*

Gulf completed 33 transmission substation inspections during 2010 as planned. The costs associated with inspections are not tracked separately from general maintenance expenses. Gulf transmission does not inspect by circuit.

5.3 *Transmission Metal Pole and Tower Inspections*

	2010 Activity		2010 Costs		2011	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total Transmission Metal Poles and Towers Inspections(Note 1)	-	3283	-	-	-	-
(B) Transmission Metal Poles and Towers	741	1761	$32,802	$215,019	300	$37,571
(C) Percent of transmission Metal Poles and Tower inspections completed	-	54%	-	-	-	-

NOTES:

Note 1: For better tracking, this table includes the count of all metal poles and towers. Previously, it included towers only. This count is not by structure and is by pole or tower. The number increased due to continual improvement of our GIS database on pole type.

5.4 Transmission Pole Inspections

	2010 Activity		2010 Costs		2011	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Total number of Transmission Poles[(Note 1)]	-	14,837	-	-	-	-
(B) Number of transmission poles inspected.	2,986	3,895	$131,211	$453,350	1,682	$212,908
(C) Number of transmission poles passing inspection.	-	3,421	-	-	-	-
(D) Number of transmission poles failing strength test (overloaded)	-	N/A	-	-	-	-
(E) Number of transmission poles failing inspection (other reasons).	-	474	-	-	-	-
(F) Number of transmission poles corrected (strength failure)	-	0	-	-	-	-
(G) Number of transmission poles corrected (other reasons)	-	387	-	-	-	-
(H) Total transmission poles replaced	-	387	-	-	383	-

NOTES:

Note 1: This count is for the number of wood and concrete poles. The total number of transmission poles decreased due to an error discovered with double circuit poles being counted twice. The correction of this error reduced the pole count. Additionally, Gulf rebuilt several lines utilizing fewer poles.

6.0 Storm Hardening Activities for Transmission Structures

6.1 Activity and Costs Incurred for 2010 and 2011 Projections

Gulf Power Company identified two priority hardening activities for transmission structures: installation of guys on H-frame structures and replacement of wooden cross arms with steel cross arms. These activities will add additional strength capacity to the existing structures.

Gulf Power Company believes these two activities are the best alternatives for existing transmission assets most at risk. All replacements and installations are proceeding on schedule to meet the target completion dates.

6.2 Hardening of Existing Transmission Structures (Poles)

	2010 Activity		2010 Costs		2011	
	Goal	Actual	Budget	Actual	Goal	Budget
(A) Transmission structures hardened	300	324	(Note 1)	(Note 1)	858 (Note 2)	$600,000
(B) Percent Transmission structures hardening completed	-	108%	-	-	-	-

NOTES:

Note 1: Actual dollars spent are incorporated into a budget for maintenance replacement of capital items and not separated by hardening activity.

Note 2: The 2010-2012 Storm Hardening Plan referenced Gulf Power performing a wood arm and storm guy re-count utilizing a helicopter instead of a fixed wing aircraft. This was done in October 2010 and produced accurate wood arms and un-guyed structures remaining on the system. This resulted in an increased 2011 goal.

7.0 Distribution Substations

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

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

7.2 Distribution Substation Reliability Tracking

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

7.3 Distribution Substation Reliability Problem Identification Process

In order to promote substation reliability, inspections are performed. These inspections include visual checks on all equipment including breakers, regulators, transformers and battery banks. The substation is verified to ensure that proper signs are installed. The fence is checked for security and proper grounding. Yard lights are checked and weed problems are noted. Any abnormal condition is repaired immediately or is recorded as an abnormal condition and scheduled for repair in the future.

Along with station inspections, equipment maintenance is performed on a regular cycle to maintain reliability. A detailed battery inspection is completed every six months with impedance tests performed every four years. Preventative diagnostics on Oil Breakers are performed every two years. Preventative diagnostics on12kV vacuum breakers are performed every four years. Preventative diagnostics on regulators are performed every year. A dissolved gas analysis is performed on transformers every year and power factor testing is performed every six years.

7.4 Distribution Substation Inspections during Normal Operations

Gulf inspected all of its distribution substations at least once during 2010.

8.0 Geographic Information System (GIS)

8.1 Activity and Costs Incurred for 2010 and 2011 Projections

Gulf completed its distribution facilities mapping transition to its new Distribution Geographic Information System (DistGIS) in 2009.

The Transmission system has been completely captured in the Transmission GIS database. Transmission GIS continues to be updated with any additions and changes as the associated work orders for maintenance, system improvements, and new business are completed.

There are no costs to report. The updating of this data is now a part of existing systems and processes and is no longer separately tracked.

8.2 Distribution Overhead Data Input

All overhead distribution equipment has been captured in Gulf's DistGIS including conductors, regulators, capacitors and switches, protective devices such as reclosers, sectionalizers, fuses and transformers. The DistGIS continues to be updated with any additions and changes as the associated work orders for maintenance, system improvements, and new business are completed. This on-going process provides Gulf sufficient facility information to use with collected forensic data to assess performance of its overhead system in the event of a major storm.

8.3 Distribution Underground Data Input

All underground distribution equipment has been captured in Gulf's DistGIS including conductors, regulators, capacitors and switches,

protective devices such as reclosers, sectionalizers, fuses and transformers. The DistGIS continues to be updated with any additions and changes as the associated work orders for maintenance, system improvements, and new business are completed. This on-going process provides Gulf sufficient facility information to use with collected forensic data to assess performance of its underground system in the event of a major storm.

9.0 Post Storm Data Collection and Forensic Analysis

9.1 Activity and Costs Incurred for 2010 and 2011 Projections

Distribution:

The 2010 storm season was uneventful so there was no need to bring the forensic collection team on the system. The contractor did conduct a refresher training course during 2010 to ensure the inspectors stay current on the procedures for forensic collection.

Gulf feels confident that it is ready to perform post-storm forensics if needed in the 2011 storm season.

Transmission:

Gulf Power Company's Transmission department's forensics team will be led by the transmission engineering function. Utilizing an aerial patrol with a fixed wing aircraft, the team will capture an initial assessment of the level of damage to the transmission system. A follow-up aerial patrol utilizing helicopters will capture GPS coordinates for each failure and record the failures with the Transmission Line Inspection System (TLIS). When ground crews arrive on the scene, the construction inspector with the crew will be responsible for assessing all damage and making a determination as to the cause of the failure. Gulf's Transmission Engineering department will review all findings of the field inspection and determine if additional information should be gathered.

Gulf Power's existing Common Transmission Data Base (CTDB) will be utilized to capture all forensic information. The TLIS tool will be used to track all facility failures and create work orders to associate those failures with the affected facilities. TLIS utilizes geographic mapping software to track the location facilities.

10.0 Outage Data Differentiating Between Overhead and Underground Systems

Gulf did not experience any damage from FPSC excludable storms in 2010. No major storm related data is available for this section.

10.1 Activities and Costs Incurred in 2010 and 2011 Projections

As reported previously, Gulf expanded its record keeping and analysis of data associated with overhead and underground outages, some of which is included in Section 15.10.4 of this report. Gulf continued collecting 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

This data was collected as each outage occurred using the Company's Trouble Call Management System (TCMS). Data collected in 2010 is shown in the tables below. This data includes transmission, planned outages, and all exclusions. The costs of collecting this data were minimal as existing systems and processes were utilized.

Cust	System	N	CI	CMI	Dur	SAIDI	SAIFI	CAIDI	L-Bar
430,658	Overhead	10,067	950,774	67,576,332	1,146,742	157	2	71	114
430,658	URD - Direct Burial	506	12,714	1,941,887	93,051	5	0.03	153	184
430,658	URD - In Conduit	161	3,362	477,294	20,198	1	0.01	142	125
430,658	URD - Injected	3	14	1,364	454	0	0.00	97	151
430,658	URD - Undetermined	410	12,357	2,014,549	90,997	4.7	0.03	163.03	222

Cust	Failure	N	CI	CMI	Dur	SAIDI	SAIFI	CAIDI	L-Bar
430,658	Pole - Wood	56	18,067	2,157,093	11648	5.01	0.04	119	2081

11.0 Coordination with Local Governments

For years, Gulf Power has emphasized the importance of coordinating with local governments on major projects and storm preparedness. For all major projects, Gulf meets with governmental entities as appropriate to discuss the scope of the projects and coordinate activities involved with project implementation. Gulf also works very closely with the county Emergency Operation Centers (EOC) in its service area for storm preparedness and restoration activities as needed.

In 2007, Gulf initiated a periodic communication survey with the four active EOCs in Northwest Florida to gauge the Company's participation and communication levels with the EOCs. In the surveys the Directors for the Escambia County, Santa Rosa County, Okaloosa County, and Bay County EOCs are asked to gauge Gulf's participation level, responsiveness, presence in the EOC, and overall information exchange. Three surveys of this type have been conducted over the years. In all cases, all four EOCs rated Gulf Power's coordination efforts as outstanding. The surveys show that Gulf Power values and actively pursues a positive and cooperative relationship with the leadership in every community served.

In addition to being active partners with the emergency centers, Gulf maintains year-round contact with city and county officials to ensure cooperation in planning, good communications and coordination of activities.

Gulf Power also hosts Community Leader Forums in the three geographic districts. Community, government, education and business leaders are invited to these half-day events where Gulf Power gives an update on Gulf's plans and activities and asks for input from the community. Working with the community leaders, two or three key community issues are identified and brought to the forum for leaders to listen to each other and build consensus on how to address the issues.

Gulf also has designated employees in every community whose job is to keep in regular contact with city, county and business leadership.

11.1 Ongoing Programs

Gulf Power Company has several employees with local government liaison responsibilities in Northwest 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 employees interact with city and county personnel on a daily/weekly basis regarding numerous issues, including emergency preparedness

as needed. Due to the regularity of interaction, it would not be feasible to document all liaisons initiated. These employees are also actively involved in specific government/business committees that focus on emergency preparedness needs in Northwest Florida. Examples of those include:

- 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.
- 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.

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

In addition to numerous planning meetings with the EOCs, Gulf Power personnel also participated in the following hurricane activities with local governments during 2010:

- Escambia County EOC:
  - Hurricane Drill
  - All EOC Activations
  - Media Storm Training Session
  - EOC Representative Training
- Santa Rosa Co. EOC:
  - Hurricane Drill
  - All EOC Activations
  - EOC Representative Training
- Okaloosa County EOC:
  - Hurricane Drills
  - All EOC Activations
  - EOC Representative Training

- Media Storm Training Session (Emergency Communication Procedures)

- Bay County EOC:
  - Hurricane Drill
  - All EOC Activations
  - Media Storm Training Session (Emergency Communication Procedures)

11.2 Storm Preparation

Gulf Power Company has 12 employees dedicated to the county EOCs throughout Northwest Florida. Each of those employees received federal certification under the National Incident Management System (NIMS) through FEMA. The EOC Representatives assist city and county agencies and officials during emergencies that warrant activation of the county EOCs. Gulf Power provides 24-hour coverage throughout the duration of the EOC activation. All actions are based on the Company's central Emergency Operations Plan.

Gulf Power's Emergency Operations Plan includes ongoing communications, pre-storm communications, and post-storm communications supplied by 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.

11.3 Storm Restoration

Gulf maintains a communication link with the activated EOCs for a storm event. Assigned Gulf Power representatives immediately coordinated pre-storm activities with the County EOCs to establish emergency communication links with local and state officials, the media, and restoration crews for all 2010 EOC activations.

Gulf Power strives to restores priority emergency services as quickly as possible. In addition, Gulf Power has completed storm-hardened pilot projects for feeder lines that serve critical infrastructures such as hospitals, water treatment facilities, and fuel depots to minimize outages of these facilities during major storm events. No hurricane-related outages required emergency restoration services during 2010.

12.0 Collaborative Research

As a member of the Public Utility Research Center (PURC), Gulf participates in the research activities for Storm Hardening as described by PURC management in Appendix 4.

13.0 Disaster Preparedness and Recovery Plan

Gulf's 2010 Disaster Preparedness and Recovery Plan had no major revisions from what was submitted in the Company's March 1, 2010 annual filing. A copy can be provided upon request.

13.1 Activity and Costs Incurred for 2010 and 2011 Projections

In response to the April 2010 oil spill event, Gulf provided general awareness training to our storm team responders. Specific training (Hazardous Waste Operations – HAZWOPER) was given to those individuals who would conduct initial and detailed site evaluations in storm surge areas. An oil awareness brochure was developed as a communication tool to give to off system line personnel and support personnel responding to a storm disaster on our system. It is anticipated that costs associated with this effort will be recovered through the claims process.

13.2 Disaster Recovery Plan Activity

Gulf's 2011 Storm Procedures Manual is currently being reviewed by management. Revisions, if any, will be returned and incorporated in the Manual by June 1, 2011. Storm assignments and training schedules are being finalized with plans for training to be completed prior to hurricane season.

13.3 Hurricane Drill

A mock hurricane drill was conducted on May 27, 2010 at Gulf's Corporate Office. The purpose of this drill was to enhance coordination and cooperation by involving all participants in rehearsing departmental readiness plans in response to a natural disaster. Escambia County's Emergency Manager, John Dosh, spoke on the issues they face and

their preparedness plans. Allen Strum, the Weather Anchor/Chief Meteorologist with the local ABC news affiliate, reviewed the 2010 hurricane forecast. Gulf's discussions focused on:

- The preparedness cycle of (1) planning (2) organizing, training, and equipping personnel (3) conducting exercises and (4) evaluating and improving processes
- The importance of employees preparing their homes and family both prior to and after landfall
- Safety precautions both before, during, and after a storm
- Worst case scenarios
- The drill scenario called for a hurricane landfall at Hurlburt Field in Mary Ester, Florida as a category 3 with a hurricane severity index of 36. Participants tested their responses and the quality of existing plans based on the availability of outside resources and logistics capabilities

Gulf Power Company's next hurricane drill is scheduled for May 23, 2011.

14.0 Storm Season Ready Status

Storm Recovery Plan

Gulf uses the strategy described in its Storm Recovery Plan to respond to any natural disaster that may occur in our service area. The plan has previously proven to be very effective in recovering from multiple storms that have impacted Gulf and its customers. As part of its annual operations, Gulf has developed and refined its planning and preparations for the possibility of a natural disaster in the Florida panhandle. 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 experiences from recovery efforts within northwest Florida as well as serving to assist other utilities that have suffered weather related natural disasters.

Gulf's plan has been encapsulated within a detailed and proprietary Storm Recovery Plan procedure manual as an element of its Natural Disaster Preparedness and Recovery program. The manual will follow the guidelines and philosophy set forth in the Storm Recovery Plan.

The restoration procedure establishes a plan of action to be utilized for the operation and restoration of generation, transmission, and distribution facilities during major disasters. Such disasters include hurricanes, tornadoes, and storms that could cause widespread outages to Gulf's customers.

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

The company garners support from a number of resources including but not limited to the Southeastern Electric Exchange (SEE) Mutual Assistance Group and Southern Company for distribution, logistics and the Transmission Emergency Restoration Plan.

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'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.

15.0 2010 Reliability Performance

15.1 Overall Performance

For 2010, Gulf Power's actual system indices showed improvements in two of the five metrics. The actual system indices for SAIDI, CAIDI, SAIFI, MAIFIe and CEMI5 which represent the full reliability picture experienced by Gulf's customers, showed a 6% increase, 19% improvement, 31% increase, 18% improvement and 53% increase respectively.

The adjusted system indices also showed improvements in two of the five metrics. CAIDI showed a 19% improvement and MAIFIe showed a 14% improvement.

Gulf had zero distribution weather exclusions for 2010.

In 2010, there was an extreme January weather event that was not excludable because it was not a named storm or NWS recordable tornado. The total SAIDI impact for this significant event was 7.43. Exclusion of this event results in a Gulf adjusted SAIDI of 138.21 or a 1% improvement from 2009 to 2010.

In 2010, Gulf continued to seek improvements in the company's distribution reliability. The **D**istribution **L**ock-**O**ut **R**eport was developed and implemented in 2007 to document and track distribution feeder lock-outs, recognize root causes of feeder lock-outs, and identify systems and operational modifications that could be implemented to prevent future feeder lock-outs. A 2009 process improvement was implemented, called

"TreeGulf", which provides a pro-active way for any employee to efficiently notify Gulf's Forestry Services Department of a vegetation problem.

See Appendix 1 for 2010 actual data and adjusted data.

15.2 Data Tracking Level

Gulf continues to collect outage data down to the customer meter level using the Trouble Call Management System (TCMS).

15.3 Critical Review of Detailed Reliability Data

In 2010, Gulf was impacted by several storm events which did not meet the FPSC exclusion criteria.

In 2010, there were outage events that were uncontrollable. As previously stated, there was an extreme weather event in January that was not excludable because it was not a named storm or NWS recordable tornado. The removal of this major event from Gulf's adjusted numbers results in an adjusted SAIDI of 138.21 or a 1% improvement from 2009 to 2010.

In 2010, although the overhead transformers scrapped have increased, the overhead change of 5% is not deemed significant. The large underground change of 44% is due to replacement of deteriorated transformer units identified for replacement from inspections.

Both Gulf actual and adjusted total system outages (N) from 2009 to 2010 showed a significant improvement with reduced outages of approximately 8% and 10% respectively. Eight of the top ten outage causes showed improvements.

A review of the data in the table below from 2005 to 2010, shows that immediately after the major storms of Ivan and Dennis, both overhead and underground failures escalated. Overhead transformer failures leveled off in the last four years while underground transformers continue to experience high change outs as a result of problems found from inspections.

YEAR	OVERHEADS	% OH CHANGE Compared to 99 - 03 Average of 1523	PAD-MOUNTS	% UG CHANGE Compared to 99 - 03 Average Of 226
1999	1,509		214	
2000	1,639		180	
2001	1,727		220	
2002	1,516		272	
2003	1,224		246	
2004	1,967	29%	244	8%
2005	3,004	97%	433	92%
2006	2,212	45%	333	47%
2007	1,576	4%	336	49%
2008	1,451	(5%)	222	(2%)
2009	1,569	3%	372	65%
2010	1,600	5%	325	44%

15.4 Identification and Selection of Detailed Reliability Data

The identification and selection of detailed reliability data continues to be a part of Gulf's Trouble Call Management System (TCMS) process. Gulf's outage data collection captures information down to the customer meter level. As a result, Gulf can review data and the resulting reliability indices at the system level and by its three districts – Western, Central, and Eastern.

15.5 Generation Events – Adjustments

There were no generation events excluded from distribution reliability reporting in 2010.

15.6 Transmission Events – Adjustments

See Appendix 1 for transmission excluded events and associated outage causes and resolutions.

15.7 Extreme Weather – Adjustments

Gulf did not have any weather events which met the FPSC exclusion criteria.

15.8 Other Distribution Adjustments

Please see Appendix 1 for Planned Outage excluded events.

15.9 Adjusted Reliability

15.9.1 Outage Event Causes

15.9.1.1 Five-Year Patterns

Below are trend tables showing the percentage of change in N and separate tables for SAIDI and SAIFI showing the percentage change for five years for the top ten outage causes.

Gulf is still in the process of analyzing the 2010 data to determine the need for any specific improvement activities beyond current programs and storm hardening initiatives which are underway.

Cause	**(All)**						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	2,371	2,404	2,567	2,819	2,984	2,495
	% Change	13%	1%	7%	10%	6%	-16%
Eastern	N	1,719	2,273	1,917	2,133	1,964	1,913
	% Change	9%	32%	-16%	11%	-8%	-3%
Western	N	5,548	5,199	5,466	6,481	6,294	5,929
	% Change	6%	-6%	5%	19%	-3%	-6%
Company	N	9,638	9,876	9,950	11,433	11,242	10,337
	% Change	8%	2%	1%	15%	-2%	-8%

Cause	Animal						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	532	611	730	1,009	942	847
	% Change	-4%	15%	19%	38%	-7%	-10%
Eastern	N	264	412	345	402	314	344
	% Change	0%	56%	-16%	17%	-22%	10%
Western	N	690	586	1,014	2,006	1,856	1,772
	% Change	-42%	-15%	73%	98%	-7%	-5%
Company	N	1,486	1,609	2,089	3,417	3,112	2,963
	% Change	-26%	8%	30%	64%	-9%	-5%

Cause	Deterioration						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	439	497	573	557	661	536
	% Change	10%	13%	15%	-3%	19%	-19%
Eastern	N	343	365	430	500	449	451
	% Change	8%	6%	18%	16%	-10%	.5%
Western	N	852	1,052	1,185	1,243	1,223	1,224
	% Change	-4%	23%	13%	5%	-2%	.08%
Company	N	1,634	1,914	2,188	2,300	2,333	2,211
	% Change	1%	17%	14%	5%	1%	-5%

Cause	Lightning						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	361	427	447	397	469	299
	% Change	8%	18%	5%	-11%	18%	-36%
Eastern	N	270	461	378	433	352	305
	% Change	-2%	71%	-18%	15%	-19%	-13%
Western	N	1,220	1,419	1,287	1,324	1,259	965
	% Change	31%	16%	-9%	3%	-5%	-23%
Company	N	1,851	2,307	2,112	2,154	2,080	1,569
	% Change	20%	25%	-8%	2%	-3%	-25%

Cause	Tree						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	170	217	219	234	244	218
	% Change	-14%	28%	1%	7%	4%	-11%
Eastern	N	170	249	325	314	296	235
	% Change	-19%	46%	31%	-3%	-6%	-21%
Western	N	640	826	875	766	753	698
	% Change	-18%	29%	6%	-12%	-2%	-7%
Company	N	980	1,292	1,419	1,314	1,293	1,151
	% Change	-18%	32%	10%	-7%	-2%	-11%

Cause	Unknown						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	518	218	224	282	289	170
	% Change	57%	-58%	3%	26%	2%	-41%
Eastern	N	368	274	151	152	200	136
	% Change	51%	-26%	-45%	1%	32%	-32%
Western	N	1,351	495	367	440	499	333
	% Change	65%	-63%	-26%	20%	13%	-33%
Company	N	2,237	987	742	874	988	639
	% Change	61%	-56%	-25%	18%	13%	-35%

Cause	Contamination/Corrosion						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	85	62	62	68	66	90
	% Change	44%	-27%	0%	10%	-3%	36%
Eastern	N	52	65	63	68	76	79
	% Change	-10%	25%	-3%	8%	12%	4%
Western	N	287	157	211	152	133	97
	% Change	54%	-45%	34%	-28%	-13%	-27%
Company	N	424	284	336	288	275	266
	% Change	40%	-33%	18%	-14%	-5%	-3%

Cause	Other						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	66	46	71	42	58	74
	% Change	29%	-30%	54%	-41%	38%	28%
Eastern	N	84	65	63	57	60	71
	% Change	58%	-23%	-3%	-10%	5%	18%
Western	N	104	112	137	99	127	143
	% Change	-4%	8%	22%	-28%	28%	13%
Company	N	254	223	271	198	245	288
	% Change	20%	-12%	22%	-27%	24%	18%

Cause	Overload						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	32	36	35	52	72	66
	% Change	52%	13%	-3%	49%	38%	-8%
Eastern	N	28	29	37	52	56	97
	% Change	17%	4%	28%	41%	8%	73%
Western	N	58	72	71	99	84	251
	% Change	222%	24%	-1%	39%	-15%	199%
Company	N	118	137	143	203	212	414
	% Change	87%	16%	4%	42%	4%	95%

Cause	Vehicle						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	24	33	38	16	38	57
	% Change	-23%	38%	15%	-58%	138%	50%
Eastern	N	16	29	27	16	37	66
	% Change	-41%	81%	-7%	-41%	131%	78%
Western	N	39	57	46	39	91	141
	% Change	-39%	46%	-19%	-15%	133%	55%
Company	N	79	119	111	71	166	264
	% Change	-35%	51%	-7%	-36%	134%	59%

Cause	Vines						
Region	Data	2005	2006	2007	2008	2009	2010
Central	N	16	16	30	45	30	35
	% Change	0%	0%	88%	50%	-33%	17%
Eastern	N	24	21	18	38	29	41
	% Change	4%	-13%	-14%	111%	-24%	41%
Western	N	40	46	70	79	91	113
	% Change	-49%	15%	52%	13%	15%	24%
Company	N	80	83	118	162	150	189
	% Change	-32%	4%	42%	37%	-7%	26%

The SAIDI and SAIFI Trend Tables showing the percentage change for five years for the top ten causes are shown below.

Cause	(All)						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	121.09	174.13	109.35	98.93	106.63	115.30
	% Change	61%	44%	-37%	-10%	8%	8%
Eastern	SAIDI	78.74	331.38	100.44	140.23	140.08	133.41
	% Change	15%	321%	-70%	40%	0%	-5%
Western	SAIDI	129.79	157.55	145.73	145.89	157.47	168.02
	% Change	11%	21%	-8%	0%	8%	7%
Company	SAIDI	114.87	205.12	124.80	132.45	140.01	145.64
	% Change	22%	79%	-39%	6%	6%	4%

Cause	(All)						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	1.349	1.276	0.952	1.142	1.082	1.577
	% Change	80%	-5%	-25%	20%	-5%	46%
Eastern	SAIFI	0.712	1.288	1.121	1.127	1.200	1.637
	% Change	10%	81%	-13%	1%	6%	36%
Western	SAIFI	1.237	1.274	1.323	1.449	1.589	1.88
	% Change	15%	3%	4%	10%	10%	18%
Company	SAIFI	1.135	1.278	1.176	1.288	1.359	1.74
	% Change	28%	13%	-8%	10%	6%	28%

Cause	Animal						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	4.81	7.49	11.67	9.86	10.08	8.82
	% Change	-15%	56%	56%	-16%	2%	-13%
Eastern	SAIDI	3.58	9.51	5.03	5.53	2.63	9.8
	% Change	99%	166%	-47%	10%	-52%	273%
Western	SAIDI	2.84	3.23	5.33	11.14	13.81	13.52
	% Change	-56%	13%	65%	109%	24%	-2%
Company	SAIDI	3.53	5.90	6.88	9.37	9.97	11.36
	% Change	-30%	67%	17%	36%	6%	14%

Cause	Animal						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.063	0.103	0.153	0.166	0.177	.183
	% Change	-18%	62%	49%	8%	7%	3%
Eastern	SAIFI	0.035	0.105	0.063	0.058	0.033	.103
	% Change	42%	203%	-39%	-8%	-43%	212%
Western	SAIFI	0.037	0.042	0.074	0.144	0.133	.172
	% Change	-54%	15%	78%	94%	-8%	29%
Company	SAIFI	0.043	0.073	0.092	0.128	0.119	.157
	% Change	-34%	71%	25%	39%	-7%	32%

Cause	Deterioration						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	23.54	42.01	17.45	17.35	26.72	26.85
	% Change	72%	78%	-58%	-1%	54%	.5%
Eastern	SAIDI	8.71	16.14	15.99	25.09	23.76	25.26
	% Change	-33%	85%	-1%	57%	-5%	6%
Western	SAIDI	9.51	13.61	19.37	21.65	26.83	29.24
	% Change	-12%	43%	42%	12%	24%	9%
Company	SAIDI	12.93	21.62	18.01	21.44	26.01	27.6
	% Change	7%	67%	-17%	19%	21%	6%

Cause	Deterioration						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.184	0.159	0.163	0.193	0.225	.291
	% Change	84%	-14%	2%	18%	17%	29%
Eastern	SAIFI	0.059	0.115	0.168	0.220	0.160	.239
	% Change	-51%	94%	46%	30%	-27%	49%
Western	SAIFI	0.061	0.104	0.173	0.207	0.239	.359
	% Change	-15%	71%	66%	20%	15%	50%
Company	SAIFI	0.092	0.121	0.169	0.207	0.215	.31
	% Change	2%	31%	40%	22%	4%	44%

Cause	Lightning						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	22.86	37.07	32.78	20.30	21.23	17.39
	% Change	9%	62%	-12%	-38%	5%	-18%
Eastern	SAIDI	21.41	52.12	26.47	32.75	44.16	15.87
	% Change	12%	143%	-49%	24%	35%	-64%
Western	SAIDI	40.01	44.79	36.73	43.47	52.58	33.64
	% Change	49%	12%	-18%	18%	21%	-36%
Company	SAIDI	30.97	44.61	33.09	34.80	42.41	24.92
	% Change	32%	44%	-26%	5%	22%	-41%

Cause	Lightning						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.292	0.261	0.269	0.208	0.237	.173
	% Change	46%	-11%	3%	-23%	14%	-27%
Eastern	SAIFI	0.178	0.290	0.268	0.220	0.317	.120
	% Change	50%	62%	-7%	-18%	44%	-62%
Western	SAIFI	0.288	0.306	0.311	0.313	0.394	.254
	% Change	46%	7%	1%	1%	26%	-36%
Company	SAIFI	0.262	0.290	0.289	0.262	0.334	.199
	% Change	46%	11%	0%	-9%	27%	-40%

Cause	Tree						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	6.28	10.76	5.94	3.66	7.03	9.78
	% Change	-16%	71%	-45%	-38%	92%	39%
Eastern	SAIDI	8.87	15.49	22.01	25.00	22.43	19.13
	% Change	-13%	75%	42%	14%	-10%	-15%
Western	SAIDI	15.58	36.55	37.40	27.71	20.63	25.3
	% Change	-46%	135%	2%	-26%	-26%	23%
Company	SAIDI	11.52	24.61	25.39	20.88	17.63	19.75
	% Change	-39%	114%	3%	-18%	-16%	12%

Cause	Tree						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.086	0.101	0.053	0.037	0.086	.075
	% Change	1%	17%	-47%	-30%	132%	-13%
Eastern	SAIFI	0.103	0.131	0.180	0.206	0.220	.187
	% Change	-16%	28%	37%	15%	7%	-15%
Western	SAIFI	0.184	0.332	0.358	0.225	0.189	.216
	% Change	-45%	81%	8%	-37%	-16%	14%
Company	SAIFI	0.138	0.222	0.234	0.172	0.171	.173
	% Change	-36%	60%	5%	-26%	-1%	1%

Cause	Unknown						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	23.73	14.00	16.37	9.87	5.85	9.10
	% Change	110%	-41%	17%	-40%	-41%	56%
Eastern	SAIDI	17.65	26.24	9.92	5.31	5.67	13.41
	% Change	40%	49%	-62%	-46%	7%	137%
Western	SAIDI	27.49	11.15	9.04	9.86	7.91	10.08
	% Change	63%	-59%	-19%	9%	-20%	27%
Company	SAIDI	24.08	15.65	11.15	8.69	6.81	10.69
	% Change	67%	-35%	-29%	-22%	-22%	57%

Cause	Unknown						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.352	0.208	0.079	0.140	0.087	.146
	% Change	131%	-41%	-62%	77%	-38%	68%
Eastern	SAIFI	0.180	0.119	0.160	0.063	0.066	.128
	% Change	24%	-34%	34%	-61%	6%	94%
Western	SAIFI	0.335	0.129	0.107	0.154	0.140	.146
	% Change	95%	-62%	-17%	44%	-9%	4%
Company	SAIFI	0.301	0.147	0.114	0.127	0.107	.141
	% Change	88%	-51%	-23%	12%	-15%	32%

Cause	Vehicle						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	12.29	6.54	6.27	20.85	10.65	8.55
	% Change	30%	-47%	-4%	233%	-49%	-20%
Eastern	SAIDI	5.94	8.36	5.63	18.26	25.97	8.96
	% Change	-8%	41%	-33%	224%	42%	-66%
Western	SAIDI	19.03	15.43	22.28	19.90	16.40	23.91
	% Change	22%	-19%	44%	-11%	-18%	46%
Company	SAIDI	14.04	11.36	13.91	19.72	17.40	16.14
	% Change	20%	-19%	22%	42%	-12%	-7%

Cause	Vehicle						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.061	0.067	0.049	0.147	0.066	.069
	% Change	44%	9%	-26%	197%	-55%	5%
Eastern	SAIFI	0.048	0.072	0.084	0.056	0.174	.141
	% Change	18%	50%	17%	-34%	213%	-19%
Western	SAIFI	0.163	0.093	0.147	0.236	0.137	.167
	% Change	44%	-43%	58%	60%	-42%	22%
Company	SAIFI	0.108	0.081	0.106	0.167	0.129	.135
	% Change	41%	-25%	31%	57%	-23%	5%

Cause	Overload						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	4.42	1.81	3.56	3.28	4.36	2.23
	% Change	219%	-59%	96%	-8%	33%	-49%
Eastern	SAIDI	4.40	1.51	2.82	4.69	3.61	14.04
	% Change	240%	-66%	87%	66%	-23%	289%
Western	SAIDI	2.81	4.49	3.42	2.65	3.62	17.06
	% Change	-34%	60%	-24%	-22%	37%	371%
Company	SAIDI	3.62	3.05	3.30	3.34	3.81	12.49
	% Change	31%	-16%	8%	1%	14%	228%

Cause	Overload						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.058	0.025	0.066	0.025	0.048	.031
	% Change	196%	-56%	160%	-62%	92%	-35%
Eastern	SAIFI	0.029	0.015	0.040	0.078	0.045	.181
	% Change	132%	-47%	159%	97%	-42%	303%
Western	SAIFI	0.036	0.045	0.042	0.031	0.037	.149
	% Change	-3%	26%	-7%	-25%	19%	303%
Company	SAIFI	0.040	0.033	0.048	0.042	0.042	.127
	% Change	51%	-18%	46%	-12%	1%	202%

Cause	Contamination/Corrosion						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	0.29	1.61	1.30	0.55	1.19	5.02
	% Change	157%	460%	-19%	-58%	118%	322%
Eastern	SAIDI	0.18	3.85	0.72	7.92	3.50	2.065
	% Change	-43%	2008%	-81%	1002%	-56%	-41%
Western	SAIDI	0.17	0.53	1.96	1.44	0.59	.93
	% Change	68%	218%	268%	-26%	-59%	58%
Company	SAIDI	0.20	1.64	1.47	2.88	1.49	2.26
	% Change	29%	711%	-10%	96%	-48%	52%

Cause	Contamination/Corrosion						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.002	0.033	0.012	0.005	0.006	.061
	% Change	58%	1225%	-64%	-57%	24%	917%
Eastern	SAIFI	0.001	0.034	0.006	0.025	0.059	.035
	% Change	-60%	2416%	-83%	334%	136%	-41%
Western	SAIFI	0.001	0.004	0.017	0.014	0.014	.007
	% Change	-5%	416%	336%	-18%	4%	-50%
Company	SAIFI	0.001	0.019	0.013	0.014	0.024	.028
	% Change	-17%	1307%	-33%	14%	65%	17%

Cause	Other						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	1.28	1.85	0.49	2.55	0.53	13.01
	% Change	-60%	44%	-73%	416%	-79%	2,355%
Eastern	SAIDI	0.14	4.19	2.73	0.91	2.22	18.57
	% Change	-86%	2830%	-35%	-66%	143%	737%
Western	SAIDI	0.54	2.50	3.96	1.49	5.34	4.79
	% Change	-78%	366%	59%	-62%	259%	-10%
Company	SAIDI	0.63	2.75	2.75	1.61	3.30	10.43
	% Change	-72%	336%	0%	-42%	105%	216%

Cause	Other						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.050	0.029	0.026	0.052	0.014	.297
	% Change	67%	-42%	-12%	103%	-74%	2,021%
Eastern	SAIFI	0.002	0.023	0.064	0.027	0.032	.384
	% Change	-94%	1060%	182%	-57%	17%	1,100%
Western	SAIFI	0.006	0.028	0.041	0.023	0.112	.245
	% Change	-69%	351%	48%	-43%	377%	119%
Company	SAIFI	0.017	0.027	0.043	0.032	0.066	.294
	% Change	-35%	63%	60%	-26%	108%	346%

Cause	Vines						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	0.06	0.10	0.08	0.27	0.19	.0945
	% Change	-39%	86%	-25%	243%	-28%	-50%
Eastern	SAIDI	0.25	1.51	0.06	0.30	0.35	.088
	% Change	-7%	515%	-96%	365%	18%	-75%
Western	SAIDI	0.23	0.17	0.17	0.17	0.51	.419
	% Change	-39%	-23%	-3%	2%	196%	-18%
Company	SAIDI	0.19	0.49	0.12	0.23	0.39	.25
	% Change	-31%	161%	-76%	93%	70%	-36%

Cause	Vines						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.001	0.001	0.001	0.004	0.002	.001
	% Change	-36%	86%	-30%	394%	-48%	-50%
Eastern	SAIFI	0.001	0.004	0.001	0.003	0.002	.001
	% Change	-71%	415%	-83%	242%	-12%	-50%
Western	SAIFI	0.002	0.002	0.002	0.001	0.015	.002
	% Change	-53%	11%	-28%	-22%	1005%	-87%
Company	SAIFI	0.001	0.003	0.001	0.002	0.008	.002
	% Change	-55%	78%	-52%	86%	263%	-75%

15.9.1.2 Identification and Selection/Process Improvements

Gulf continues to focus its process improvement efforts on the system wide top ten outage causes through its existing programs and the new storm hardening efforts.

15.9.1.3 2010 Activities and Budget Allowances

In general, it is not practical to provide an itemized list of all activities that Gulf has included in its budget that are related to distribution reliability. Gulf's budget and accounting systems do not separately categorize and track capital expenditures or O & M expenses on the basis that they are related specifically to distribution reliability. Virtually all distribution functional capital projects and O & M expenses have been or will be undertaken as part of Gulf's commitment to provide customers with reliable and high quality electric service.

Gulf's Vegetation Management Program is an exception to the above. The activities and budgets associated with this program are provided in Section 3.0.

15.9.2 Three Percent Feeder List

15.9.2.1 Five-Year Patterns

Gulf had one feeder in the Actual report, and two feeders in the adjusted report which were repeats in the last five years.

The initial review of the reports showed that in all cases, the associated feeder problems were corrected at the same time of the outage. Additional reviews of the

feeders will be conducted to determine if there are any specific improvements that can be performed to avoid having these feeders becoming repeats.

15.9.2.2 Identification and Selection/Process Improvements

Gulf continues to focus its process improvement efforts on the system wide top ten outage causes through its existing programs and the new storm hardening efforts.

15.9.2.3 2010 Activities and Budget Allowances

Please see the response to Section 15.9.1.3 for 2010 activities and budget allowances.

15.9.3 Regional Reliability Indices

15.9.3.1 Five-Year Patterns

Please see tables given in Section 15.9.1.1.

15.9.3.2 Identification and Selection/Process Improvements

Gulf continues to focus its process improvement efforts on the system wide top ten outage causes through its existing programs and the new storm hardening efforts.

15.9.3.3 2010 Activities and Budget Allowances

Please see the response to 15.9.1.3 for 2010 Activities and Budget allowances.

15.10 Overhead – Underground Reliability

15.10.1 Five-Year Patterns

NOTE: % Change is from one year to the next.

System	Overhead						
Region	Data	2005	2006	2007	2008	2009	2010
Central	Num	2,040	2,112	2,224	2,498	2,672	2,207
	% Change	12%	4%	5%	12%	7%	-17%
Eastern	Num	1,484	2,080	1,727	1,914	1,739	1,667
	% Change	7%	40%	-17%	11%	-9%	-4%
Western	Num	4,807	4,597	4,963	5,964	5,840	5,412
	% Change	3%	-4%	8%	20%	-2%	-7%
Company	Num	8,331	8,789	8,914	10,376	10,251	9,288
	% Change	6%	5%	1%	16%	-1%	-9%

System	Underground						
Region	Data	2005	2006	2007	2008	2009	2010
Central	Num	331	292	343	321	312	288
	% Change	22%	-12%	17%	-6%	-3%	-8%
Eastern	Num	235	193	190	219	225	244
	% Change	27%	-18%	-2%	15%	3%	8%
Western	Num	741	602	503	517	454	517
	% Change	37%	-19%	-16%	3%	-12%	14%
Company	Num	1,307	1,087	1,036	1,057	991	1049
	% Change	31%	-17%	-5%	2%	-6%	6%

System	Overhead						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	109.01	161.46	85.85	85.87	92.25	107.84
	% Change	66%	48%	-47%	0%	7%	17%
Eastern	SAIDI	69.46	319.65	92.62	132.47	121.90	121.73
	% Change	16%	360%	-71%	43%	-8%	-.1%
Western	SAIDI	117.55	145.43	136.50	136.55	148.13	157.26
	% Change	11%	24%	-6%	0%	8%	6%
Company	SAIDI	103.41	192.96	112.27	122.57	127.10	135.49
	% Change	23%	87%	-42%	9%	4%	7%

System	Underground						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIDI	12.07	12.67	23.50	13.06	14.38	7.45
	% Change	26%	5%	85%	-44%	10%	-48%
Eastern	SAIDI	9.29	11.73	7.82	7.76	18.18	11.67
	% Change	8%	26%	-33%	-1%	134%	-36%
Western	SAIDI	12.24	12.13	9.22	9.34	9.34	10.76
	% Change	20%	-1%	-24%	1%	0%	15%
Company	SAIDI	11.46	12.17	12.53	9.88	12.91	10.15
	% Change	19%	6%	3%	-21%	31%	-21%

System	Overhead						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	1.260	1.216	0.865	1.018	0.999	1.522
	% Change	81%	-4%	-29%	18%	-2%	52%
Eastern	SAIFI	0.671	1.235	1.070	1.089	1.135	1.573
	% Change	11%	84%	-13%	2%	4%	39%
Western	SAIFI	1.174	1.203	1.272	1.406	1.542	1.814
	% Change	16%	2%	6%	11%	10%	18%
Company	SAIFI	1.071	1.214	1.116	1.225	1.298	1.677
	% Change	30%	13%	-8%	10%	6%	29%

System	Underground						
Region	Data	2005	2006	2007	2008	2009	2010
Central	SAIFI	0.088	0.060	0.087	0.124	0.082	.055
	% Change	65%	-32%	44%	42%	-34%	-33%
Eastern	SAIFI	0.042	0.053	0.051	0.038	0.066	.603
	% Change	-14%	27%	-4%	-25%	71%	814%
Western	SAIFI	0.063	0.071	0.051	0.043	0.047	.068
	% Change	-8%	13%	-29%	-15%	9%	45%
Company	SAIFI	0.064	0.064	0.060	0.062	0.061	.064
	% Change	7%	-1%	-6%	4%	-3%	5%

15.10.2 Identification and Selection/Process Improvements

Gulf continues to focus its process improvement efforts on the top ten outage causes system wide through its existing programs and the new storm hardening efforts.

15.10.3 2010 Activities and Budget Allowances

Please see Section 10.0.

15.10.4 Overhead (OH) and Underground (UG) Metrics

Please see Appendix 3 for specific feeder data for Gulf's overhead and underground lines.

The tables below represent reliability metrics for Gulf's overhead and underground system for 2010.

System	Region	Miles	Cust	N	Duration	CMI	CI
Overhead	CENTRAL	1,162.36	59,690	2,207	203,361.1	1,186,736.3	167,514
	EASTERN	1,546.96	61,299	1,669	182,547	13,487,333.4	174,345
	WESTERN	3,188.46	132,596	5,412	680,345.7	32,997,621.6	380,760
	System	5,897.78	253,587	9,288	1,066,254	58,352,591.3	722,619
Underground	CENTRAL	420.47	48,455	288	50,687.84	820,355.69	6,102
	EASTERN	439.55	46,969	244	41,546.14	1,293,804.46	7,119
	WESTERN	925.56	71,201	517	109,188.9	2,258,238.21	14,440
	System	1,785.58	166,625	1,049	201,422.8	4,372,398.36	27,661

Note: Total Customers above are from Gulf's Trouble Call Management System, which does not include non-metered accounts.

System	Region	SAIDI	SAIFI	SAIDI / mile	L-Bar	CI / N	CAIDI
Overhead	CENTRAL	198.82	2.81	.17	92.14	75.90	70.85
	EASTERN	220.03	2.84	.14	109.38	104.46	77.36
	WESTERN	248.86	2.87	.07	125.71	70.35	86.66
	System	230.11	2.85	.04	114.80	77.80	80.75
Underground	CENTRAL	16.93	0.13	.04	176.00	21.19	134.44
	EASTERN	27.55	0.15	.06	170.27	29.18	181.74
	WESTERN	31.72	0.20	.03	211.20	27.93	156.39
	System	26.24	0.17	.01	192.01	26.37	158.07

Note: The above metrics are for 2010.

A review of the above data continues to reinforce observations made in Gulf's March 1, 2010 report.

There are several difficulties with comparing overhead outage statistics and underground outage statistics. The first is trying to ensure a true "apples to apples" comparison. This is very difficult to do given that historically the construction standard for Gulf's system has been overhead and as a result is approximately three times that of Gulf's underground system. The main difficulty is that the comparison suffers from problems of scale. The growth of Gulf's underground system is driven by customer demand based on aesthetic reasons. This results in the construction of

underground subdivisions, commercial developments and conversion of overhead lines that are spread across Gulf's distribution system, in neighborhoods and near businesses. Over time the effect of this growth pattern on the distribution system results in the development of an overhead backbone serving "pockets" of underground distribution facilities.

A review of the data in the tables above continues to bring out the same important points.

First, Gulf has less than one-fourth of its system installed as underground. This means that overhead is over three times as exposed to outage-causing events and hence should experience more outages than underground, which it does. The result of dividing the SAIDI by miles of OH or by miles of UG indicates that both overhead and underground are comparable when you compare their SAIDI on a per mile basis as shown in the bottom chart.

Second, comparing the L-Bar of overhead and underground shows that underground outages last nearly twice as long as overhead outages. This continues to support the long held assertion that underground outages require more time to locate the problem and restore power than overhead outages.

Third, comparing the calculation of CI/N for overhead and underground which gives the average number of customers affected by an outage indicates that underground outages typically affect fewer customers than an overhead outage, in fact, about half as many. This supports the observation of an overhead backbone serving "pockets" of underground. Thus the data available to Gulf for underground outages, at this time, continues to be limited to mostly small-scale outages, whereas Gulf's overhead outage data include both small-scale and large-scale outages.

Fourth, comparing the CAIDI calculation for overhead and underground shows underground has a CAIDI value that is 2 times that of overhead's, which continues to be consistent with Gulf's previous observations that underground outages have longer durations and fewer customers affected.

As discussed in last year's Reliability Report, the problem of scale is raised in attempting to answer the question, "Would Gulf Power be more or less reliable if their entire system was underground?" Gulf's underground is currently located in isolated "pockets"

served from an overhead backbone. This limits Gulf's underground outage data to mostly small-scale outages, which, in turn, limits the number of customers that can be affected by any single underground outage. This places an upper limit on underground's SAIDI. If that limitation were to be removed by creating a system with an underground backbone, the analysis of L-Bar and CAIDI predicts that Gulf's reliability could degrade significantly simply due to the extended duration of each outage that occurs. In addition, equipment scrapping data, such as shown in Section 15.3, which fairly represents the failures of overhead and underground transformers, indicates a longer recovery period for underground facilities that may have been subjected to high water due to a major storm. In summary, without taking into consideration the recognized high cost of underground, continued analysis of available overhead and underground metrics at this time does not support using underground as a storm hardening option. It will be re-evaluated each year, as more data is accumulated, and technology evolves.

Gulf's installation of underground distribution facilities continues to outpace overhead due to customer demand based on aesthetic reasons.

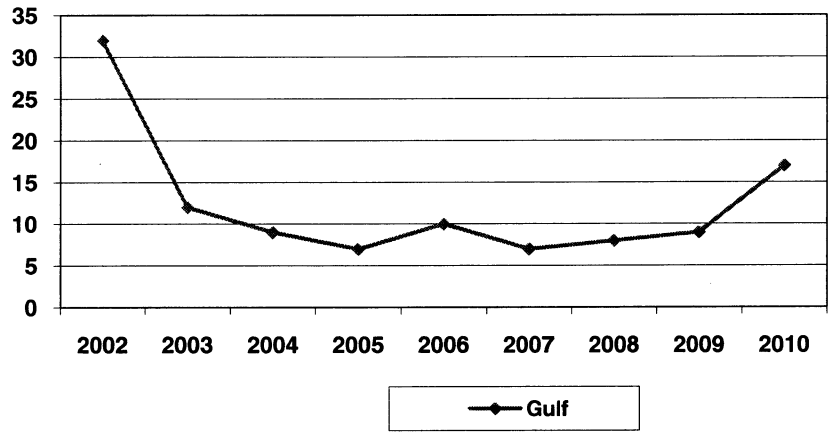
15.11 Reliability Related Customer Complaints

15.11.1 Five-Year Patterns

Gulf Power management reviews a monthly report which supplies data on FPSC complaints and inquiries. Gulf Power has had no reliability infractions for over eight years, and the complaint activity as reflected in the FPSC Consumer Activity Report has remained at very low levels.

The graph below, based on the FPSC Consumer Activity Report, is provided to illustrate Gulf Power's customer complaint trend. The numbers include Service and Billing. Although 2010 increased, it should be noted that out of the 17 complaints, 16 were billing.

Customer Complaint History



15.11.2 Correlation of Reliability Related Customer Complaints to Indices

Gulf Power has not determined a correlation of reliability related customer complaints to indices. Management continues to review complaints as they occur to determine if there are any deficiencies and if so, takes action to correct them.

15.11.3 Identification and Selection/Process Improvements

Due to Gulf's very low FPSC Consumer Activity Report complaints and no apparent correlation of reliability-related customer complaints to outage indices, Gulf has not implemented any programs to identify and select systemic actions to improve reliability based on customer complaints. Gulf will continue to review complaints as they occur to determine if there are any deficiencies and will take the needed action to correct them.

Appendix 1

Appendix 1

Form 102 - Actual Data

2010 Distribution Service Reliability Reports – Actual

Service Reliability Indices – Actual Gulf Power Company					
District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIFIe (e)	CEMI5 (f)
Central	128.92	63.59	2.027	7.58	1.73%
Eastern	171.34	73.44	2.333	5.61	8.04%
Western	185.12	78.05	2.372	7.65	6.94%
System Averages	167.21	73.54	2.274	7.11	5.89%

Appendix 1

2010 Distribution Service Reliability Reports - Actual

	CENTRAL		EASTERN		WESTERN		SYSTEM	
SAIDI = System Average Interruption Duration Index								
Total Number of Customer Minutes of Interruption (CMI)	14,185,856	128.92	18,982,638	171.34	38,842,932	185.12	72,011,426	167.21
Total Number of Customers Served (C)	110,040		110,791		209,827		430,658	
CAIDI = Customer Average Interruption Duration Index								
Total Number of Customer Minutes of Interruption (CMI)	14,185,856	63.59	18,982,638	73.44	38,842,932	78.05	72,011,426	73.54
Total Number of Customer Interruptions (CI)	223,076		258,495		497,650		979,221	
SAIFI = System Average Interruption Frequency Index								
Total Number of Customer Interruptions (CI)	223,076	2.027	258,495	2.333	497,650	2.372	979,221	2.274
Total Number of Customers Served (C)	110,040		110,791		209,827		430,658	
$MAIFI_e$ = Momentary Average Interruption Frequency Index								
Total Number of Customer Momentary Interruption Events (CME)	833,948	7.58	621,828	5.61	1,605,730	7.65	3,061,506	7.11
Total Number of Customers Served (C)	110,040		110,791		209,827		430,658	
CEMI5 = Customers Experiencing More Interruptions than 5								
Number of Customers Experiencing More Interruptions than 5	1,901	1.73%	8,910	8.04%	14,555	6.94%	25,366	5.89%
Total Number of Customers Served (C)	110,040		110,791		209,827		430,658	
L-Bar								
Minutes of Interruption							1,351,442	121.24
Total Number of Outages							11,147	

Appendix 1

2010 Distribution Services Reliability Reports - Actual

Causes of Outage Events - Actual Gulf Power Company			
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
1. Animal	2,963	79.09	72.23
2. Deterioration	2,211	151.55	88.71
3. Lightning	1,569	166.70	124.84
4. Tree	1,151	137.02	114.20
5. Planned Outage	692	114.20	79.62
6. Unknown	639	96.09	75.38
7. Overload	414	112.89	98.25
8. Other	288	85.18	35.44
9. Contamination/Corrosion	266	118.06	79.76
10. Vehicle	264	178.89	118.94
All Other Causes	690	104.99	39.15
System Totals	11,147	121.24	73.54

Appendix 1

2010 Distribution Service Reliability Reports - Actual

3 Percent Feeder List - Actual

Utility Name: Gulf Power Company Year: 2010

Primary Circuit Id. No. or Name (a)	Sub-station Origin (b)	Location (c)	Number of Customers					Outage Events "N" (i)	Avg Duration "L-Bar" (j)	CAIDI (k)	Listed Last Year? (l)	No. of Years in the Last 5 (m)	Corrective Action Completion Date (n)
			Residential (d)	Commercial (e)	Industrial (f)	Other (g)	Total (h)						
8602	Highland City	Eastern	2,549	105			2,654	11	56	59	N		December 2011
6032	Beach Haven	Western	942	171			1,113	6	23	23	N		December 2011
9592	Sunny Hills	Eastern	975	92			1,067	6	39	42	N		December 2011
9222	Chipley	Eastern	616	374	1		991	6	289	339	N		December 2011
8792	Highland City	Eastern	2,590	395	3		2,988	6	43	44	N		December 2011
8612	Highland City	Eastern	516	150			666	6	48	48	N		December 2011
5612	Black Water	Western	2,179	185			2,364	6	54	57	N	1	December 2011
5602	Black Water	Western	1,680	310	9		1,999	6	61	61	N		December 2011
6062	Beach Haven	Western	1,448	128			1,576	5	36	36	N		December 2011

Appendix 1

Form 103 - Adjusted Data

2010 Distribution Service Reliability Reports – Adjusted

Service Reliability Indices - Adjusted Gulf Power Company					
District or Service Area (a)	SAIDI (b)	CAIDI (c)	SAIFI (d)	MAIFIe (e)	CEMI5 (f)
Central	115.30	73.08	1.578	7.58	1.12%
Eastern	133.41	81.45	1.638	5.61	4.25%
Western	168.02	89.21	1.883	7.65	4.01%
System Averages	145.65	83.60	1.742	7.11	3.33%

Appendix 1

2010 Distribution Service Reliability Reports - Adjusted

	CENTRAL		EASTERN		WESTERN		SYSTEM	
SAIDI = System Average Interruption Duration Index								
Total Number of Customer Minutes of Interruption (CMI)	12,687,992	115.30	14,781,138	133.41	35,255,860	168.02	62,724,990	145.65
Total Number of Customers Served (C)	110,040		110,791		209,827		430,658	
CAIDI = Customer Average Interruption Duration Index								
Total Number of Customer Minutes of Interruption (CMI)	12,687,992	73.08	14,781,138	81.45	35,255,860	89.21	62,724,990	83.60
Total Number of Customer Interruptions (CI)	173,616		181,464		395,200		750,280	
SAIFI = System Average Interruption Frequency Index								
Total Number of Customer Interruptions (CI)	173,616	1.578	181,464	1.638	395,200	1.883	750,280	1.742
Total Number of Customers Served (C)	110,040		110,791		209,827		430,658	
$MAIFI_e$ = Momentary Average Interruption Frequency Index								
Total Number of Customer Momentary Interruption Events (CME)	833,948	7.58	621,828	5.61	1,605,730	7.65	3,061,506	7.11
Total Number of Customers Served (C)	110,040		110,791		209,827		430,658	
CEMI5 = Customers Experiencing More Interruptions than 5								
Number of Customers Experiencing More Interruptions than 5	1,234	1.12%	4,708	4.25%	8,405	4.01%	14,347	3.33%
Total Number of Customers Served (C)	110,040		110,791		209,827		430,658	
L-Bar								
Minutes of Interruption							1,267,677	122.63
Total Number of Outages							10,337	

Appendix 1

2010 Distribution Service Reliability Reports - Adjusted

Causes of Outage Events - Adjusted Gulf Power Company			
Cause (a)	Number of Outage Events(N) (b)	Average Duration (L-Bar) (c)	Average Restoration Time (CAIDI) (d)
1. Animal	2,963	79.09	72.23
2. Deterioration	2,211	151.55	88.81
3. Lightning	1,569	166.70	124.84
4. Tree	1,151	137.02	114.20
5. Unknown	639	96.09	75.38
6. Overload	414	112.89	98.25
7. Other	288	85.18	35.44
8. Contamination/Corrosion	266	118.06	79.76
9. Vehicle	264	178.89	118.94
10. Vines	189	90.39	120.85
All Other Causes	383	132.17	56.71
System Totals	10,337	122.63	83.60

Appendix 1

2010 Distribution Service Reliability Reports - Adjusted

3 Percent Feeder List - Adjusted

Utility Name: Gulf Power Company Year: 2010

Primary Circuit Id. No. or Name (a)	Sub-station Origin (b)	Location (c)	Number of Customers					Outage Events "N" (i)	Avg Duration "L-Bar" (j)	CAIDI (k)	Listed Last Year? (l)	No. of Years in the Last 5 (m)	Corrective Action Completion Date (n)
			Residential (d)	Commercial (e)	Industrial (f)	Other (g)	Total (h)						
8602	Highland City	Eastern	2,549	105			2,654	8	58	62	N		December 2011
5602	Black Water	Western	1,680	310	9		1,999	5	31	31	N		December 2011
5612	Black Water	Western	2,179	185			2,364	5	22	20	N	2	December 2011
5382	Molino	Western	1,686	204	3		1,893	4	26	27	Y	2	December 2011
5792	Avalon	Western	2,596	222			2,818	4	38	34	N		December 2011
8792	Highland City	Eastern	2,590	395	3		2,988	4	27	29	N		December 2011
9382	Fort Walton	Central	802	328			1,130	4	32	31	N		December 2011
9592	Sunnyhills	Eastern	975	92			1,067	4	28	30	N		December 2011
9812	Shoal River	Central	2,248	191	1		2,440	4	7	4	N		December 2011

Appendix 1

2010 Excluded Transmission Events Resulting in Customer Outages

Outage Event Description	Reason of Exclusion	N	CMI Excluded	CI Excluded	Duration
Transmission Outages	Transmission Outage	118	5,958,329	187,142	4,940

Event Code	Date	Reason of Exclusion	CMI	CI	Duration	Causation	Resolution
723227	1/3/2010	Transmission	95,848.48	1,589.00	60.32	Deterioration	Manual
723228	1/3/2010	Transmission	241,040.32	3,001.00	80.32	Deterioration	Manual
723237	1/3/2010	Transmission	63,999.52	1,061.00	60.32	Deterioration	Manual
723242	1/3/2010	Transmission	125,767.68	1,424.00	88.32	Deterioration	Manual
723245	1/3/2010	Transmission	58,114.56	658.00	88.32	Deterioration	Manual
723248	1/3/2010	Transmission	38,794.56	483.00	80.32	Deterioration	Manual
723279	1/3/2010	Transmission	3,958.72	1,424.00	2.78	Deterioration	Manual
723283	1/3/2010	Transmission	1,829.24	658.00	2.78	Deterioration	Manual
724436	1/11/2010	Transmission	76,547.28	2,504.00	30.57	Deterioration	Manual
724452	1/11/2010	Transmission	48,530.58	1,666.00	29.13	Deterioration	Manual
724589	1/11/2010	Transmission	11,881.08	324.00	36.67	Thermal Loading	Manual
725096	1/12/2010	Transmission	19,582.64	187.00	104.72	Thermal Loading	Manual
725152	1/12/2010	Transmission	6,916.50	2,385.00	2.90	Thermal Loading	Manual
725153	1/12/2010	Transmission	3,271.20	1,128.00	2.90	Thermal Loading	Manual
725156	1/12/2010	Transmission	2,070.60	714.00	2.90	Thermal Loading	Manual
725157	1/12/2010	Transmission	4,860.40	1,676.00	2.90	Thermal Loading	Manual
725162	1/12/2010	Transmission	2,929.00	1,010.00	2.90	Thermal Loading	Manual
725164	1/12/2010	Transmission	690.20	238.00	2.90	Thermal Loading	Manual
725663	1/19/2010	Transmission	423,018.00	1,986.00	213.00	Deterioration	Manual
725664	1/19/2010	Transmission	497,355.00	2,335.00	213.00	External Utility Trouble	Supervisory
725843	1/21/2010	Transmission	204,966.00	2,316.00	88.50	External Utility Trouble	Supervisory
725844	1/21/2010	Transmission	140,995.68	1,624.00	86.82	External Utility Trouble	Supervisory
725846	1/21/2010	Transmission	70,623.00	798.00	88.50	External Utility Trouble	Supervisory
725848	1/21/2010	Transmission	164,089.80	1,890.00	86.82	External Utility Trouble	Supervisory
725852	1/21/2010	Transmission	17,837.01	183.00	97.47	External Utility Trouble	Supervisory
725853	1/21/2010	Transmission	29,143.53	299.00	97.47	Planned Outage	Manual
726392	1/25/2010	Transmission	106,656.75	1,725.00	61.83	Planned Outage	Manual
726393	1/25/2010	Transmission	68,198.49	1,103.00	61.83	Lightning	Manual
726666	1/28/2010	Transmission	4,667.60	1,667.00	2.80	Lightning	Manual
726667	1/28/2010	Transmission	9,102.80	3,251.00	2.80	Lightning	Manual
726788	1/3/2010	Transmission	230,868.48	2,614.00	88.32	Lightning	Manual
726793	1/3/2010	Transmission	7,266.92	2,614.00	2.78	Failed Equipment	Supervisory
726798	1/11/2010	Transmission	103,592.75	2,825.00	36.67	Failed Equipment	Supervisory

Appendix 1

2010 Excluded Transmission Events Resulting in Customer Outages

726827	1/30/2010	Transmission	591.20	10.00	59.12	Accidental Trip	Manual
726982	1/11/2010	Transmission	87,934.66	2,398.00	36.67	Accidental Trip	Manual
727002	1/11/2010	Transmission	82,175.73	2,821.00	29.13	Failed Equipment	Manual
727024	1/11/2010	Transmission	71,533.80	2,340.00	30.57	Failed Equipment	Manual
727065	1/11/2010	Transmission	67,173.78	2,306.00	29.13	Failed Equipment	Manual
728421	2/22/2010	Transmission	3,942.84	2,987.00	1.32	Failed Equipment	Manual
728423	2/22/2010	Transmission	1,432.20	1,085.00	1.32	Failed Equipment	Manual
728427	2/22/2010	Transmission	3,744.84	2,837.00	1.32	Failed Equipment	Manual
728434	2/22/2010	Transmission	1,173.48	889.00	1.32	Failed Equipment	Manual
728556	2/24/2010	Transmission	2,027.00	2,027.00	1.00	Deterioration	Manual
728557	2/24/2010	Transmission	1,442.00	1,442.00	1.00	Deterioration	Manual
728768	2/26/2010	Transmission	5,812.56	2,808.00	2.07	Vehicle	Supervisory
728769	2/26/2010	Transmission	4,564.35	2,205.00	2.07	Vehicle	Supervisory
734807	4/28/2010	Transmission	33,780.00	2,252.00	15.00	Vehicle	Supervisory
734808	4/28/2010	Transmission	34,290.00	2,286.00	15.00	Vehicle	Supervisory
734809	4/28/2010	Transmission	25,335.00	1,689.00	15.00	Vehicle	Supervisory
734810	4/28/2010	Transmission	27,870.00	1,858.00	15.00	Vehicle	Supervisory
734812	4/28/2010	Transmission	12,859.00	1,837.00	7.00	Vehicle	Supervisory
734813	4/28/2010	Transmission	20,692.00	2,956.00	7.00	Vehicle	Supervisory
734814	4/28/2010	Transmission	35,610.00	2,374.00	15.00	Vehicle	Supervisory
734815	4/28/2010	Transmission	16,575.00	1,105.00	15.00	Vehicle	Supervisory
734818	4/28/2010	Transmission	22,230.00	1,482.00	15.00	Vehicle	Supervisory
734822	4/28/2010	Transmission	19,560.00	1,304.00	15.00	Vehicle	Supervisory
734836	4/28/2010	Transmission	9,360.00	624.00	15.00	Vehicle	Supervisory
734848	4/28/2010	Transmission	23,325.00	1,555.00	15.00	Relay Misoperation	Manual
734872	4/28/2010	Transmission	2,190.00	146.00	15.00	Relay Misoperation	Manual
735758	5/4/2010	Transmission	3,958.25	1,115.00	3.55	Relay Misoperation	Manual
735759	5/4/2010	Transmission	9,996.80	2,816.00	3.55	Relay Misoperation	Manual
735760	5/4/2010	Transmission	5,200.75	1,465.00	3.55	Relay Misoperation	Manual
738442	5/29/2010	Transmission	20,240.00	253.00	80.00	Relay Misoperation	Manual
738995	5/29/2010	Transmission	480.00	6.00	80.00	Lightning	Manual
738996	5/29/2010	Transmission	41,360.00	517.00	80.00	Lightning	Manual
739080	5/18/2010	Transmission	108,303.00	2,777.00	39.00	Lightning	Manual
739081	5/18/2010	Transmission	101,673.00	2,607.00	39.00	Animal	Manual
739093	5/18/2010	Transmission	62,283.00	1,597.00	39.00	Animal	Manual
740967	6/17/2010	Transmission	73,840.00	520.00	142.00	Animal	Manual
740975	6/17/2010	Transmission	852.00	6.00	142.00	Animal	Manual
741738	6/20/2010	Transmission	71,580.00	1,193.00	60.00	Animal	Manual
741741	6/20/2010	Transmission	85,620.00	1,427.00	60.00	Animal	Manual
741745	6/20/2010	Transmission	48,480.00	808.00	60.00	Animal	Manual
802311	6/17/2010	Transmission	58,520.00	2,926.00	20.00	Animal	Manual

Appendix 1

2010 Excluded Transmission Events Resulting in Customer Outages

802312	6/17/2010	Transmission	25,000.00	1,250.00	20.00	Animal	Manual
802313	6/17/2010	Transmission	42,900.00	2,145.00	20.00	Animal	Manual
802425	6/15/2010	Transmission	11,440.00	220.00	52.00	Failed Equipment	Manual
802430	6/15/2010	Transmission	52.00	1.00	52.00	Failed Equipment	Manual
803568	7/10/2010	Transmission	195,260.00	3,004.00	65.00	Failed Equipment	Manual
803569	7/10/2010	Transmission	105,468.00	1,598.00	66.00	Failed Equipment	Manual
803571	7/10/2010	Transmission	70,224.00	1,064.00	66.00	Failed Equipment	Manual
803574	7/10/2010	Transmission	171,535.00	2,639.00	65.00	Failed Equipment	Manual
803576	7/10/2010	Transmission	31,590.00	486.00	65.00	Failed Equipment	Manual
803578	7/10/2010	Transmission	93,145.00	1,433.00	65.00	Failed Equipment	Manual
803594	7/10/2010	Transmission	42,770.00	658.00	65.00	Lightning	Supervisory
803607	7/10/2010	Transmission	205,408.00	1,834.00	112.00	Lightning	Supervisory
807510	8/5/2010	Transmission	39,445.00	1,127.00	35.00	Lightning	Supervisory
807511	8/5/2010	Transmission	8,295.00	237.00	35.00	Lightning	Supervisory
808522	8/11/2010	Transmission	2,748.00	916.00	3.00	Lightning	Supervisory
808528	8/11/2010	Transmission	8,343.00	2,781.00	3.00	Lightning	Supervisory
808788	8/11/2010	Transmission	9,652.00	2,413.00	4.00	Lightning	Supervisory
809329	8/4/2010	Transmission	128,841.00	1,923.00	67.00	Lightning	Supervisory
809330	8/4/2010	Transmission	99,294.00	1,482.00	67.00	Lightning	Supervisory
809551	8/12/2010	Transmission	66,540.00	1,109.00	60.00	Lightning	Supervisory
809553	8/12/2010	Transmission	104,280.00	1,738.00	60.00	Lightning	Manual
810845	8/28/2010	Transmission	66,410.00	2,290.00	29.00	Lightning	Manual
810851	8/28/2010	Transmission	18,038.00	622.00	29.00	Animal	Manual
810852	8/28/2010	Transmission	37,758.00	1,302.00	29.00	Animal	Manual
811363	9/1/2010	Transmission	22,424.00	2,803.00	8.00	Failed Equipment	Supervisory
811364	9/1/2010	Transmission	20,856.00	2,607.00	8.00	Failed Equipment	Supervisory
811367	9/1/2010	Transmission	61,620.00	1,580.00	39.00	Failed Equipment	Supervisory
811760	8/2/2010	Transmission	1,489.00	1,489.00	1.00	Failed Equipment	Manual
811761	8/2/2010	Transmission	120.00	120.00	1.00	Failed Equipment	Manual
811763	8/2/2010	Transmission	3,208.00	3,208.00	1.00	Failed Equipment	Manual
811764	8/2/2010	Transmission	2,141.00	2,141.00	1.00	Failed Equipment	Manual
811765	8/2/2010	Transmission	3,508.00	3,508.00	1.00	Animal	Manual
811766	8/2/2010	Transmission	1,596.00	1,596.00	1.00	Animal	Manual
811767	8/2/2010	Transmission	2,572.00	2,572.00	1.00	Animal	Manual
811775	8/2/2010	Transmission	3,306.00	3,306.00	1.00	Relay Misoperation	Supervisory
811776	8/2/2010	Transmission	1,699.00	1,699.00	1.00	Relay Misoperation	Supervisory
811777	8/2/2010	Transmission	2,543.00	2,543.00	1.00	Relay Misoperation	Supervisory
812254	9/9/2010	Transmission	2,107.00	7.00	301.00	Failed Equipment	Manual
817784	11/3/2010	Transmission	6,780.00	1,356.00	5.00	Lightning	Supervisory
817785	11/3/2010	Transmission	5,520.00	1,104.00	5.00	Lightning	Supervisory
818843	11/11/2010	Transmission	12,456.00	2,076.00	6.00	Accidental Trip	Manual

Appendix 1

2010 Excluded Transmission Events Resulting in Customer Outages

818844	11/11/2010	Transmission	6,996.00	1,166.00	6.00	Accidental Trip	Manual
818849	11/11/2010	Transmission	4,752.00	792.00	6.00	Accidental Trip	Manual
820197	11/26/2010	Transmission	13,575.00	181.00	75.00	Deterioration	Manual

Appendix 1

2010 Planned Outages Table

Outage Event Description	Reason of Exclusion	N	• CMI	CI	Duration
Planned Outages	Planned Outage	692	3,328,106.68	41,799.00	79,025.92

Event Code	Date	Reason of Exclusion	CMI	CI	Duration
723478	1/4/2010	Planned Outage	2,515.00	5.00	503.00
723479	1/4/2010	Planned Outage	320.75	1.00	320.75
723495	1/4/2010	Planned Outage	2,688.70	2,338.00	1.15
723511	1/4/2010	Planned Outage	396.00	3.00	132.00
723636	1/5/2010	Planned Outage	258.00	3.00	86.00
723650	1/5/2010	Planned Outage	210.35	7.00	30.05
723696	1/5/2010	Planned Outage	7,633.44	1,767.00	4.32
723886	1/6/2010	Planned Outage	7,868.40	948.00	8.30
723895	1/6/2010	Planned Outage	1,882.90	991.00	1.90
723897	1/6/2010	Planned Outage	1,189.20	991.00	1.20
723917	1/6/2010	Planned Outage	1,288.30	991.00	1.30
723942	1/6/2010	Planned Outage	4,620.00	80.00	57.75
724037	1/7/2010	Planned Outage	2,135.40	30.00	71.18
724097	1/8/2010	Planned Outage	200.10	9.00	22.23
724099	1/8/2010	Planned Outage	60.87	4.00	15.22
724110	1/8/2010	Planned Outage	716.40	9.00	79.60
724116	1/8/2010	Planned Outage	4.50	3.00	1.50
724117	1/8/2010	Planned Outage	29.95	3.00	9.98
724507	1/11/2010	Planned Outage	362.00	2.00	181.00
724822	1/11/2010	Planned Outage	162.00	6.00	27.00
724828	1/11/2010	Planned Outage	16.00	1.00	16.00
725116	1/12/2010	Planned Outage	6,372.00	18.00	354.00
725147	1/12/2010	Planned Outage	385.00	5.00	77.00
725189	1/13/2010	Planned Outage	4,101.43	142.00	28.88
725191	1/13/2010	Planned Outage	3,752.00	14.00	268.00
725196	1/13/2010	Planned Outage	406.00	7.00	58.00
725209	1/13/2010	Planned Outage	9,172.80	108.00	84.93
725218	1/13/2010	Planned Outage	42.00	6.00	7.00
725251	1/14/2010	Planned Outage	2,656.00	332.00	8.00
725621	1/19/2010	Planned Outage	272.00	8.00	34.00
725635	1/19/2010	Planned Outage	3,555.00	9.00	395.00
725672	1/19/2010	Planned Outage	514.50	1.00	514.50
725753	1/20/2010	Planned Outage	363.00	3.00	121.00
725793	1/20/2010	Planned Outage	200.00	4.00	50.00
726061	1/21/2010	Planned Outage	768.00	8.00	96.00

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2010 Planned Outages Table

726132	1/22/2010	Planned Outage	5,266.50	45.00	117.03
726184	1/22/2010	Planned Outage	120.00	5.00	24.00
726360	1/25/2010	Planned Outage	14.33	2.00	7.17
726365	1/25/2010	Planned Outage	7,124.97	74.00	96.28
726460	1/26/2010	Planned Outage	825.00	5.00	165.00
726464	1/26/2010	Planned Outage	1,016.63	7.00	145.23
726489	1/26/2010	Planned Outage	4.67	1.00	4.67
726517	1/26/2010	Planned Outage	348.00	3.00	116.00
726533	1/27/2010	Planned Outage	220.87	2.00	110.43
726546	1/27/2010	Planned Outage	644.00	4.00	161.00
726551	1/27/2010	Planned Outage	123.50	2.00	61.75
726573	1/27/2010	Planned Outage	132.12	1.00	132.12
726577	1/27/2010	Planned Outage	91.35	1.00	91.35
726604	1/28/2010	Planned Outage	30,543.90	113.00	270.30
726664	1/28/2010	Planned Outage	520.00	8.00	65.00
726750	1/29/2010	Planned Outage	1,986.75	15.00	132.45
726751	1/29/2010	Planned Outage	2,144.00	16.00	134.00
726753	1/29/2010	Planned Outage	251.70	3.00	83.90
726759	1/29/2010	Planned Outage	1,343.50	10.00	134.35
726760	1/29/2010	Planned Outage	220.45	1.00	220.45
726978	2/1/2010	Planned Outage	643.20	3.00	214.40
726998	2/1/2010	Planned Outage	47.27	1.00	47.27
727025	2/2/2010	Planned Outage	612.00	4.00	153.00
727040	2/2/2010	Planned Outage	970.00	5.00	194.00
727094	2/3/2010	Planned Outage	21,244.00	226.00	94.00
727194	2/4/2010	Planned Outage	1,312.80	6.00	218.80
727346	2/5/2010	Planned Outage	164.00	16.00	10.25
727599	2/9/2010	Planned Outage	435.67	10.00	43.57
727602	2/9/2010	Planned Outage	8.20	2.00	4.10
728003	2/16/2010	Planned Outage	540.60	4.00	135.15
728054	2/17/2010	Planned Outage	238.00	2.00	119.00
728060	2/17/2010	Planned Outage	17.00	17.00	1.00
728100	2/17/2010	Planned Outage	473.83	10.00	47.38
728151	2/18/2010	Planned Outage	1,029.00	7.00	147.00
728153	2/18/2010	Planned Outage	182.00	1.00	182.00
728205	2/19/2010	Planned Outage	153.00	1.00	153.00
728224	2/19/2010	Planned Outage	330.00	3.00	110.00
728522	2/23/2010	Planned Outage	724.00	4.00	181.00
728535	2/23/2010	Planned Outage	27.00	1.00	27.00
728539	2/23/2010	Planned Outage	160.00	5.00	32.00
728989	3/1/2010	Planned Outage	1,132.25	5.00	226.45

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2010 Planned Outages Table

729007	3/1/2010	Planned Outage	608.00	6.00	101.33
729010	3/1/2010	Planned Outage	470.00	47.00	10.00
729217	2/24/2010	Planned Outage	1,616,235.00	1,007.00	1,605.00
729218	2/25/2010	Planned Outage	22,657.50	1,007.00	22.50
729553	3/4/2010	Planned Outage	31.58	1.00	31.58
730217	3/8/2010	Planned Outage	2,108.00	17.00	124.00
730251	3/8/2010	Planned Outage	114.00	2.00	57.00
730329	3/9/2010	Planned Outage	241.13	4.00	60.28
730408	3/10/2010	Planned Outage	85.00	5.00	17.00
730431	3/10/2010	Planned Outage	99.40	2.00	49.70
730510	3/11/2010	Planned Outage	264.03	2.00	132.02
730975	3/16/2010	Planned Outage	1,498.00	7.00	214.00
731035	3/17/2010	Planned Outage	26.00	1.00	26.00
731072	3/18/2010	Planned Outage	7,395.00	85.00	87.00
731080	3/18/2010	Planned Outage	532.00	4.00	133.00
731081	3/18/2010	Planned Outage	527.93	2.00	263.97
731090	3/18/2010	Planned Outage	5,340.00	20.00	267.00
731092	3/18/2010	Planned Outage	874.00	19.00	46.00
731254	3/19/2010	Planned Outage	3,834.00	18.00	213.00
731255	3/19/2010	Planned Outage	4,686.00	22.00	213.00
731261	3/19/2010	Planned Outage	2,783.00	23.00	121.00
731464	3/22/2010	Planned Outage	664.20	4.00	166.05
731466	3/22/2010	Planned Outage	766.73	7.00	109.53
731467	3/22/2010	Planned Outage	1,115.00	5.00	223.00
731564	3/23/2010	Planned Outage	262.45	3.00	87.48
731571	3/23/2010	Planned Outage	819.00	7.00	117.00
731588	3/23/2010	Planned Outage	1,651.00	13.00	127.00
731604	3/23/2010	Planned Outage	220.75	5.00	44.15
731609	3/23/2010	Planned Outage	610.40	8.00	76.30
731705	3/24/2010	Planned Outage	4,218.33	10.00	421.83
731708	3/24/2010	Planned Outage	234.69	3.00	78.23
731774	3/25/2010	Planned Outage	42.00	2.00	21.00
731780	3/25/2010	Planned Outage	283.00	1.00	283.00
731792	3/25/2010	Planned Outage	32.70	1.00	32.70
731796	3/25/2010	Planned Outage	5.10	1.00	5.10
731863	3/26/2010	Planned Outage	420.00	7.00	60.00
731869	3/26/2010	Planned Outage	111.00	3.00	37.00
731971	3/28/2010	Planned Outage	183.00	1.00	183.00
732064	3/30/2010	Planned Outage	5,916.00	12.00	493.00
732086	3/30/2010	Planned Outage	21.67	5.00	4.33
732096	3/30/2010	Planned Outage	15.80	6.00	2.63

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2010 Planned Outages Table

732099	3/30/2010	Planned Outage	10,220.77	118.00	86.62
732127	3/30/2010	Planned Outage	273.00	1.00	273.00
732150	3/31/2010	Planned Outage	660.00	5.00	132.00
732153	3/31/2010	Planned Outage	643.30	6.00	107.22
732154	3/31/2010	Planned Outage	7,067.00	37.00	191.00
732155	3/31/2010	Planned Outage	5,481.00	29.00	189.00
732159	3/31/2010	Planned Outage	3,584.00	28.00	128.00
732160	3/31/2010	Planned Outage	3,429.00	27.00	127.00
732207	4/1/2010	Planned Outage	232.75	3.00	77.58
732211	4/1/2010	Planned Outage	431.80	3.00	143.93
732214	4/1/2010	Planned Outage	32.28	1.00	32.28
732275	4/2/2010	Planned Outage	684.00	12.00	57.00
732418	4/5/2010	Planned Outage	1,195.20	4.00	298.80
732486	4/5/2010	Planned Outage	539.00	11.00	49.00
732556	4/6/2010	Planned Outage	2,282.00	2,282.00	1.00
732563	4/7/2010	Planned Outage	5,916.00	12.00	493.00
732576	4/7/2010	Planned Outage	141.00	3.00	47.00
732583	4/7/2010	Planned Outage	182.60	4.00	45.65
732658	4/8/2010	Planned Outage	15.20	4.00	3.80
732683	4/9/2010	Planned Outage	49.28	1.00	49.28
732689	4/9/2010	Planned Outage	177.00	3.00	59.00
732690	4/9/2010	Planned Outage	6,077.00	103.00	59.00
732697	4/9/2010	Planned Outage	714.00	14.00	51.00
732713	4/9/2010	Planned Outage	480.00	20.00	24.00
732716	4/9/2010	Planned Outage	1,819.85	51.00	35.68
732718	4/9/2010	Planned Outage	3,408.00	24.00	142.00
732780	4/10/2010	Planned Outage	2,883.16	28.00	102.97
732916	4/13/2010	Planned Outage	732.00	12.00	61.00
732920	4/13/2010	Planned Outage	487.90	3.00	162.63
732923	4/13/2010	Planned Outage	222.00	3.00	74.00
733252	4/14/2010	Planned Outage	6.90	1.00	6.90
733273	4/14/2010	Planned Outage	3,734.50	42.00	88.92
733274	4/14/2010	Planned Outage	265.75	3.00	88.58
733356	4/15/2010	Planned Outage	1,458.00	3.00	486.00
733363	4/16/2010	Planned Outage	956.15	3.00	318.72
733370	4/16/2010	Planned Outage	791.98	14.00	56.57
733440	4/17/2010	Planned Outage	81.00	1.00	81.00
733560	4/19/2010	Planned Outage	129.00	3.00	43.00
733571	4/19/2010	Planned Outage	324.00	3.00	108.00
733646	4/20/2010	Planned Outage	22,059.00	129.00	171.00
733774	4/22/2010	Planned Outage	84.00	1.00	84.00

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2010 Planned Outages Table

733781	4/22/2010	Planned Outage	230.00	5.00	46.00
733790	4/22/2010	Planned Outage	2,028.00	78.00	26.00
733842	4/23/2010	Planned Outage	3,266.00	46.00	71.00
733843	4/23/2010	Planned Outage	168.00	4.00	42.00
734624	4/27/2010	Planned Outage	410.00	1.00	410.00
734677	4/27/2010	Planned Outage	2,645.83	10.00	264.58
734690	4/27/2010	Planned Outage	688.75	15.00	45.92
734777	4/28/2010	Planned Outage	4,840.20	15.00	322.68
734977	4/29/2010	Planned Outage	481.50	3.00	160.50
734985	4/29/2010	Planned Outage	1,287.88	49.00	26.28
734994	4/29/2010	Planned Outage	897.00	13.00	69.00
734996	4/29/2010	Planned Outage	228.72	4.00	57.18
735039	4/30/2010	Planned Outage	212.93	4.00	53.23
735061	4/30/2010	Planned Outage	14.49	7.00	2.07
735226	5/1/2010	Planned Outage	154.00	2.00	77.00
735236	5/1/2010	Planned Outage	3,572.75	31.00	115.25
735649	5/4/2010	Planned Outage	344.00	1.00	344.00
735650	5/4/2010	Planned Outage	402.00	3.00	134.00
736044	5/7/2010	Planned Outage	3,977.00	41.00	97.00
736050	5/7/2010	Planned Outage	708.00	12.00	59.00
736051	5/7/2010	Planned Outage	720.00	12.00	60.00
736065	5/7/2010	Planned Outage	4.00	2.00	2.00
736299	5/10/2010	Planned Outage	450.00	6.00	75.00
736309	5/10/2010	Planned Outage	116.20	4.00	29.05
736342	5/10/2010	Planned Outage	280.00	5.00	56.00
736395	5/11/2010	Planned Outage	160.00	1.00	160.00
736420	5/11/2010	Planned Outage	15.00	1.00	15.00
736424	5/11/2010	Planned Outage	40.00	1.00	40.00
736428	5/11/2010	Planned Outage	1,197.82	7.00	171.12
736467	5/12/2010	Planned Outage	549.00	9.00	61.00
736504	5/12/2010	Planned Outage	2,133.00	9.00	237.00
736574	5/13/2010	Planned Outage	146.00	1.00	146.00
736672	5/14/2010	Planned Outage	26,068.00	168.00	155.17
736710	5/14/2010	Planned Outage	26.00	1.00	26.00
737028	5/17/2010	Planned Outage	92.00	4.00	23.00
737117	5/18/2010	Planned Outage	105,637.50	162.00	652.08
737415	5/19/2010	Planned Outage	4.00	4.00	1.00
737417	5/19/2010	Planned Outage	1,808.22	77.00	23.48
737469	5/20/2010	Planned Outage	1,596.24	1,478.00	1.08
737487	5/20/2010	Planned Outage	243.00	3.00	81.00
737555	5/21/2010	Planned Outage	3,255.00	15.00	217.00

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2010 Planned Outages Table

737577	5/21/2010	Planned Outage	304.00	2.00	152.00
737827	5/24/2010	Planned Outage	660.92	7.00	94.42
737833	5/24/2010	Planned Outage	893.10	6.00	148.85
737844	5/24/2010	Planned Outage	52.40	2.00	26.20
737846	5/24/2010	Planned Outage	100.35	9.00	11.15
737862	5/24/2010	Planned Outage	14.73	1.00	14.73
737863	5/24/2010	Planned Outage	61.67	1.00	61.67
737868	5/24/2010	Planned Outage	14,030.00	184.00	76.25
737884	5/24/2010	Planned Outage	3,772.00	184.00	20.50
737887	5/24/2010	Planned Outage	480.00	3.00	160.00
737929	5/25/2010	Planned Outage	1,497.00	3.00	499.00
738046	5/26/2010	Planned Outage	495.00	3.00	165.00
738912	6/1/2010	Planned Outage	496.00	2.00	248.00
738913	6/1/2010	Planned Outage	300.00	6.00	50.00
738915	6/1/2010	Planned Outage	2,318.75	53.00	43.75
738922	6/1/2010	Planned Outage	6,849.33	44.00	155.67
738946	6/1/2010	Planned Outage	68.55	3.00	22.85
738950	6/1/2010	Planned Outage	36.00	3.00	12.00
739070	6/2/2010	Planned Outage	1,012.87	4.00	253.22
739099	6/2/2010	Planned Outage	418.00	2.00	209.00
739202	6/3/2010	Planned Outage	332.72	4.00	83.18
740019	6/9/2010	Planned Outage	8,324.80	44.00	189.20
740036	6/9/2010	Planned Outage	91.87	4.00	22.97
740132	6/10/2010	Planned Outage	45.87	4.00	11.47
740133	6/10/2010	Planned Outage	1,978.00	46.00	43.00
740161	6/10/2010	Planned Outage	425.00	17.00	25.00
740252	6/11/2010	Planned Outage	168.00	3.00	56.00
740364	6/12/2010	Planned Outage	16,388.52	3,331.00	4.92
740815	6/16/2010	Planned Outage	1,304.00	8.00	163.00
740828	6/16/2010	Planned Outage	14,904.00	216.00	69.00
740831	6/16/2010	Planned Outage	126.00	3.00	42.00
740922	6/16/2010	Planned Outage	250.00	5.00	50.00
740956	6/17/2010	Planned Outage	15,837.50	75.00	211.17
741046	6/17/2010	Planned Outage	1,850.00	24.00	77.08
741898	6/21/2010	Planned Outage	475.40	6.00	79.23
741907	6/21/2010	Planned Outage	548.00	4.00	137.00
741916	6/21/2010	Planned Outage	507.00	3.00	169.00
741932	6/21/2010	Planned Outage	3,360.00	1,920.00	1.75
741969	6/21/2010	Planned Outage	1,350.00	6.00	225.00
800768	6/22/2010	Planned Outage	318.00	6.00	53.00
800809	6/22/2010	Planned Outage	1,112.00	8.00	139.00

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2010 Planned Outages Table

800876	6/23/2010	Planned Outage	96.00	2.00	48.00
800880	6/23/2010	Planned Outage	6,042.00	106.00	57.00
800901	6/23/2010	Planned Outage	867.00	17.00	51.00
801192	6/25/2010	Planned Outage	3,952.00	152.00	26.00
801237	6/26/2010	Planned Outage	284.00	4.00	71.00
801563	6/29/2010	Planned Outage	1,884.00	12.00	157.00
801634	6/29/2010	Planned Outage	11,675.40	58.00	201.30
801645	6/29/2010	Planned Outage	200.00	5.00	40.00
801923	7/2/2010	Planned Outage	12.00	1.00	12.00
801924	7/2/2010	Planned Outage	204.00	17.00	12.00
802283	7/6/2010	Planned Outage	300.00	4.00	75.00
802443	7/7/2010	Planned Outage	228.00	6.00	38.00
802782	7/8/2010	Planned Outage	435.00	5.00	87.00
802785	7/8/2010	Planned Outage	625.00	5.00	125.00
802786	7/8/2010	Planned Outage	432.00	1.00	432.00
802789	7/8/2010	Planned Outage	1,280.00	8.00	160.00
803035	7/8/2010	Planned Outage	810.00	27.00	30.00
803251	7/9/2010	Planned Outage	60.00	4.00	15.00
804123	7/12/2010	Planned Outage	1,458.00	6.00	243.00
804141	7/12/2010	Planned Outage	2,154.00	6.00	359.00
804147	7/12/2010	Planned Outage	378.00	9.00	42.00
804170	7/12/2010	Planned Outage	520.80	9.00	57.87
804237	7/13/2010	Planned Outage	6,660.00	90.00	74.00
804239	7/13/2010	Planned Outage	3,318.00	7.00	474.00
804475	7/15/2010	Planned Outage	3,105.00	15.00	207.00
804486	7/15/2010	Planned Outage	118.00	4.00	29.50
804507	7/15/2010	Planned Outage	7,548.00	74.00	102.00
804633	7/16/2010	Planned Outage	20.00	4.00	5.00
804642	7/16/2010	Planned Outage	476.00	4.00	119.00
804865	7/19/2010	Planned Outage	1,032.00	12.00	86.00
804883	7/19/2010	Planned Outage	1,064.00	19.00	56.00
804896	7/19/2010	Planned Outage	20.00	10.00	2.00
804903	7/19/2010	Planned Outage	170.00	10.00	17.00
804929	7/20/2010	Planned Outage	1,035.00	9.00	115.00
804935	7/20/2010	Planned Outage	128.00	4.00	32.00
804937	7/20/2010	Planned Outage	80.00	4.00	20.00
804980	7/20/2010	Planned Outage	1,342.00	11.00	122.00
805252	7/21/2010	Planned Outage	72.00	2.00	36.00
806140	7/28/2010	Planned Outage	1,772.55	39.00	45.45
806148	7/28/2010	Planned Outage	32.80	1.00	32.80
806152	7/28/2010	Planned Outage	550.00	10.00	55.00

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2010 Planned Outages Table

806192	7/29/2010	Planned Outage	552.00	3.00	184.00
806201	7/29/2010	Planned Outage	220.00	4.00	55.00
806263	7/30/2010	Planned Outage	56.00	1.00	56.00
806264	7/30/2010	Planned Outage	5.50	3.00	1.83
806266	7/30/2010	Planned Outage	418.00	38.00	11.00
806562	8/2/2010	Planned Outage	86.00	2.00	43.00
806575	8/2/2010	Planned Outage	2,872.57	13.00	220.97
806579	8/2/2010	Planned Outage	2,040.00	6.00	340.00
806584	8/2/2010	Planned Outage	3,196.55	21.00	152.22
806612	8/2/2010	Planned Outage	3.00	2.00	1.50
807019	8/3/2010	Planned Outage	290.00	5.00	58.00
807156	8/4/2010	Planned Outage	16,293.13	722.00	22.57
807159	8/4/2010	Planned Outage	5,973.72	79.00	75.62
807513	8/5/2010	Planned Outage	330.00	2.00	165.00
807527	8/5/2010	Planned Outage	780.90	6.00	130.15
807529	8/5/2010	Planned Outage	1,832.75	15.00	122.18
807544	8/5/2010	Planned Outage	329.47	14.00	23.53
807582	8/5/2010	Planned Outage	64.00	2.00	32.00
807655	8/6/2010	Planned Outage	1,064.00	7.00	152.00
808293	8/9/2010	Planned Outage	158.00	2.00	79.00
808310	8/9/2010	Planned Outage	65.00	1.00	65.00
808311	8/9/2010	Planned Outage	1,084.00	4.00	271.00
808629	8/12/2010	Planned Outage	6,108.75	81.00	75.42
808805	8/13/2010	Planned Outage	1,630.00	10.00	163.00
808886	8/14/2010	Planned Outage	132.00	11.00	12.00
809117	8/16/2010	Planned Outage	1,475.83	7.00	210.83
809148	8/16/2010	Planned Outage	1,023.00	3.00	341.00
809163	8/16/2010	Planned Outage	1,112.00	4.00	278.00
809327	8/17/2010	Planned Outage	109.00	1.00	109.00
809345	8/17/2010	Planned Outage	67.00	1.00	67.00
809376	8/18/2010	Planned Outage	331.00	1.00	331.00
809419	8/18/2010	Planned Outage	56.00	4.00	14.00
809508	8/19/2010	Planned Outage	850.00	5.00	170.00
809516	8/19/2010	Planned Outage	5,518.00	89.00	62.00
809538	8/19/2010	Planned Outage	979.00	89.00	11.00
809566	8/19/2010	Planned Outage	265.90	6.00	44.32
809569	8/19/2010	Planned Outage	486.00	18.00	27.00
809618	8/20/2010	Planned Outage	2,657.90	6.00	442.98
809622	8/20/2010	Planned Outage	3,752.40	9.00	416.93
809624	8/20/2010	Planned Outage	4,087.50	10.00	408.75
809626	8/20/2010	Planned Outage	5,616.33	14.00	401.17

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2010 Planned Outages Table

810276	8/23/2010	Planned Outage	765.00	5.00	153.00
810296	8/23/2010	Planned Outage	65.00	1.00	65.00
810360	8/23/2010	Planned Outage	2,790.00	90.00	31.00
810386	8/24/2010	Planned Outage	17,765.07	56.00	317.23
810416	8/24/2010	Planned Outage	16.55	1.00	16.55
810437	8/24/2010	Planned Outage	175.12	7.00	25.02
810444	8/24/2010	Planned Outage	1,476.00	6.00	246.00
810467	8/24/2010	Planned Outage	420.00	1.00	420.00
810471	8/24/2010	Planned Outage	910.00	26.00	35.00
810507	8/25/2010	Planned Outage	300.00	4.00	75.00
810508	8/25/2010	Planned Outage	126.00	6.00	21.00
810516	8/25/2010	Planned Outage	358.00	2.00	179.00
810520	8/25/2010	Planned Outage	50.53	2.00	25.27
810521	8/25/2010	Planned Outage	1,098.20	4.00	274.55
810524	8/25/2010	Planned Outage	391.00	1.00	391.00
810533	8/25/2010	Planned Outage	692.00	2.00	346.00
810545	8/25/2010	Planned Outage	184.00	4.00	46.00
810556	8/25/2010	Planned Outage	670.00	5.00	134.00
810588	8/26/2010	Planned Outage	399.00	7.00	57.00
810591	8/26/2010	Planned Outage	546.00	7.00	78.00
810596	8/26/2010	Planned Outage	1,752.00	24.00	73.00
810598	8/26/2010	Planned Outage	341.00	31.00	11.00
810696	8/27/2010	Planned Outage	360.00	3.00	120.00
810940	8/28/2010	Planned Outage	18.60	4.00	4.65
810941	8/28/2010	Planned Outage	12.47	4.00	3.12
810942	8/28/2010	Planned Outage	4.87	2.00	2.43
810943	8/28/2010	Planned Outage	93.80	4.00	23.45
811135	8/30/2010	Planned Outage	222.00	3.00	74.00
811203	8/31/2010	Planned Outage	222.00	2.00	111.00
811215	8/31/2010	Planned Outage	2,430.00	15.00	162.00
811225	8/31/2010	Planned Outage	1,022.00	7.00	146.00
811231	8/31/2010	Planned Outage	647.33	5.00	129.47
811240	8/31/2010	Planned Outage	773.25	15.00	51.55
811262	8/31/2010	Planned Outage	632.00	8.00	79.00
811316	9/1/2010	Planned Outage	678.00	6.00	113.00
811401	9/1/2010	Planned Outage	195.00	15.00	13.00
811405	9/1/2010	Planned Outage	92.00	4.00	23.00
811408	9/1/2010	Planned Outage	18.00	3.00	6.00
811411	9/1/2010	Planned Outage	352.00	16.00	22.00
811420	9/1/2010	Planned Outage	3,722.00	1,861.00	2.00
811758	9/2/2010	Planned Outage	846.00	9.00	94.00

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2010 Planned Outages Table

811795	9/2/2010	Planned Outage	1,938.00	17.00	114.00
811824	9/3/2010	Planned Outage	328.00	8.00	41.00
812117	9/7/2010	Planned Outage	248.00	2.00	124.00
812120	9/7/2010	Planned Outage	869.07	4.00	217.27
812167	9/7/2010	Planned Outage	59.00	1.00	59.00
812211	9/8/2010	Planned Outage	35.50	3.00	11.83
812215	9/8/2010	Planned Outage	855.67	85.00	10.07
812218	9/8/2010	Planned Outage	15.40	1.00	15.40
812227	9/8/2010	Planned Outage	448.50	2.00	224.25
812366	9/10/2010	Planned Outage	170.43	1.00	170.43
812381	9/10/2010	Planned Outage	675.00	5.00	135.00
812645	9/13/2010	Planned Outage	395.30	2.00	197.65
812672	9/13/2010	Planned Outage	2,843.45	159.00	17.88
812858	9/14/2010	Planned Outage	27.00	1.00	27.00
812951	9/15/2010	Planned Outage	771.00	3.00	257.00
812953	9/15/2010	Planned Outage	1,400.00	4.00	350.00
812958	9/15/2010	Planned Outage	380.00	2.00	190.00
812961	9/15/2010	Planned Outage	51.42	1.00	51.42
812962	9/15/2010	Planned Outage	50.82	1.00	50.82
813080	9/16/2010	Planned Outage	2,394.58	7.00	342.08
813097	9/16/2010	Planned Outage	32.00	16.00	2.00
813100	9/16/2010	Planned Outage	1,287.60	8.00	160.95
813227	9/18/2010	Planned Outage	265.00	1.00	265.00
813352	9/20/2010	Planned Outage	232.38	191.00	1.22
813417	9/20/2010	Planned Outage	2,346.00	102.00	23.00
813425	9/21/2010	Planned Outage	593.15	3.00	197.72
813779	9/22/2010	Planned Outage	438.00	3.00	146.00
813885	9/23/2010	Planned Outage	220.53	16.00	13.78
813948	9/24/2010	Planned Outage	740.13	4.00	185.03
813968	9/24/2010	Planned Outage	1,107.00	9.00	123.00
814235	9/27/2010	Planned Outage	1.00	1.00	1.00
814242	9/27/2010	Planned Outage	1,230.00	10.00	123.00
814248	9/27/2010	Planned Outage	249.00	3.00	83.00
814251	9/27/2010	Planned Outage	274.10	6.00	45.68
814262	9/27/2010	Planned Outage	1,590.00	10.00	159.00
814350	9/28/2010	Planned Outage	99.90	6.00	16.65
814384	9/28/2010	Planned Outage	72.00	1.00	72.00
814385	9/28/2010	Planned Outage	142.00	2.00	71.00
814388	9/28/2010	Planned Outage	168.00	7.00	24.00
814395	9/28/2010	Planned Outage	335.00	5.00	67.00
814463	9/29/2010	Planned Outage	9.00	1.00	9.00

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2010 Planned Outages Table

814464	9/29/2010	Planned Outage	106.50	15.00	7.10
814514	9/30/2010	Planned Outage	2,070.33	5.00	414.07
814515	9/30/2010	Planned Outage	1.00	1.00	1.00
814516	9/30/2010	Planned Outage	16.20	9.00	1.80
814518	9/30/2010	Planned Outage	1,211.80	6.00	201.97
814539	9/30/2010	Planned Outage	1,630.00	5.00	326.00
814549	9/30/2010	Planned Outage	46.33	2.00	23.17
814556	9/30/2010	Planned Outage	3,017.50	85.00	35.50
814605	10/1/2010	Planned Outage	100.00	5.00	20.00
814881	10/4/2010	Planned Outage	585.00	9.00	65.00
814886	10/4/2010	Planned Outage	403.00	13.00	31.00
814887	10/4/2010	Planned Outage	2,655.07	8.00	331.88
814898	10/4/2010	Planned Outage	560.00	2.00	280.00
814900	10/4/2010	Planned Outage	308.00	7.00	44.00
814958	10/5/2010	Planned Outage	379.27	4.00	94.82
814973	10/5/2010	Planned Outage	755.60	2.00	377.80
814980	10/5/2010	Planned Outage	987.00	7.00	141.00
814982	10/5/2010	Planned Outage	168.00	6.00	28.00
814991	10/5/2010	Planned Outage	585.70	3.00	195.23
814992	10/5/2010	Planned Outage	4,257.90	57.00	74.70
815007	10/5/2010	Planned Outage	546.00	7.00	78.00
815039	10/5/2010	Planned Outage	789.42	5.00	157.88
815062	10/5/2010	Planned Outage	172.00	2.00	86.00
815096	10/6/2010	Planned Outage	1,709.87	8.00	213.73
815124	10/6/2010	Planned Outage	6,961.50	63.00	110.50
815127	10/6/2010	Planned Outage	214.00	2.00	107.00
815130	10/6/2010	Planned Outage	120.00	3.00	40.00
815137	10/6/2010	Planned Outage	9,500.00	190.00	50.00
815158	10/6/2010	Planned Outage	2,855.78	11.00	259.62
815201	10/7/2010	Planned Outage	1,056.00	8.00	132.00
815248	10/7/2010	Planned Outage	52.00	2.00	26.00
815250	10/7/2010	Planned Outage	9,258.07	19.00	487.27
815251	10/7/2010	Planned Outage	315.00	7.00	45.00
815336	10/8/2010	Planned Outage	3,797.03	14.00	271.22
815558	10/11/2010	Planned Outage	2,076.00	9.00	230.67
815602	10/11/2010	Planned Outage	480.43	7.00	68.63
815676	10/12/2010	Planned Outage	1,215.00	5.00	243.00
815693	10/12/2010	Planned Outage	258.60	4.00	64.65
815694	10/12/2010	Planned Outage	118.57	2.00	59.28
815712	10/12/2010	Planned Outage	816.40	8.00	102.05
815721	10/12/2010	Planned Outage	189.00	3.00	63.00

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2010 Planned Outages Table

815763	10/13/2010	Planned Outage	1,332.60	6.00	222.10
815765	10/13/2010	Planned Outage	200.23	2.00	100.12
815777	10/13/2010	Planned Outage	114.65	3.00	38.22
815804	10/13/2010	Planned Outage	202.83	1.00	202.83
815808	10/13/2010	Planned Outage	385.10	6.00	64.18
815810	10/13/2010	Planned Outage	976.00	4.00	244.00
815812	10/13/2010	Planned Outage	696.00	4.00	174.00
815855	10/14/2010	Planned Outage	308.55	3.00	102.85
815856	10/14/2010	Planned Outage	273.65	3.00	91.22
815868	10/14/2010	Planned Outage	284.00	2.00	142.00
815873	10/14/2010	Planned Outage	3,865.00	773.00	5.00
815949	10/15/2010	Planned Outage	510.60	6.00	85.10
815957	10/15/2010	Planned Outage	129.07	2.00	64.53
815990	10/15/2010	Planned Outage	142.00	1.00	142.00
816001	10/15/2010	Planned Outage	60.00	4.00	15.00
816003	10/15/2010	Planned Outage	192.00	4.00	48.00
816231	10/18/2010	Planned Outage	10,660.00	65.00	164.00
816238	10/18/2010	Planned Outage	1,332.00	4.00	333.00
816243	10/18/2010	Planned Outage	872.00	8.00	109.00
816250	10/18/2010	Planned Outage	34,500.00	1,500.00	23.00
816260	10/18/2010	Planned Outage	112.00	2.00	56.00
816278	10/18/2010	Planned Outage	218.00	1.00	218.00
816280	10/18/2010	Planned Outage	3,513.30	49.00	72.00
816284	10/18/2010	Planned Outage	1,104.00	4.00	276.00
816288	10/18/2010	Planned Outage	627.00	3.00	209.00
816330	10/19/2010	Planned Outage	309.00	3.00	103.00
816351	10/19/2010	Planned Outage	1,680.00	21.00	80.00
816380	10/19/2010	Planned Outage	508.00	2.00	254.00
816381	10/19/2010	Planned Outage	1,012.00	4.00	253.00
816383	10/19/2010	Planned Outage	1,650.00	6.00	275.00
816415	10/19/2010	Planned Outage	100.00	4.00	25.00
816418	10/19/2010	Planned Outage	490.00	5.00	98.00
816434	10/19/2010	Planned Outage	62.20	3.00	20.73
816452	10/20/2010	Planned Outage	280.30	2.00	140.15
816454	10/20/2010	Planned Outage	1,186.00	5.00	237.20
816466	10/20/2010	Planned Outage	978.93	16.00	61.18
816468	10/20/2010	Planned Outage	510.00	5.00	102.00
816470	10/20/2010	Planned Outage	534.75	5.00	106.95
816488	10/20/2010	Planned Outage	59.07	4.00	14.77
816493	10/20/2010	Planned Outage	1,182.00	12.00	98.50
816499	10/20/2010	Planned Outage	192.00	2.00	96.00

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2010 Planned Outages Table

816501	10/20/2010	Planned Outage	2,576.00	23.00	112.00
816511	10/20/2010	Planned Outage	606.00	6.00	101.00
816512	10/20/2010	Planned Outage	675.00	5.00	135.00
816531	10/21/2010	Planned Outage	414.00	6.00	69.00
816556	10/21/2010	Planned Outage	467.07	4.00	116.77
816591	10/21/2010	Planned Outage	373.20	6.00	62.20
816916	10/25/2010	Planned Outage	2,322.00	18.00	129.00
816926	10/25/2010	Planned Outage	310.00	5.00	62.00
816935	10/25/2010	Planned Outage	2,429.40	18.00	134.97
816941	10/25/2010	Planned Outage	960.00	16.00	60.00
816947	10/25/2010	Planned Outage	980.60	3.00	326.87
816968	10/25/2010	Planned Outage	75.60	2.00	37.80
816992	10/26/2010	Planned Outage	433,650.00	885.00	490.00
817002	10/26/2010	Planned Outage	1,163.50	15.00	77.57
817013	10/26/2010	Planned Outage	25,974.05	163.00	159.35
817046	10/26/2010	Planned Outage	10,612.85	123.00	86.28
817096	10/27/2010	Planned Outage	7,658.67	40.00	191.47
817099	10/27/2010	Planned Outage	760.08	5.00	152.02
817103	10/27/2010	Planned Outage	2,220.00	12.00	185.00
817113	10/27/2010	Planned Outage	628.72	7.00	89.82
817138	10/27/2010	Planned Outage	6,231.52	31.00	201.02
817151	10/27/2010	Planned Outage	157.05	1.00	157.05
817162	10/27/2010	Planned Outage	255.00	5.00	51.00
817298	10/28/2010	Planned Outage	50.67	2.00	25.33
817301	10/28/2010	Planned Outage	944.88	7.00	134.98
817604	11/1/2010	Planned Outage	622.07	4.00	155.52
817619	11/1/2010	Planned Outage	177.52	1.00	177.52
817631	11/1/2010	Planned Outage	474.73	4.00	118.68
817636	11/1/2010	Planned Outage	607.73	4.00	151.93
817715	11/2/2010	Planned Outage	121.60	4.00	30.40
817716	11/2/2010	Planned Outage	93.90	3.00	31.30
817721	11/2/2010	Planned Outage	71.25	5.00	14.25
817730	11/2/2010	Planned Outage	141.80	4.00	35.45
817731	11/2/2010	Planned Outage	1,120.00	10.00	112.00
817961	11/3/2010	Planned Outage	560.75	15.00	37.38
818009	11/4/2010	Planned Outage	326.40	9.00	36.27
818145	11/5/2010	Planned Outage	532.00	14.00	38.00
818404	11/8/2010	Planned Outage	1,317.58	5.00	263.52
818411	11/8/2010	Planned Outage	65.93	4.00	16.48
818413	11/8/2010	Planned Outage	83.40	6.00	13.90
818415	11/8/2010	Planned Outage	14.33	4.00	3.58

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2010 Planned Outages Table

818423	11/8/2010	Planned Outage	3,509.10	42.00	83.55
818452	11/8/2010	Planned Outage	300.07	4.00	75.02
818454	11/8/2010	Planned Outage	270.00	3.00	90.00
818500	11/9/2010	Planned Outage	4,875.62	161.00	30.28
818525	11/9/2010	Planned Outage	56.05	3.00	18.68
818527	11/9/2010	Planned Outage	91.75	3.00	30.58
818531	11/9/2010	Planned Outage	507.83	11.00	46.17
818534	11/9/2010	Planned Outage	494.00	5.00	98.80
818541	11/9/2010	Planned Outage	48.40	3.00	16.13
818547	11/9/2010	Planned Outage	16.75	1.00	16.75
818551	11/9/2010	Planned Outage	175.00	1.00	175.00
818552	11/9/2010	Planned Outage	880.00	5.00	176.00
818553	11/9/2010	Planned Outage	352.00	2.00	176.00
818559	11/9/2010	Planned Outage	158.00	1.00	158.00
818563	11/9/2010	Planned Outage	35.00	3.00	11.67
818570	11/9/2010	Planned Outage	40.70	3.00	13.57
818583	11/9/2010	Planned Outage	448.20	4.00	112.05
818591	11/9/2010	Planned Outage	316.00	4.00	79.00
818614	11/9/2010	Planned Outage	202.00	2.00	101.00
818621	11/10/2010	Planned Outage	269.20	3.00	89.73
818648	11/10/2010	Planned Outage	212.30	3.00	70.77
818662	11/10/2010	Planned Outage	228.00	6.00	38.00
818676	11/10/2010	Planned Outage	139.92	5.00	27.98
818682	11/10/2010	Planned Outage	67.47	4.00	16.87
818710	11/10/2010	Planned Outage	99.00	3.00	33.00
818711	11/10/2010	Planned Outage	128.00	4.00	32.00
818730	11/11/2010	Planned Outage	789.45	3.00	263.15
818764	11/11/2010	Planned Outage	676.33	5.00	135.27
818767	11/11/2010	Planned Outage	525.75	3.00	175.25
818813	11/11/2010	Planned Outage	560.17	10.00	56.02
818815	11/11/2010	Planned Outage	50.07	2.00	25.03
818878	11/12/2010	Planned Outage	337.57	13.00	25.97
818894	11/12/2010	Planned Outage	171.35	3.00	57.12
818895	11/12/2010	Planned Outage	17,358.40	114.00	152.27
818901	11/12/2010	Planned Outage	157.85	3.00	52.62
818929	11/12/2010	Planned Outage	11,907.00	1,701.00	7.00
819060	11/15/2010	Planned Outage	192.00	4.00	48.00
819139	11/15/2010	Planned Outage	150.00	6.00	25.00
819272	11/16/2010	Planned Outage	45.83	5.00	9.17
819279	11/16/2010	Planned Outage	15.42	5.00	3.08
819330	11/16/2010	Planned Outage	219.60	4.00	54.90

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2010 Planned Outages Table

819339	11/16/2010	Planned Outage	63,764.32	1,159.00	55.02
819352	11/16/2010	Planned Outage	460.00	4.00	115.00
819388	11/17/2010	Planned Outage	60.00	2.00	30.00
819507	11/17/2010	Planned Outage	5,252.00	101.00	52.00
819561	11/17/2010	Planned Outage	196.93	2.00	98.47
819566	11/17/2010	Planned Outage	1,322.70	9.00	146.97
819634	11/18/2010	Planned Outage	66.00	6.00	11.00
819638	11/18/2010	Planned Outage	1,078.00	7.00	154.00
819639	11/18/2010	Planned Outage	195.00	5.00	39.00
819640	11/18/2010	Planned Outage	42.00	2.00	21.00
819642	11/18/2010	Planned Outage	1,033.80	9.00	114.87
819649	11/18/2010	Planned Outage	97.53	2.00	48.77
819651	11/18/2010	Planned Outage	15.00	1.00	15.00
819652	11/18/2010	Planned Outage	24.00	2.00	12.00
819657	11/18/2010	Planned Outage	8,108.70	179.00	45.30
819660	11/18/2010	Planned Outage	5,146.00	2,573.00	2.00
819669	11/18/2010	Planned Outage	348.00	3.00	116.00
819672	11/18/2010	Planned Outage	308.00	7.00	44.00
819679	11/18/2010	Planned Outage	249.13	2.00	124.57
819723	11/19/2010	Planned Outage	183.67	2.00	91.83
819744	11/19/2010	Planned Outage	3,031.70	21.00	144.37
819747	11/19/2010	Planned Outage	129.00	3.00	43.00
819909	11/22/2010	Planned Outage	592.00	8.00	74.00
819927	11/22/2010	Planned Outage	2,257.80	18.00	125.43
819929	11/22/2010	Planned Outage	170.00	1.00	170.00
819930	11/22/2010	Planned Outage	1,151.83	10.00	115.18
819931	11/22/2010	Planned Outage	8,619.00	51.00	169.00
819938	11/22/2010	Planned Outage	2,721.07	8.00	340.13
819941	11/22/2010	Planned Outage	928.20	3.00	309.40
819962	11/22/2010	Planned Outage	572.00	4.00	143.00
819967	11/22/2010	Planned Outage	488.45	3.00	162.82
819973	11/22/2010	Planned Outage	58.00	2.00	29.00
820019	11/23/2010	Planned Outage	84.00	3.00	28.00
820032	11/23/2010	Planned Outage	54.38	1.00	54.38
820041	11/23/2010	Planned Outage	316.00	2.00	158.00
820049	11/23/2010	Planned Outage	266.00	7.00	38.00
820082	11/23/2010	Planned Outage	12,485.00	44.00	283.75
820083	11/23/2010	Planned Outage	282.82	1.00	282.82
820116	11/24/2010	Planned Outage	124.87	4.00	31.22
820353	11/29/2010	Planned Outage	386.00	2.00	193.00
820354	11/29/2010	Planned Outage	285.57	2.00	142.78

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2010 Planned Outages Table

820355	11/29/2010	Planned Outage	1,014.77	7.00	144.97
820370	11/29/2010	Planned Outage	644.92	5.00	128.98
820379	11/29/2010	Planned Outage	265.07	28.00	9.47
820383	11/29/2010	Planned Outage	465.00	3.00	155.00
820418	11/29/2010	Planned Outage	1,620.00	18.00	90.00
820422	11/29/2010	Planned Outage	300.00	4.00	75.00
820441	11/30/2010	Planned Outage	1,968.00	8.00	246.00
820445	11/30/2010	Planned Outage	573.00	3.00	191.00
820462	11/30/2010	Planned Outage	423.10	6.00	70.52
820463	11/30/2010	Planned Outage	2,002.00	13.00	154.00
820661	12/1/2010	Planned Outage	2,569.87	92.00	27.93
820663	12/1/2010	Planned Outage	31.00	1.00	31.00
820667	12/1/2010	Planned Outage	1,183.00	7.00	169.00
820698	12/1/2010	Planned Outage	183.65	3.00	61.22
820776	12/2/2010	Planned Outage	217.43	2.00	108.72
820805	12/2/2010	Planned Outage	644.87	4.00	161.22
820817	12/2/2010	Planned Outage	417.68	19.00	21.98
821110	12/6/2010	Planned Outage	358.10	6.00	59.68
821218	12/7/2010	Planned Outage	425.60	2.00	212.80
821219	12/7/2010	Planned Outage	1,908.90	9.00	212.10
821386	12/9/2010	Planned Outage	62.58	5.00	12.52
821389	12/9/2010	Planned Outage	1,140.00	5.00	228.00
821391	12/9/2010	Planned Outage	58.00	1.00	58.00
821395	12/9/2010	Planned Outage	1,749.00	53.00	33.00
821417	12/9/2010	Planned Outage	290.10	9.00	32.23
821426	12/9/2010	Planned Outage	96.40	4.00	24.10
821427	12/9/2010	Planned Outage	139.40	6.00	23.23
821428	12/9/2010	Planned Outage	169.07	8.00	21.13
821459	12/10/2010	Planned Outage	384.55	1.00	384.55
821471	12/10/2010	Planned Outage	621.97	2.00	310.98
821472	12/10/2010	Planned Outage	157.73	2.00	78.87
821484	12/10/2010	Planned Outage	147.05	1.00	147.05
821501	12/10/2010	Planned Outage	401.10	6.00	66.85
821956	12/13/2010	Planned Outage	7,876.12	61.00	129.12
821980	12/13/2010	Planned Outage	156.78	1.00	156.78
821981	12/13/2010	Planned Outage	68.70	3.00	22.90
821983	12/13/2010	Planned Outage	461.47	4.00	115.37
822096	12/14/2010	Planned Outage	7.03	1.00	7.03
822126	12/14/2010	Planned Outage	2,114.00	14.00	151.00
822127	12/14/2010	Planned Outage	51.00	3.00	17.00
822131	12/14/2010	Planned Outage	116.00	4.00	29.00

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2010 Planned Outages Table

822135	12/14/2010	Planned Outage	405.00	3.00	135.00
822305	12/15/2010	Planned Outage	399.80	4.00	99.95
822322	12/15/2010	Planned Outage	432.00	3.00	144.00
822376	12/16/2010	Planned Outage	42,864.00	752.00	57.00
822384	12/16/2010	Planned Outage	345.80	3.00	115.27
822385	12/16/2010	Planned Outage	450.93	2.00	225.47
822453	12/17/2010	Planned Outage	4,555.25	95.00	47.95
822455	12/17/2010	Planned Outage	1,260.00	28.00	45.00
822466	12/17/2010	Planned Outage	60.00	2.00	30.00
822484	12/17/2010	Planned Outage	300.00	5.00	60.00
822636	12/20/2010	Planned Outage	377.17	2.00	188.58
822650	12/20/2010	Planned Outage	1,292.55	7.00	184.65
822665	12/20/2010	Planned Outage	253.70	2.00	126.85
822706	12/20/2010	Planned Outage	977.67	10.00	97.77
822735	12/21/2010	Planned Outage	1,846.27	8.00	230.78
822767	12/21/2010	Planned Outage	906.92	5.00	181.38
822792	12/22/2010	Planned Outage	105.08	1.00	105.08
822799	12/22/2010	Planned Outage	200.33	1.00	200.33
822801	12/22/2010	Planned Outage	512.80	4.00	128.20
822802	12/22/2010	Planned Outage	547.63	7.00	78.23
822807	12/22/2010	Planned Outage	1,361.27	4.00	340.32
822811	12/22/2010	Planned Outage	517.00	517.00	1.00
822822	12/22/2010	Planned Outage	381.85	7.00	54.55
822824	12/22/2010	Planned Outage	288.92	5.00	57.78
822835	12/22/2010	Planned Outage	440.53	4.00	110.13
823196	12/27/2010	Planned Outage	421.35	3.00	140.45
823199	12/27/2010	Planned Outage	720.00	4.00	180.00
823209	12/27/2010	Planned Outage	537.55	13.00	41.35
823211	12/27/2010	Planned Outage	150.75	3.00	50.25
823229	12/27/2010	Planned Outage	118.37	2.00	59.18
823284	12/28/2010	Planned Outage	1,511.38	29.00	52.12
823289	12/28/2010	Planned Outage	411.37	7.00	58.77
823290	12/28/2010	Planned Outage	420.80	8.00	52.60
823298	12/28/2010	Planned Outage	753.00	3.00	251.00
823319	12/28/2010	Planned Outage	371.75	3.00	123.92
823322	12/28/2010	Planned Outage	952.17	5.00	190.43
823387	12/29/2010	Planned Outage	1,178.53	4.00	294.63
823389	12/29/2010	Planned Outage	1,351.93	7.00	193.13
823395	12/29/2010	Planned Outage	141.97	2.00	70.98
823409	12/29/2010	Planned Outage	1,346.00	4.00	336.50
823415	12/29/2010	Planned Outage	9.45	1.00	9.45

Appendix 1

2010 Planned Outages Table

823451	12/30/2010	Planned Outage	51.00	1.00	51.00

Appendix 2

APPENDIX 2

110138-STAFF-POD-23-76

Gulf Power Company
Annual Wood Pole Inspection Report
(Reporting Year 2010)

a	b	c	d	e	f	g	h	i	j	k	l	m
Total # of Wooden Poles in the Company Inventory	# of Pole Inspections Planned this Annual Inspection	# of Poles Inspected this Annual Inspection*	# of Poles Failing Inspection this Annual Inspection	Pole Failure Rate (%) this Annual Inspection	# of Poles Designated for Replacement this Annual Inspection	Total # of Poles Replaced this Annual Inspection	# of Poles Requiring Minor Follow-up this Annual Inspection	# of Poles Overloaded this Annual Inspection	Method(s) V = Visual E = Excavation P= Prod S = Sound B= Bore R = Resistograph	# of Pole Inspections Planned for Next Annual Inspection Cycle	Total # of Poles Inspected (Cumulative) in the 8-Year Cycle To Date	% of Poles Inspected (Cumulative) in the 8-Year Cycle To Date
263,133	32,000	32,016	1,060	3.31	923	649 (See Note)	137		V, E, S, B	32,000	128,101	48.7%

If b – c > 0, provide explanation	
If d – g > 0, provide explanation	Pole inspections were completed in 2010 and remaining repairs have been scheduled for 2011.
Description of selection criteria for inspections	Gulf is systematically moving across its system. Poles are selected for inspection on a geographical basis.

Appendix 3

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	(a) Feeder ID	(b) Sub Region	(c) Number of OH Lateral Lines	(d) Number of OH Lateral Miles	(e) Number of Customers served on OH Lateral Lines	(f) CMI for OH Lateral Lines	(g) CI for OH Lateral Lines	(h) Number of UG Lateral Lines	(i) Number of UG Lateral Miles	(j) Number of Customers served on UG Lateral Lines	(k) CMI for UG Lateral Lines	(l) CI for UG Lateral Lines	(m) Number of Automatic line Sectionalizing devices on the Lateral Lines	(n) Number of Automatic line Sectionalizing devices on the Feeder	(o) Whether the feeder Circuit is Loop	(p) Total Length of the Feeder Circuit	(q) Length of UG portion of the Feeder Circuit	(u) Length of OH portion of the Feeder Circuit	(v) Number of customers served by OH Feeders	(w) CMI for OH Feeders	(x) CI for OH Feeders	(y) Load Growth %	(z) Peak Load MVA
2	514	WESTERN	0	0.00	1	-	-	0	0.00	-	-	-	0	0	No	0.01	0.00	0.01	1	-	-	0.1	4.69
3	804	WESTERN	1	1.10	1	-	-	4	1.05	-	-	-	0	0	No	2.17	1.05	1.12	1	-	-	n/a	n/a
4	2222	EASTERN	0	0.00	1	-	-	1	0.54	5	-	-	0	0	No	0.72	0.64	0.08	6	-	-	n/a	n/a
5	2613	CENTRAL	2	2.41	19	-	-	0	0.00	-	-	-	0	0	No	2.42	0.00	2.42	19	-	-	n/a	n/a
6	2619	CENTRAL	13	5.29	74	1,221	86	0	0.00	-	-	-	0	1	No	5.31	0.00	5.31	74	1,221	86	n/a	n/a
7	5202	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.03	0.00	0.03	-	-	-	0.1	4.08
8	5212	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.02	0.00	0.02	-	-	-	0.1	2.11
9	5222	WESTERN	0	0.00	-	-	-	1	0.00	-	-	-	0	0	Yes	0.99	0.97	0.03	-	-	-	0.1	4.52
10	5232	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	Yes	1.08	1.05	0.02	-	-	-	0.1	0.00
11	5242	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.02	0.00	0.02	-	-	-	0.1	1.23
12	5262	WESTERN	0	0.00	-	-	-	1	0.00	-	-	-	0	0	Yes	1.04	0.97	0.07	-	-	-	0.1	4.30
13	5332	WESTERN	85	15.89	708	318,601	2,112	42	8.98	985	2,141	8	0	0	Yes	26.57	8.98	17.60	1,693	320,742	2,120	0.1	9.58
14	5342	WESTERN	27	3.91	184	42,306	326	20	5.20	919	-	-	0	0	Yes	10.78	5.20	5.59	1,103	42,306	326	0.1	7.47
15	5352	WESTERN	42	6.35	134	2,283	12	30	2.96	88	2,097	9	0	0	Yes	11.51	2.96	8.55	222	4,381	21	0.5	11.68
16	5362	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	3.21	0.06	3.15	-	-	-	0.5	1.65
17	5372	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	3.18	0.06	3.11	-	-	-	0.5	1.11
18	5382	WESTERN	447	134.75	1,815	737,678	4,174	31	5.88	78	218	1	2	3	No	143.85	5.88	137.96	1,893	737,896	4,175	0.5	9.06
19	5392	WESTERN	227	61.08	932	229,059	2,264	15	1.95	19	1,480	2	0	1	No	64.90	1.95	62.95	951	230,539	2,266	1	4.27
20	5412	WESTERN	1	0.47	2	290	1	0	0.00	-	-	-	0	0	No	1.01	0.00	1.01	2	290	1	0.1	0.82
21	5502	WESTERN	50	8.31	250	3,068	27	2	1.11	68	-	-	0	1	Yes	11.13	1.11	10.02	318	3,068	27	0.5	1.72
22	5512	WESTERN	168	44.61	1,075	1,044,001	3,403	21	8.38	484	5,304	38	1	1	No	56.41	8.38	48.03	1,559	1,049,305	3,441	2	7.78
23	5522	WESTERN	104	24.59	611	68,793	612	14	4.02	236	-	-	1	0	Yes	32.92	4.02	28.89	847	68,793	612	0.5	4.54
24	5542	WESTERN	105	32.55	1,671	26,986	251	27	19.11	878	18,615	86	0	0	Yes	56.07	19.11	36.96	2,549	45,601	337	1	14.97
25	5562	WESTERN	83	22.65	1,778	106,786	956	16	5.23	341	5,185	43	0	1	Yes	31.25	5.23	26.02	2,119	111,972	999	0.2	8.77
26	5572	WESTERN	32	12.44	929	62,938	684	13	5.30	339	-	-	0	2	Yes	18.93	5.30	13.64	1,268	62,938	684	1	8.07
27	5582	WESTERN	101	14.51	887	44,173	370	15	7.91	918	26,730	78	1	0	Yes	27.01	7.91	19.10	1,805	70,902	448	0.5	12.10
28	5592	WESTERN	29	6.23	314	35,298	99	14	7.53	1,210	22,345	217	0	0	Yes	15.31	7.53	7.77	1,524	57,643	316	2	5.13
29	5602	WESTERN	291	77.05	1,873	477,653	4,670	31	12.07	126	6,002	28	0	0	Yes	92.89	12.08	80.81	1,999	483,655	4,698	1.5	13.38
30	5612	WESTERN	352	137.93	2,208	1,400,640	9,440	11	4.29	156	268	1	0	1	Yes	145.57	4.29	141.29	2,364	1,400,908	9,441	1	14.52
31	5632	WESTERN	19	6.35	457	82,674	399	23	6.70	699	202	1	0	2	Yes	15.19	7.97	7.22	1,156	82,875	400	1	4.96
32	5642	WESTERN	105	26.09	1,561	691,391	3,003	17	27.27	1,515	272,233	1,639	1	0	Yes	59.54	27.27	32.27	3,076	963,624	4,642	3	16.28
33	5652	CENTRAL	82	16.95	1,087	86,741	545	33	5.07	398	10,675	34	0	2	No	24.60	5.07	19.53	1,485	97,416	579	0.5	9.34
34	5662	CENTRAL	97	18.99	1,621	455,817	4,874	56	8.39	1,206	8,329	80	1	2	No	28.52	8.39	20.13	2,827	464,147	4,954	0.2	13.13
35	5682	CENTRAL	48	9.36	901	63,686	802	25	2.41	235	1,098	12	2	0	No	12.74	2.41	10.33	1,136	64,784	814	0.5	10.08
36	5752	WESTERN	192	41.01	1,808	149,921	779	29	23.54	1,327	10,561	154	0	3	Yes	68.82	23.54	45.28	3,135	160,482	933	2.5	16.17
37	5762	WESTERN	164	45.60	1,839	243,119	1,940	30	17.69	1,173	15,665	48	0	0	Yes	66.60	17.69	48.92	3,012	258,783	1,988	2.5	13.67
38	5772	WESTERN	19	4.59	128	12,050	109	5	2.79	205	76	1	0	0	Yes	8.44	2.79	5.65	333	12,125	110	2	3.42
39	5782	WESTERN	204	66.67	1,892	308,359	3,898	25	18.61	512	1,100	12	0	0	Yes	88.64	18.61	70.03	2,404	309,458	3,910	1.5	13.02
40	5792	WESTERN	271	99.53	2,294	292,420	2,916	44	12.57	524	436	8	3	0	No	118.61	12.57	106.04	2,818	292,856	2,924	1	12.60
41	5812	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.04	0.00	0.04	-	-	-	0	0.00
42	5822	WESTERN	102	24.79	1,265	19,702	183	26	10.12	447	3,619	34	0	0	Yes	38.85	10.12	28.72	1,712	23,321	217	1	11.13
43	5832	WESTERN	198	61.56	2,234	131,210	1,010	15	1.62	89	26,345	57	1	1	Yes	67.81	1.62	66.20	2,323	157,554	1,067	0.5	14.64
44	5852	WESTERN	89	25.93	804	397,284	1,027	5	0.93	7	-	-	1	0	Yes	29.60	0.93	28.67	811	397,284	1,027	0.5	6.35
45	5872	WESTERN	47	11.46	636	146,599	1,210	32	15.47	924	10,446	64	0	3	No	28.15	15.47	12.67	1,560	157,045	1,274	0.5	8.72
46	5882	CENTRAL	90	24.47	1,951	98,555	1,141	35	5.03	652	2,352	24	0	0	No	30.01	5.03	24.98	2,603	100,906	1,165	0.5	10.50
47	5892	CENTRAL	106	28.27	2,010	96,429	670	52	17.66	1,345	10,090	31	0	0	No	51.78	17.66	34.12	3,355	106,519	701	1.5	16.05
48	5902	WESTERN	42	7.20	572	167,602	665	6	2.57	122	3,085	12	0	1	Yes	11.12	2.93	8.19	694	170,688	677	0.1	7.82
49	5912	WESTERN	24	2.09	267	209,168	674	32	4.90	321	-	-	0	0	Yes	10.90	5.89	5.01	588	209,168	674	0.5	10.70
50	5922	WESTERN	41	7.23	677	25,270	256	27	25.39	1,638	52,176	414	0	0	Yes	36.25	25.39	10.86	2,315	77,446	670	1	14.56
51	5932	WESTERN	67	13.96	1,110	41,852	370	25	14.18	860	135,852	603	0	2	Yes	29.74	14.18	15.56	1,970	177,704	973	0.5	12.43
52	5942	WESTERN	16	9.33	598	171,277	1,564	43	8.59	1,624	12,091	66	0	0	No	21.19	10.71	10.48	2,222	183,368	1,630	1	13.26
53	5952	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.01	0.00	0.01	-	-	-	0	0.00
54	5972	WESTERN	38	9.63	660	24,895	190	20	4.86	441	245,906	527	0	2	Yes	16.42	4.95	11.47	1,101	270,801	717	0.5	6.28
55	5982	WESTERN	47	13.17	969	120,015	1,274	48	12.39	1,406	47,408	353	0	2	No	29.20	12.64	16.56	2,375	167,424	1,627	0.1	10.56
56	5992	WESTERN	35	7.42	633	176,553	1,048	22	11.13	1,064	51,582	288	0	2	Yes	22.14	11.23	10.92	1,697	228,134	1,336	0.1	8.53
57	6022	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.01	0.00	0.01	-	-	-	0	0.00
58	6032	WESTERN	32	6.68	344	150,543	1,850	15	3.97	769	12,514	122	0	1	Yes	13.76	3.97	9.78	1,113	163,057	1,972	0.5	7.99
59	6042	WESTERN	81	17.73	1,671	290,957	2,901	6	0.49	45	-	-	1	0	Yes	19.76	0.49	19.27	1,716	290,957	2,901	0.1	6.55
60	6052	WESTERN	131	31.24	1,429	83,679	815	25	12.18	1,141	34,123	144	2	0	Yes	46.07	12.18	33.88	2,570	117,802	959	0.1	12.19
61	6062	WESTERN	69	20.77	1,566	78,388	846	7	0.26	10	-	-	0	0	Yes	23.90	0.26	23.64	1,576	78,388	846	0.1	7.48
62	6072	WESTERN	100	24.80	1,183	86,638	384	36	22.80	1,599	19,974	84	0	1	Yes	51.70	22.80	28.90	2,782	106,612	468	0.5	15.13
63	6082	WESTERN	107	29.36	1,565	250,157	1,926	16	11.14	1,013	4,084	20	1	1	No	44.66	11.14	33.51	2,578	254,241	1,946	1	10.76
64	6092	WESTERN	42	14.42	859	46,074	353	26	8.65	1,032	21,107	105	0	1	Yes	26.72	8.67	18.05	1,891	67,182	458	0.1	9.75
65	6212	WESTERN	91	24.77	1,106	337,800	2,750	19	25.00	1,089	12,718	70	0	0	No	54.61	25.00	29.61	2,195	350,518	2,820	2	12.72
66	6222	WESTERN	73	18.88	601	257,289	3,273	23	10.74	612	451	4	0	1	No	31.59	10.74	20.84	1,213	257,740	3,277	1	6.12
67	6338	WESTERN	0	0.00	-	-	-	0	0.89	46	-	-	0	0	No	0.89	0.89	0.00	46	-	-	n/a	n/a
68	6348	WESTERN	0	0.00	-	-	-	0	0.93	35	-	-	0	0	No	0.93	0.93	0.00	35	-	-	n/a	n/a
69	6352	WESTERN	0	0.00	-	-	-	0	0.86	58	-	-	0	0	No	0.86	0.86	0.00	58	-	-	n/a	n/a
70	6412	CENTRAL	71	23.45	475	30,674	238	6	2.12	48	-	-	1	0	No	28.21	2.12	26.09	523	30,674	238	0.1	2.36
71	6432	CENTRAL	24	6.38	204	8,500	103	4	0.64	10	-	-	0	0	No	8.77	0.64	8.13	214	8,500	103	0.1	1.85
72	6452	CENTRAL	3	0.26	4	99	1	1	0.13	2	-	-	0	0	No	4.11	0.13	3.97	6	99	1	0.1	0.20
73	6482	WESTERN	39	10.58	859	64,158	586	43	11.87	1,423	31,446	156	0	1	Yes	26.82	11.91	14.91	2,282	95,604	742	0.5	9.29
74	6508	WESTERN	11	0.50	18	187	1	9	0.33	4	-	-	0	0	Yes	2.46	0.41	2.04	22	187	1	0.1	8.51
75	6522	WESTERN	112	17.21	1,327	165,899	1,391	35	3.48	458	3,034	23	2	0	No	22.46	3.49	18.97	1,785	168,933	1,414	0.1	8.28
76	6532	WESTERN	108	23.11	1,804	509,891	3,098	8	0.36	301	1,243	6	0	1	No	24.70	0.36	24.33	2,105	511,134	3,104	0.1	8.48
77	6542	WESTERN	59	14.15	1,528	88,406	970	15	1.31	235	-	-	0	2	No	19.25	1.31	17.94	1,763	88,406	970	0.5	10.21
78	6572	WESTERN	115	21.41	1,608	431,006	2,148	20	0.84	179	204	2	0	0	No	24.37	0.84	23.52	1,787	431,210	2,150	3	9.11

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	(a) Feeder ID	(b) Sub Region	(c) Number of OH Lateral Lines	(d) Number of OH Lateral Miles	(e) Number of Customers served on OH Lateral Lines	(f) CMI for OH Lateral Lines	(g) CI for OH Lateral Lines	(h) Number of UG Lateral Lines	(i) Number of UG Lateral Miles	(j) Number of Customers served on UG Lateral Lines	(k) CMI for UG Lateral Lines	(l) CI for UG Lateral Lines	(m) Number of Automatic line Sectionalizing devices on the Lateral Lines	(n) Number of Automatic line Sectionalizing devices on the Feeder	(o) Whether the feeder Circuit is Loop	(p) Total Length of the Feeder Circuit	(q) Length of UG portion of the Feeder Circuit	(u) Length of OH portion of the Feeder Circuit	(v) Number of customers served by OH Feeders	(w) CMI for OH Feeders	(x) CI for OH Feeders	(y) Load Growth %	(z) Peak Load MVA
79	6582	WESTERN	102	18.89	1,513	205,113	1,566	5	0.31	28	-	-	0	1	Yes	21.28	0.31	20.97	1,541	205,113	1,566	0.5	6.28
80	6592	WESTERN	20	2.29	190	20,411	248	8	0.97	156	49	1	0	0	No	6.58	0.97	5.61	346	20,460	249	0.1	8.14
81	6602	WESTERN	30	6.36	544	143,361	450	4	0.12	19	-	-	0	0	Yes	7.79	0.12	7.67	563	143,361	450	0.5	2.21
82	6612	WESTERN	57	15.62	1,280	898,778	1,490	5	0.11	4	-	-	1	0	Yes	18.06	0.20	17.85	1,284	898,778	1,490	0.1	8.47
83	6622	WESTERN	45	7.71	782	70,359	824	4	0.12	11	-	-	0	1	Yes	9.33	0.27	9.06	793	70,359	824	0.5	3.88
84	6632	WESTERN	85	8.42	624	74,466	804	10	0.96	16	-	-	0	2	Yes	11.38	0.96	10.43	640	74,466	804	0.5	8.80
85	6642	WESTERN	62	10.51	570	11,433	86	7	0.37	5	149	1	1	0	Yes	12.57	0.37	12.20	575	11,583	87	0.5	7.24
86	6652	WESTERN	159	27.26	2,333	155,140	1,782	10	0.93	151	23,832	183	0	3	Yes	29.51	0.93	28.59	2,484	178,972	1,965	0.5	11.50
87	6662	WESTERN	83	16.43	997	89,716	582	23	3.77	354	-	-	0	0	Yes	25.02	3.77	21.25	1,351	89,716	582	0.1	8.53
88	6678	WESTERN	51	16.99	1,696	237,515	1,754	25	5.61	710	10,339	23	0	1	No	25.43	5.61	19.82	2,406	247,854	1,777	0.1	9.40
89	6682	WESTERN	33	9.83	737	121,030	1,253	12	2.42	210	-	-	0	1	Yes	16.47	2.42	14.05	947	121,030	1,253	0.1	5.31
90	6692	WESTERN	54	13.77	1,138	146,319	3,011	12	2.97	492	67,446	243	0	1	Yes	19.08	2.97	16.11	1,630	213,765	3,254	1	5.93
91	6706	WESTERN	51	12.75	806	107,884	857	4	0.11	4	-	-	0	0	Yes	14.96	0.11	14.85	810	107,884	857	0.5	6.21
92	6716	WESTERN	69	12.58	846	286,981	1,208	17	1.11	163	-	-	1	0	Yes	18.51	1.11	17.40	1,009	286,981	1,208	0.1	6.24
93	6722	WESTERN	0	0.00	1	-	-	0	0.00	-	-	-	0	0	No	0.70	0.06	0.64	1	-	-	0.1	7.50
94	6732	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.60	0.05	0.55	-	-	-	0.1	10.76
95	6742	WESTERN	28	10.62	1,142	11,573	87	11	7.04	542	17,494	192	0	0	Yes	21.33	7.12	14.21	1,684	29,067	279	0.1	8.71
96	6774	WESTERN	60	15.81	709	199,314	2,379	32	2.31	88	1,114	3	0	0	Yes	21.79	2.31	19.49	797	200,428	2,382	1.5	7.77
97	6782	WESTERN	106	29.94	1,047	460,195	2,318	22	7.46	706	-	-	2	0	Yes	41.49	7.46	34.03	1,753	460,195	2,318	1	10.01
98	6792	WESTERN	152	34.37	1,206	213,249	1,860	40	12.42	1,057	9,987	73	1	0	No	48.89	12.42	36.46	2,263	223,237	1,933	1	12.34
99	6912	WESTERN	132	33.85	912	150,326	1,428	18	6.44	312	-	-	0	0	Yes	41.88	6.44	35.44	1,224	150,326	1,428	0.5	7.57
100	6922	WESTERN	164	46.95	1,184	66,513	445	4	2.32	110	-	-	3	0	Yes	50.50	2.32	48.17	1,294	66,513	445	0.5	5.82
101	6932	WESTERN	99	23.27	878	39,048	328	23	12.25	701	98,600	436	0	0	No	39.88	12.25	27.63	1,579	137,648	764	1	7.92
102	6942	WESTERN	279	54.70	1,473	228,139	1,297	15	2.54	136	720	4	3	0	Yes	60.11	2.54	57.57	1,609	228,859	1,301	0.5	7.13
103	6966	WESTERN	1	0.39	-	-	-	1	0.02	-	-	-	0	0	No	0.42	0.02	0.41	-	-	-	0.1	0.89
104	6982	WESTERN	9	10.00	9	-	-	0	0.00	-	-	-	0	0	No	10.58	0.00	10.58	9	-	-	0.1	0.01
105	6992	WESTERN	103	20.81	1,048	195,524	2,031	31	19.47	1,158	40,529	195	0	0	Yes	45.06	19.47	25.59	2,206	236,053	2,226	1.5	15.92
106	7012	WESTERN	134	34.37	1,768	196,647	2,223	17	4.57	304	621	8	0	1	No	42.04	4.57	37.48	2,072	197,268	2,231	0.5	11.18
107	7022	WESTERN	61	11.76	587	51,232	733	15	3.99	209	18,385	110	0	0	Yes	19.52	3.99	15.53	796	69,617	843	0.5	6.16
108	7032	WESTERN	48	8.96	538	19,402	222	14	4.42	324	8,608	38	0	0	No	15.28	4.42	10.86	862	28,010	260	0.5	4.70
109	7042	WESTERN	79	21.78	899	138,532	1,352	19	13.94	644	105	1	0	1	No	39.90	13.94	25.96	1,543	138,637	1,353	1	7.98
110	7112	WESTERN	119	23.51	1,122	168,793	1,505	24	6.84	494	13,767	47	0	1	Yes	31.56	6.84	24.73	1,616	182,560	1,552	0.1	7.59
111	7122	WESTERN	124	22.94	723	103,500	518	32	21.87	849	31,056	122	0	1	Yes	48.71	21.87	26.84	1,572	134,556	640	1.5	11.40
112	7132	WESTERN	124	18.68	905	142,036	958	23	8.86	545	1,861	41	0	0	Yes	32.26	8.86	23.40	1,450	143,897	999	0.1	7.77
113	7157	WESTERN	1	0.39	-	-	-	1	0.08	1	-	-	0	1	No	0.49	0.08	0.41	1	-	-	n/a	n/a
114	7172	WESTERN	83	20.99	921	257,715	1,143	18	5.83	249	930	7	0	1	No	30.99	5.83	25.16	1,170	258,645	1,150	0.5	5.82
115	7232	WESTERN	198	51.26	1,844	325,909	2,363	51	8.30	407	-	-	0	2	Yes	64.39	8.30	56.09	2,251	325,909	2,363	1	11.31
116	7252	WESTERN	166	38.98	1,387	496,197	3,366	42	14.92	1,005	24,546	127	0	0	Yes	57.19	14.92	42.27	2,392	520,743	3,493	1.5	12.46
117	7262	WESTERN	184	66.71	2,582	452,745	3,860	21	6.03	371	35,896	140	1	0	Yes	75.14	6.03	69.11	2,953	488,641	4,000	0.5	12.51
118	7272	WESTERN	240	72.45	2,274	366,935	2,391	29	2.85	219	825	7	2	1	Yes	78.10	2.85	75.25	2,493	367,760	2,398	0.5	13.00
119	7282	WESTERN	104	24.89	1,393	33,895	283	22	3.94	216	448	6	0	1	Yes	33.23	3.94	29.29	1,609	34,343	289	0.1	10.11
120	7292	WESTERN	128	28.43	1,552	117,718	1,175	18	4.50	417	-	-	0	1	Yes	37.46	4.50	32.96	1,969	117,718	1,175	0.5	11.28
121	7302	WESTERN	1	0.08	-	-	-	1	0.55	1	-	-	0	0	No	0.66	0.55	0.10	1	-	-	0.1	0.32
122	7332	WESTERN	77	19.06	529	273,256	1,652	29	18.20	962	18,798	154	0	0	Yes	39.11	18.20	20.91	1,491	292,055	1,806	1	8.52
123	7342	WESTERN	142	22.44	1,061	13,608	47	78	15.26	2,266	744	2	0	0	Yes	42.04	15.54	26.50	3,327	14,352	49	2	7.40
124	7352	WESTERN	40	12.70	1,008	146,813	1,164	25	7.43	1,306	64,367	1,357	0	1	Yes	22.64	7.43	15.21	2,314	211,181	2,521	0.1	8.55
125	7362	WESTERN	38	5.89	315	227,650	2,432	49	6.66	1,642	53,043	378	0	0	Yes	15.73	6.85	8.89	1,957	280,693	2,810	1	12.42
126	7372	WESTERN	68	12.61	823	90,667	541	32	28.36	1,892	14,922	101	0	0	Yes	43.90	28.36	15.53	2,715	105,588	642	0.5	13.84
127	7402	WESTERN	0	0.01	-	265,420	1,883	1	0.03	2	-	-	0	0	Yes	1.89	0.09	1.80	2	265,420	1,883	0.5	1.08
128	7404	WESTERN	58	7.43	912	181,332	1,545	24	1.60	59	504	3	0	0	Yes	11.31	1.75	9.56	971	181,836	1,548	0.1	10.03
129	7406	WESTERN	109	17.34	1,906	498,122	6,346	10	0.60	168	9,044	51	2	0	Yes	22.39	1.04	21.35	2,074	507,166	6,397	0.1	9.57
130	7408	WESTERN	16	2.26	250	37,741	658	6	0.39	14	-	-	0	0	Yes	3.85	0.44	3.41	264	37,741	658	0.1	2.87
131	7410	WESTERN	3	0.24	30	-	-	0	0.00	-	-	-	0	0	Yes	2.30	0.13	2.18	30	-	-	0.1	2.02
132	7414	WESTERN	5	0.37	90	450	2	4	0.10	1	-	-	0	0	Yes	2.91	0.84	2.07	91	450	2	0.1	2.41
133	7416	WESTERN	77	7.10	723	58,864	464	23	1.69	45	108	1	0	1	Yes	12.00	1.91	10.09	768	58,971	465	0.1	9.07
134	7492	WESTERN	125	29.28	786	305,847	2,244	9	0.95	65	-	-	0	0	Yes	33.54	0.95	32.59	851	305,847	2,244	0.1	5.25
135	7512	WESTERN	95	17.52	1,225	156,309	988	33	4.80	448	-	-	0	1	Yes	25.00	4.80	20.20	1,673	156,309	988	1.5	10.12
136	7522	WESTERN	49	12.09	842	100,529	864	37	10.45	550	50,093	214	0	0	Yes	23.59	10.45	13.15	1,392	150,622	1,078	0.5	11.72
137	7532	WESTERN	10	2.39	106	50,797	130	7	17.31	1,190	106,238	521	0	1	Yes	24.42	21.12	3.30	1,296	157,035	651	1	6.14
138	7542	WESTERN	0	0.00	-	-	-	1	5.94	349	34,357	281	0	0	Yes	11.03	10.23	0.80	349	34,357	281	1	4.79
139	7572	WESTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.01	0.00	0.01	-	-	-	0	0.00
140	7582	WESTERN	159	33.63	2,145	396,444	3,234	19	3.99	316	7,408	38	0	1	Yes	42.58	3.99	38.60	2,461	403,853	3,272	0.1	10.44
141	7592	WESTERN	21	5.29	301	105,107	1,517	13	6.18	586	253	1	0	1	Yes	12.68	6.18	6.50	887	105,360	1,518	0.1	4.38
142	7602	WESTERN	29	3.60	193	16,996	241	38	3.48	448	10,153	179	0	0	Yes	9.59	3.60	5.98	641	27,149	420	0.1	4.41
143	7612	WESTERN	86	13.70	1,161	112,109	519	48	5.22	715	1,923	17	0	2	Yes	22.08	5.26	16.83	1,876	114,033	536	0.5	12.03
144	7622	WESTERN	47	9.74	949	39,136	359	19	2.49	353	8,784	36	0	0	Yes	14.38	2.49	11.88	1,302	47,920	395	0.5	7.34
145	7632	WESTERN	94	11.79	1,109	96,656	796	13	4.86	459	28,830	150	0	0	Yes	19.87	4.86	15.01	1,568	125,486	946	0.1	7.73
146	7642	WESTERN	42	9.53	926	30,949	265	20	3.67	548	7,093	33	1	1	Yes	15.95	3.67	12.29	1,474	38,042	298	0.5	6.77
147	7652	WESTERN	12	0.75	37	409	5	25	3.66	108	-	-	0	0	Yes	7.64	3.87	3.77	145	409	5	0.1	7.33
148	7662	WESTERN	76	16.80	1,122	339,772	3,150	27	7.08	785	7,903	40	0	0	No	26.84	7.08	19.76	1,907	347,674	3,190	1	11.38
149	7682	WESTERN	67	12.25	1,047	339,260	3,633	33	8.03	1,075	37,465	177	1	0	No	23.26	8.22	15.04	2,122	376,725	3,810	0.1	9.38
150	7692	WESTERN	7	1.52	106	1,239	8	7	0.51	9	-	-	0	0	Yes	3.58	0.51	3.07	115	1,239	8	0.1	1.45
151	7702	WESTERN	44	10.30	985	327,394	1,495	11	6.38	501	5,929	28	0	1	Yes	19.86	6.38	13.48	1,486	333,323	1,523	1	8.38
152	7712	WESTERN	42	9.66	671	76,821	980	5	1.31	130	-	-	0	1	Yes	12.69	1.31	11.38	801	76,821	980	0.1	3.72
153	7722	WESTERN	46	12.37	1,027	33,039	365	1	0.74	48	3,085	48	0	0	Yes	16.32	0.74	15.58	1,075	36,124	413	0.5	4.55
154	7742	WESTERN	56	18.24	1,833	550,694	1,913	14	1.83	275	2,516	22	0	3	Yes	24.10	1.83	22.27	2,108	553,210	1,935	0.1	8.25
155	7752	WESTERN	78	19.66	1,336	506,562	4,095	33	5.88	753	17,885	121	0	0	Yes	28.18	5.88	22.30	2,089	524,447	4,216	0.1	9.62

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	(a) Feeder ID	(b) Sub Region	(c) Number of OH Lateral Lines	(d) Number of OH Lateral Miles	(e) Number of Customers served on OH Lateral Lines	(f) CMI for OH Lateral Lines	(g) CI for OH Lateral Lines	(h) Number of UG Lateral Lines	(i) Number of UG Lateral Miles	(j) Number of Customers served on UG Lateral Lines	(k) CMI for UG Lateral Lines	(l) CI for UG Lateral Lines	(m) Number of Automatic line Sectionalizing devices on the Lateral Lines	(n) Number of Automatic line Sectionalizing devices on the Feeder	(o) Whether the feeder Circuit is Loop	(p) Total Length of the Feeder Circuit	(q) Length of UG portion of the Feeder Circuit	(u) Length of OH portion of the Feeder Circuit	(v) Number of customers served by OH Feeders	(w) CMI for OH Feeders	(x) CI for OH Feeders	(y) Load Growth %	(z) Peak Load MVA
156	7762	WESTERN	50	12.05	1,243	204,971	1,479	5	0.40	68	-	-	0	1	Yes	14.86	0.40	14.46	1,311	204,971	1,479	0.1	5.71
157	7772	WESTERN	40	6.27	393	55,083	386	11	1.33	234	7,672	94	0	1	Yes	9.96	1.33	8.63	627	62,755	480	0.1	6.32
158	7782	WESTERN	78	11.92	1,002	54,608	382	12	1.12	144	145	1	0	2	Yes	17.22	1.12	16.10	1,146	54,753	383	0.5	11.25
159	7792	WESTERN	93	21.52	1,387	118,298	1,813	19	9.36	685	2,957	26	2	0	Yes	32.75	9.36	23.38	2,072	121,255	1,839	2	11.37
160	7802	WESTERN	26	3.90	278	10,865	70	30	5.25	718	291	1	0	1	No	12.56	5.25	7.31	996	11,156	71	1	12.19
161	7822	WESTERN	44	7.45	426	96,659	1,299	28	7.54	1,417	157,458	478	0	0	Yes	17.91	7.54	10.36	1,843	254,117	1,777	0.5	7.68
162	7832	WESTERN	122	32.22	1,840	436,252	4,413	21	9.15	1,154	15,607	98	2	0	No	43.02	9.15	33.88	2,994	451,859	4,511	0.5	12.27
163	7842	WESTERN	149	30.03	1,634	178,236	1,198	43	11.58	919	13,687	95	1	2	Yes	45.82	11.58	34.24	2,553	191,924	1,293	0.5	14.42
164	7872	WESTERN	33	5.77	350	43,988	431	19	1.48	64	-	-	0	0	Yes	9.50	1.48	8.03	414	43,988	431	0.5	11.31
165	7882	WESTERN	54	9.78	644	68,751	476	30	3.95	257	329	3	0	0	Yes	16.71	3.95	12.76	901	69,079	479	2	13.02
166	7892	WESTERN	0	0.00	13	-	-	1	1.02	88	-	-	0	0	No	1.57	1.02	0.56	101	-	-	0.5	12.77
167	7902	CENTRAL	178	46.84	1,627	73,343	690	31	5.11	261	16,070	105	2	2	No	55.02	5.11	49.91	1,888	89,413	795	0.5	12.33
168	7912	CENTRAL	162	57.84	1,555	302,535	2,298	15	1.22	51	-	-	0	4	No	63.51	1.22	62.29	1,606	302,535	2,298	0.5	7.99
169	7922	WESTERN	85	13.69	921	96,813	1,056	32	14.78	1,087	9,936	51	0	0	Yes	31.03	14.78	16.25	2,008	106,748	1,107	1	10.49
170	7932	WESTERN	70	12.32	1,003	76,520	2,189	55	8.48	981	10,279	39	0	3	Yes	24.63	8.48	16.15	1,984	86,799	2,228	0.1	14.28
171	7942	WESTERN	55	5.48	539	6,046	37	27	2.54	137	523	5	0	0	Yes	12.48	3.22	9.26	676	6,570	42	1.5	10.33
172	7952	CENTRAL	22	9.14	176	35,842	252	3	0.23	4	-	-	0	0	No	13.07	0.23	12.83	180	35,842	252	0.1	1.34
173	7962	CENTRAL	50	17.61	295	58,662	490	2	0.12	1	-	-	0	0	No	18.47	0.12	18.35	296	58,662	490	0.1	1.34
174	8012	EASTERN	3	0.54	14	-	-	8	0.51	6	-	-	0	0	No	2.33	0.67	1.66	20	-	-	0.1	1.32
175	8032	EASTERN	33	22.02	197	16,530	84	23	11.23	36	444	2	0	2	No	36.18	11.23	24.95	233	16,974	86	0.1	1.59
176	8062	EASTERN	129	65.00	1,349	396,624	2,884	51	10.21	494	13,970	163	11	3	Yes	80.93	10.21	70.72	1,843	410,594	3,047	1.5	13.54
177	8112	EASTERN	52	10.83	1,528	72,503	593	32	2.45	1,960	112,577	431	0	0	No	15.50	3.07	12.43	3,488	185,081	1,024	0.5	12.36
178	8122	EASTERN	31	5.21	223	9,021	141	25	12.95	1,375	42,643	288	0	1	Yes	19.79	12.95	6.85	1,598	51,664	429	2	15.00
179	8132	EASTERN	38	11.09	368	91,361	809	46	33.32	1,820	30,113	116	1	0	No	47.45	33.32	14.12	2,188	121,474	925	3	11.22
180	8162	CENTRAL	49	13.42	435	179,113	1,365	53	24.51	1,507	16,366	130	0	2	No	39.74	24.72	15.01	1,942	195,480	1,495	4	11.69
181	8172	CENTRAL	3	1.13	22	88,833	319	15	17.19	1,721	4,914	26	0	0	Yes	19.08	17.94	1.13	1,743	93,747	345	3	12.05
182	8182	CENTRAL	0	0.00	-	6,930	154	14	4.31	1,153	6,372	157	0	0	Yes	6.62	5.40	1.22	1,153	13,302	311	0.5	8.69
183	8202	EASTERN	88	24.39	1,455	140,901	1,333	30	5.26	572	20,193	122	0	4	Yes	31.64	5.26	26.38	2,027	161,094	1,455	0.1	11.42
184	8222	EASTERN	0	0.85	3	57	1	5	21.86	883	74,138	378	0	0	No	22.79	21.86	0.92	886	74,195	379	0.1	7.04
185	8232	EASTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.02	0.00	0.02	-	-	-	0.1	4.74
186	8252	EASTERN	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.02	0.00	0.02	-	-	-	0.1	1.96
187	8262	EASTERN	8	3.20	1	6,137	18	4	0.81	8	-	-	0	1	No	7.41	0.81	6.60	9	6,137	18	0.1	10.88
188	8282	EASTERN	110	23.03	1,999	66,382	496	44	5.63	735	36,290	160	0	1	Yes	32.51	5.63	26.88	2,734	102,671	656	0.1	10.95
189	8332	EASTERN	95	36.12	1,803	344,594	2,625	71	22.49	1,374	48,540	200	1	1	Yes	62.83	22.49	40.35	3,177	393,134	2,825	0.1	13.23
190	8342	EASTERN	97	27.76	1,985	161,933	1,075	42	3.18	464	-	-	4	2	Yes	32.57	3.18	29.39	2,449	161,933	1,075	0.1	11.74
191	8352	EASTERN	68	13.34	1,153	499,888	2,380	28	2.92	1,690	9,515	65	1	0	No	17.00	2.92	14.08	2,843	509,402	2,445	2	12.10
192	8362	EASTERN	58	16.66	792	8,684	108	33	12.57	2,088	44,338	295	1	1	No	31.13	12.57	18.55	2,880	53,022	403	2	10.49
193	8372	EASTERN	13	1.46	116	10,791	34	17	5.92	775	28,596	59	0	0	Yes	8.78	5.92	2.86	891	39,387	93	2	11.26
194	8382	EASTERN	7	0.75	27	62,051	303	7	1.22	87	74	1	0	0	Yes	2.94	1.23	1.71	114	62,125	304	1	9.94
195	8392	EASTERN	64	13.51	1,212	103,060	939	15	1.80	278	525	2	1	2	Yes	17.59	1.80	15.78	1,490	103,585	941	0.5	8.31
196	8412	EASTERN	89	14.41	1,259	25,680	444	42	2.20	383	-	-	0	1	Yes	20.54	2.20	18.34	1,642	25,680	444	2	12.62
197	8432	EASTERN	73	12.97	1,365	158,460	1,535	14	1.12	269	136,318	475	0	3	Yes	15.88	1.12	14.76	1,634	294,778	2,010	0	7.05
198	8442	EASTERN	70	9.91	1,008	56,816	392	13	0.96	119	-	-	0	3	Yes	13.30	0.96	12.34	1,127	56,816	392	0.5	6.27
199	8452	EASTERN	36	5.90	249	22,783	196	56	7.89	709	4,676	41	0	1	Yes	16.18	7.89	8.28	958	27,459	237	0.1	11.51
200	8472	EASTERN	110	20.74	2,130	46,941	502	24	3.10	496	396	4	0	1	Yes	27.99	3.15	24.84	2,626	47,337	506	0.5	11.02
201	8482	EASTERN	49	10.44	590	24,078	869	33	2.16	237	-	-	0	1	Yes	16.33	2.16	14.17	827	24,078	869	0.1	11.83
202	8492	EASTERN	29	3.19	262	12,316	168	12	1.29	115	-	-	0	0	Yes	6.17	1.29	4.88	377	12,316	168	0.1	3.19
203	8512	EASTERN	46	16.51	845	119,374	1,188	44	13.86	1,652	6,800	48	2	0	No	31.50	14.86	16.65	2,497	126,173	1,236	2	13.27
204	8522	EASTERN	52	12.24	642	284,390	2,508	47	19.00	1,912	49,304	342	1	0	No	34.31	19.19	15.12	2,554	333,694	2,850	1	14.53
205	8532	EASTERN	23	3.18	144	25,118	167	30	2.98	1,608	202	3	0	0	No	6.94	2.98	3.96	1,752	25,320	170	0.5	11.52
206	8542	EASTERN	27	1.36	169	13,146	196	16	1.78	3,128	-	-	0	0	Yes	4.79	1.81	2.98	3,297	13,146	196	3	13.04
207	8552	EASTERN	21	3.56	300	117,636	520	25	4.80	1,390	19,834	177	0	0	Yes	11.63	4.82	6.81	1,690	137,470	697	0.5	8.22
208	8562	EASTERN	78	11.71	1,141	52,925	442	44	9.79	1,397	7,423	74	3	0	Yes	27.49	10.13	17.36	2,538	60,348	516	0.5	12.00
209	8572	EASTERN	114	22.33	1,867	189,553	1,084	40	5.59	718	16,477	81	1	3	Yes	33.25	5.59	27.66	2,585	206,030	1,165	0.5	13.99
210	8582	EASTERN	53	11.67	1,128	71,264	2,237	19	8.37	1,865	71,865	348	1	0	Yes	21.99	8.37	13.63	2,993	143,129	2,585	2	14.75
211	8592	EASTERN	0	0.46	12	318	-	11	0.35	-	-	-	0	0	Yes	1.81	0.35	1.46	12	318	-	0.5	5.15
212	8602	EASTERN	101	23.16	1,240	509,940	3,849	44	19.48	1,414	70,375	697	4	0	No	45.25	19.48	25.78	2,654	580,315	4,546	2.5	12.91
213	8612	EASTERN	48	12.68	559	51,834	374	15	4.69	107	1,439	5	3	1	Yes	22.08	4.69	17.39	666	53,273	379	0.5	4.80
214	8622	EASTERN	90	16.60	794	265,358	2,366	37	11.50	636	20,478	190	0	1	Yes	34.49	11.50	22.99	1,430	285,836	2,556	0.5	11.71
215	8642	EASTERN	58	9.57	1,231	73,294	607	45	10.52	1,321	29,680	308	0	0	Yes	21.99	10.52	11.47	2,552	102,974	915	0.5	10.04
216	8672	EASTERN	30	7.23	309	205,758	2,062	48	24.44	1,832	71,170	388	1	1	Yes	34.13	24.44	9.69	2,141	276,927	2,450	2	12.99
217	8682	EASTERN	58	11.92	1,224	32,117	537	40	9.70	1,965	50,856	231	3	0	No	23.00	9.70	13.30	3,189	82,973	768	1	12.35
218	8702	EASTERN	70	17.90	1,760	544,292	2,433	16	0.87	94	282	6	0	2	Yes	21.76	0.87	20.89	1,854	544,574	2,439	0.1	8.18
219	8712	EASTERN	70	15.00	1,332	52,400	381	30	3.18	122	-	-	1	3	Yes	21.90	3.24	18.66	1,454	52,400	381	0.5	13.02
220	8722	EASTERN	121	28.05	1,996	191,292	1,640	20	1.33	201	1,131	8	1	3	Yes	30.66	1.33	29.34	2,197	192,423	1,648	0.1	10.22
221	8732	EASTERN	88	20.63	2,091	500,483	4,127	19	1.54	242	9,842	26	4	2	Yes	24.06	1.63	22.43	2,333	510,325	4,153	0.1	10.60
222	8782	EASTERN	37	6.32	256	37,754	216	40	2.76	226	-	-	0	1	Yes	12.08	2.78	9.29	482	37,754	216	0.5	9.38
223	8792	EASTERN	171	41.32	2,607	378,452	3,015	30	4.02	381	178	1	4	1	No	46.97	4.02	42.94	2,988	378,630	3,016	0.5	13.04
224	8802	EASTERN	86	22.35	1,373	63,984	372	38	14.48	1,197	87,995	338	2	3	No	38.13	14.48	23.65	2,570	151,979	710	0.1	13.25
225	8812	EASTERN	74	18.54	1,274	81,298	836	59	11.00	1,425	46,788	221	1	1	No	31.86	11.00	20.85	2,699	128,086	1,057	1.5	14.12
226	8822	EASTERN	97	24.42	1,527	96,844	921	53	9.67	1,723	-	-	3	1	Yes	36.01	9.67	26.34	3,250	96,844	921	1	15.77
227	8842	CENTRAL	19	2.77	230	450,796	3,228	57	15.38	1,290	55,016	554	0	0	Yes	20.42	15.38	5.04	1,520	505,812	3,782	2	16.91
228	8852	EASTERN	84	20.34	1,521	149,465	1,507	15	1.30	146	369	6	2	3	No	24.87	1.30	23.57	1,667	149,834	1,513	0.1	8.36
229	8872	CENTRAL	22	5.70	318	126,434	1,123	30	6.99	599	107,292	324	0	0	Yes	14.78	6.99	7.78	917	233,726	1,447	1	9.38
230	8882	CENTRAL	21	3.60	670	3,174	34	55	8.73	2,092	5,538	45	0	0	Yes	14.54	9.67	4.87	2,762	8,713	79	1	8.84
231	8892	CENTRAL	30	5.04	519	16,753	154	43	9.16	1,880	37,236	324	1	0	Yes	17.58	10.51	7.06	2,399	53,989	478	0.5	11.81
232	8932	CENTRAL	83	25.87	690	45,406	600	18	4.08	196	-	-	0	1	No	32.95	4.08	28.87	886	45,406	600	1	6.87
233	8942	CENTRAL	12	1.56	32	538	7	8	0.29	8	487	1	0	0	No	3.49	0.29	3.20	40	1,025	8	3	1.49

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	(a) Feeder ID	(b) Sub Region	(c) Number of OH Lateral Lines	(d) Number of OH Lateral Miles	(e) Number of Customers served on OH Lateral Lines	(f) CMI for OH Lateral Lines	(g) CI for OH Lateral Lines	(h) Number of UG Lateral Lines	(i) Number of UG Lateral Miles	(j) Number of Customers served on UG Lateral Lines	(k) CMI for UG Lateral Lines	(l) CI for UG Lateral Lines	(m) Number of Automatic line Sectionalizing devices on the Lateral Lines	(n) Number of Automatic line Sectionalizing devices on the Feeder	(o) Whether the feeder Circuit is Loop	(p) Total Length of the Feeder Circuit	(q) Length of UG portion of the Feeder Circuit	(u) Length of OH portion of the Feeder Circuit	(v) Number of customers served by OH Feeders	(w) CMI for OH Feeders	(x) CI for OH Feeders	(y) Load Growth %	(z) Peak Load MVA
234	8952	EASTERN	9	10.58	1	266	1	3	0.29	-	-	-	0	0	No	11.28	0.29	10.99	1	266	1	0	0.45
235	8962	EASTERN	58	14.00	1,220	72,556	522	45	12.83	1,528	97,171	456	1	0	No	28.60	12.83	15.77	2,748	169,727	978	0.5	10.80
236	8972	EASTERN	86	32.18	2,390	444,454	2,760	21	14.43	887	12,779	85	0	1	No	48.02	14.51	33.51	3,277	457,234	2,845	1	14.34
237	8982	CENTRAL	15	1.74	91	355,115	2,105	36	18.47	1,802	17,496	474	0	0	Yes	24.27	18.47	5.80	1,893	372,611	2,579	4	16.14
238	8992	CENTRAL	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.00	0.00	0.00	-	-	-	0	0.00
239	9042	CENTRAL	59	9.68	483	78,497	699	62	25.56	2,137	14,249	130	0	0	Yes	36.60	25.61	10.99	2,620	92,746	829	2	13.57
240	9052	CENTRAL	46	10.66	1,146	42,108	570	34	4.76	704	10,246	82	0	0	Yes	19.57	4.79	14.78	1,850	52,353	652	0.2	10.57
241	9062	CENTRAL	18	1.72	171	105,905	707	18	6.04	719	3,231	27	0	0	No	8.16	6.04	2.12	890	109,136	734	2	5.01
242	9082	CENTRAL	17	3.72	272	2,075	14	41	9.09	2,299	71,531	815	1	0	Yes	17.89	10.53	7.35	2,571	73,606	829	0.5	11.85
243	9092	EASTERN	5	2.38	8	720	2	0	0.00	-	-	-	0	0	No	4.95	0.00	4.95	8	720	2	0	0.20
244	9112	EASTERN	83	44.19	989	189,444	1,542	22	2.56	147	-	-	4	3	No	47.91	2.56	45.35	1,136	189,444	1,542	0.1	5.64
245	9122	EASTERN	14	6.97	225	45,001	665	6	0.65	8	462	2	1	0	No	8.37	0.70	7.66	233	45,463	667	0.5	7.01
246	9132	CENTRAL	85	13.12	830	75,755	573	74	11.93	1,373	13,229	77	0	0	Yes	26.61	12.30	14.32	2,203	88,985	650	1	10.80
247	9142	CENTRAL	117	19.79	1,632	157,954	1,157	41	4.51	447	1,707	9	0	0	Yes	27.41	4.79	22.62	2,079	159,661	1,166	0.5	10.86
248	9152	CENTRAL	78	13.41	1,222	136,930	826	45	3.67	516	3,132	6	0	1	No	21.20	3.67	17.53	1,738	140,062	832	0.1	8.94
249	9162	CENTRAL	59	13.70	794	173,115	1,834	11	2.46	333	12,006	69	0	1	No	17.96	2.46	15.50	1,127	185,121	1,903	0.1	5.87
250	9172	CENTRAL	47	14.71	1,345	99,292	1,538	24	9.90	773	2,051	24	0	0	No	26.62	9.90	16.72	2,118	101,342	1,562	0.1	9.40
251	9182	CENTRAL	160	71.28	779	68,634	347	10	0.98	13	137	3	1	1	No	74.80	0.98	73.82	792	68,770	350	1	5.72
252	9192	CENTRAL	129	37.41	2,094	92,420	1,795	20	3.17	224	10,738	85	0	2	Yes	44.82	3.17	41.65	2,318	103,158	1,880	1	10.53
253	9202	EASTERN	71	32.84	668	123,463	1,027	10	0.82	36	-	-	3	2	Yes	38.22	0.82	37.40	704	123,463	1,027	0.1	5.65
254	9212	EASTERN	158	83.96	1,616	166,277	2,075	22	1.71	69	-	-	7	1	No	88.03	1.71	86.32	1,685	166,277	2,075	1	7.33
255	9222	EASTERN	64	21.64	896	130,972	651	33	2.14	95	127	2	0	4	Yes	29.41	2.14	27.26	991	131,099	653	1	8.94
256	9232	CENTRAL	93	23.31	1,623	217,094	2,633	19	1.98	203	11,804	57	1	1	No	27.10	1.98	25.12	1,826	228,898	2,690	0.5	8.45
257	9242	CENTRAL	61	16.97	724	175,035	1,155	44	8.20	810	25,722	237	1	2	Yes	27.02	8.20	18.82	1,534	200,757	1,392	2	11.30
258	9252	CENTRAL	86	18.60	1,313	155,525	1,954	49	15.23	850	6,739	37	1	0	Yes	37.49	15.23	22.26	2,163	162,264	1,991	0.5	10.51
259	9292	CENTRAL	41	11.17	1,469	329,711	2,277	7	0.96	81	-	-	0	0	Yes	15.03	1.07	13.96	1,550	329,711	2,277	0.1	6.80
260	9312	CENTRAL	56	13.23	1,769	45,196	702	19	1.02	256	3,425	32	0	0	Yes	16.46	1.08	15.39	2,025	48,621	734	0.1	8.48
261	9322	CENTRAL	45	8.00	1,102	192,275	2,483	32	2.88	932	22,230	270	0	1	Yes	13.29	2.91	10.38	2,034	214,505	2,753	0.1	8.20
262	9332	CENTRAL	52	10.20	1,052	121,291	1,188	27	4.13	398	11,200	41	0	3	Yes	16.66	4.16	12.50	1,450	132,490	1,229	0.1	7.90
263	9342	CENTRAL	59	9.72	1,146	97,321	937	19	1.20	180	-	-	0	0	Yes	14.50	1.22	13.28	1,326	97,321	937	0.2	7.13
264	9352	CENTRAL	57	12.22	1,427	99,649	1,085	20	2.92	415	22,484	88	0	0	Yes	18.77	2.92	15.85	1,842	122,133	1,173	0.1	8.62
265	9362	CENTRAL	71	14.14	1,543	20,142	235	23	0.73	153	798	4	0	0	Yes	18.04	0.73	17.30	1,696	20,940	239	0.1	9.84
266	9372	CENTRAL	63	13.42	1,412	42,161	780	7	0.16	7	-	-	0	2	Yes	15.64	0.16	15.47	1,419	42,161	780	0.1	7.34
267	9382	CENTRAL	48	7.92	771	97,327	756	14	0.88	359	343	41	0	0	Yes	11.01	0.88	10.13	1,130	97,670	797	0.1	6.67
268	9402	CENTRAL	35	3.92	739	26,715	299	38	1.65	1,868	2,892	16	0	0	Yes	9.38	2.00	7.38	2,607	29,607	315	1	8.43
269	9412	CENTRAL	52	8.01	839	237,490	2,765	30	1.85	1,254	24,481	138	0	0	Yes	12.59	2.12	10.47	2,093	261,971	2,903	0.1	8.70
270	9422	CENTRAL	39	4.53	590	17,391	182	15	0.40	218	-	-	0	0	Yes	7.02	0.40	6.62	808	17,391	182	1	4.56
271	9462	CENTRAL	87	21.22	1,840	99,479	1,486	50	13.30	976	32,632	197	0	0	Yes	36.71	13.30	23.41	2,816	132,111	1,683	1	13.79
272	9472	CENTRAL	57	15.34	1,018	39,531	487	51	24.49	1,197	73,729	560	1	2	No	42.03	24.49	17.54	2,215	113,260	1,047	1	12.40
273	9492	CENTRAL	45	6.72	544	321,269	1,646	29	2.96	652	-	-	0	1	Yes	12.28	3.12	9.16	1,196	321,269	1,646	1	10.39
274	9522	EASTERN	271	147.38	1,553	891,516	8,564	21	4.50	46	230	2	14	0	No	154.31	4.50	149.81	1,599	891,746	8,566	0.1	0.81
275	9532	CENTRAL	23	3.15	147	33,683	349	36	11.69	2,290	6,115	100	0	0	Yes	17.13	11.69	5.44	2,437	39,798	449	0.5	15.32
276	9562	CENTRAL	52	5.36	668	30,382	307	32	3.08	658	171	2	0	0	Yes	10.64	3.46	7.18	1,326	30,552	309	1.5	10.66
277	9572	CENTRAL	12	3.35	407	14,924	178	67	8.12	2,472	57,879	216	0	0	Yes	13.61	8.55	5.06	2,879	72,803	394	1	12.19
278	9582	CENTRAL	0	0.00	-	-	-	0	0.00	-	-	-	0	0	No	0.02	0.00	0.02	-	-	-	0	0.00
279	9592	EASTERN	118	112.95	746	203,484	1,990	34	15.62	321	7,637	38	7	6	No	136.91	15.62	121.29	1,067	211,121	2,028	2	4.10
280	9602	CENTRAL	53	10.28	603	165,014	2,911	26	8.57	951	6,279	53	0	1	Yes	19.92	8.57	11.35	1,554	171,292	2,964	0.5	9.36
281	9612	CENTRAL	81	17.37	1,561	140,672	1,795	34	3.41	676	30,857	185	0	1	Yes	23.22	3.41	19.81	2,237	171,529	1,980	0.1	10.96
282	9622	CENTRAL	85	10.66	918	85,001	1,015	28	2.05	430	30,001	129	0	0	Yes	15.97	2.05	13.92	1,348	115,002	1,144	0.2	10.72
283	9632	CENTRAL	39	4.30	205	820	11	15	0.50	25	532	2	0	1	Yes	6.12	0.50	5.62	230	1,352	13	0.2	7.35
284	9662	CENTRAL	35	10.31	242	15,325	162	4	1.10	16	-	-	0	1	No	13.50	1.10	12.40	258	15,325	162	0.5	2.18
285	9672	CENTRAL	216	58.59	2,473	151,709	3,560	31	8.61	463	286	4	2	0	No	69.74	8.61	61.13	2,936	151,994	3,564	2	15.88
286	9682	CENTRAL	47	11.30	399	30,996	341	36	12.73	899	3,832	16	0	0	Yes	25.68	12.73	12.95	1,298	34,829	357	2	11.77
287	9692	CENTRAL	106	31.89	1,769	69,254	1,544	20	2.62	500	258	3	0	3	Yes	35.59	2.62	32.97	2,269	69,512	1,547	1	9.09
288	9702	EASTERN	1	0.31	1	-	-	0	0.00	-	-	-	0	0	No	3.43	0.00	3.43	1	-	-	0.1	3.34
289	9792	CENTRAL	118	36.40	2,446	251,126	2,631	24	7.10	784	3,069	19	1	0	Yes	46.53	7.10	39.43	3,230	254,195	2,650	5	15.92
290	9802	EASTERN	22	12.63	182	13,213	97	1	0.04	2	-	-	3	1	No	15.65	0.04	15.61	184	13,213	97	0.1	1.25
291	9812	CENTRAL	81	39.55	964	783,205	5,138	50	18.08	1,476	1,009	7	2	0	No	61.23	18.08	43.15	2,440	784,215	5,145	1	12.14
292	9828	CENTRAL	21	7.50	201	7,814	41	3	0.16	7	-	-	0	0	No	11.26	0.16	11.10	208	7,814	41	0.2	1.07
293	9832	EASTERN	244	120.24	2,281	413,092	5,672	29	1.42	90	-	-	13	2	No	122.92	1.42	121.51	2,371	413,092	5,672	0.1	12.96
294	9854	EASTERN	0	0.00	1	-	-	0	0.00	-	-	-	0	0	No	0.05	0.00	0.05	1	-	-	n/a	n/a
295	9912	EASTERN	0	0.14	5	-	-	2	0.08	6	191	1	0	0	No	1.57	0.08	1.49	11	191	1	0.1	2.89
296	15002	CENTRAL	0	0.00	1	-	-	0	0.00	-	-	-	0	0	No	0.02	0.00	0.02	1	-	-	0.1	0.797
297	15062	EASTERN	9	2.38	112	19,329	133	3	9.32	54	-	-	0	0	No	17.80	9.39	8.41	166	19,329	133	0.1	0.91

Appendix 4

Appendix 4

Report on Collaborative Research for Hurricane Hardening

Provided by

The Public Utility Research Center
University of Florida

To the

Utility Sponsor Steering Committee

February 2011

I. Introduction

The Florida Public Service Commission (FPSC) issued Order No. PSC-06-00351-PAA-EI on April 25, 2006 (Order 06-0351) directing each investor-owned electric utility (IOU) to establish a plan that increases collaborative research to further the development of storm resilient electric utility infrastructure and technologies that reduce storm restoration costs and outages to customers. This order directed IOUs to solicit participation from municipal electric utilities and rural electric cooperatives in addition to available educational and research organizations. As a means of accomplishing this task, the IOUs joined with the municipal electric utilities and rural electric cooperatives in the state (collectively referred to as the Project Sponsors) to form a Steering Committee of representatives from each utility and entered into a Memorandum of Understanding (MOU) with the University of Florida's Public Utility Research Center (PURC).

PURC manages the work flow and communications, develops work plans, serves as a subject matter expert, conducts research, facilitates the hiring of experts, coordinates with research vendors, advises the Project Sponsors, and provides reports for Project activities. The collaborative research has focused on undergrounding, vegetation management, hurricane wind speeds at granular levels, and improved materials for distribution facilities.

This report summarizes the work completed on the Steering Committee's areas of focus. Sections II through IV provide information on the undergrounding research, wind research, and vegetation management workshop respectively. The conclusion of this report provides an overall assessment of the collaborative research program to date, including operational and financial viability and future planning to the extent these items are not already covered in the other sections of this report.

Appendix 4

II. Undergrounding

An important consequence of hurricanes is that they often cause major power outages, which can last for days or even weeks. These outages almost always lead to a public outcry for electric utilities to move overhead power lines underground. To some it seems intuitive that undergrounding facilities should protect them from damage. However, research shows that this is not necessarily the case: while underground systems on average have fewer outages than overhead systems, they can sometimes take longer to repair. Furthermore, forensic analyses of hurricane damage in Florida found that underground systems may be particularly susceptible to storm surge.

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

The Project Sponsors contracted with Quanta Technologies for a project involving three phases. Phase I was a meta-analysis of existing research, reports, methodologies, and case studies.[1] Phase II examined specific undergrounding project case studies in Florida and included an evaluation of relevant case studies from other hurricane prone states and other parts of the world.[2] Phase III developed an *ex ante* methodology to identify and evaluate the costs and benefits of undergrounding specific facilities in Florida. Although the primary focus is the impact of undergrounding on hurricane performance, this study also considered benefits and drawbacks of undergrounding during non-hurricane conditions.

For 2010, the collaborative focused on refining the computer model developed by Quanta Technologies in response to Phase III of the overall project. Specifically, there has been a collective effort to learn more about the function and functionality of the computer code, and the testing group has accomplished that. The testers have made significant improvements to the flexibility of selecting input scenarios in which the calculator arrives at results.

The implementation of the calculator component of the model is under refinement. The computer program calculates complex, non-linear interactions between hundreds of input variables. These interactions result in probability distributions of various output parameters including the extent of damage from storm-related events and the time necessary to correct that damage. However, these results are highly sensitive to the input parameters used in the calculation. Some input parameters, like the costs associated with the installation of equipment, are well known to the utilities, but may be accounted for in different ways, depending on the internal accounting and work management systems that the utilities employ. Other inputs, such as the initial availability of repair crews and the rate at which additional crews become available are not known and measurable to the utility at the time the calculations are made. For these input parameters, the utility must employ a reasonable assessment of their value. To the extent that this assessment is not realized, however, actual results may vary greatly from what is originally calculated. The testers have improved their understanding of the extent to which this variation occurs, but

[1] The Phase I report is available at http://www.cba.ufl.edu/purc/docs/initiatives_UndergroundingAssessment.pdf
[2] The Phase II report is available at http://www.cba.ufl.edu/purc/docs/initiatives_UndergroundingAssessment2.pdf

educating users outside of the testing group will be an important step in the implementation process of the calculator.

PURC and the Project Sponsors have also worked to fill information gaps for model inputs through the forensics sub-group. Significant efforts have been invested in developing a forensics data collection form for all utilities to use, towards supplying input information for the undergrounding calculator, and for future research. The data from this form is to be stored in a customized database program developed by PURC. However, since the state has not been affected by any hurricanes since the database software was completed, there is currently no data.

Ted Kury, Director of Energy Studies at PURC, has drafted an academic paper discussing the collaborative effort to address storm hardening in Florida. In November of 2010, he presented this paper at the annual conference of the Organization of Caribbean Utility Regulators. The Caribbean regulators and operators at the event were very interested to see what Florida is doing to address a problem that is common to the state as well as the Caribbean nations. Several countries have expressed interest in helping the effort.

III. Wind Data Collection

Appropriate hardening of the electric utility infrastructure against hurricane winds requires: (1) an accurate characterization of severe dynamic wind loading and (2) an understanding of the likely failure modes for different wind conditions.

The Project Sponsors addressed the first requirement by entering into an agreement with WeatherFlow, Inc., which, at the time, was beginning to establish a granular wind observation network designed to capture the behavior of the dynamic wind field upon hurricane landfall. WeatherFlow has expanded its network to include 50 permanent wind monitoring stations around the coast of Florida. The wind, temperature, and barometric pressure data being collected at these stations has been made available to the Project Sponsors.

To address the second purpose of this project, namely to better understand the likely failure modes for different severe weather conditions, a group was convened through a series of conference calls to improve forensic data consistency. PURC developed a uniform forensics data gathering system for use by the utilities and a database that will allow for data sharing and that will match the forensics data with the wind monitoring and other weather data. Once a hurricane occurs and wind data is captured, forensic investigations of utilities infrastructure failure, conducted by the utility companies, will be overlaid with wind observations to correlate failure modes to wind speed and turbulence characteristics. Project Sponsors and PURC will analyze such data.

IV. Vegetation Management

The goal of this project was to improve vegetation management practices so that vegetation related outages are reduced, vegetation clearing for post-storm restoration is reduced, and

vegetation management is more cost-effective. The initial Vegetation Management workshop was held March 5-6, 2007 and the second Vegetation Management workshop was held January 26-27, 2009. The collaborative is evaluating the opportunity to convene another workshop in 2011.

V. Conclusion

In response to the FPSC's Order 06-0351, IOUs, municipal electric utilities, and rural electric cooperatives joined together and retained PURC to coordinate research on electric infrastructure hardening. For 2010, work has focused on the continued efforts in the areas of undergrounding research, granular wind research, and vegetation management. The Steering Committee is currently considering next steps in these research areas.

The benefits of the research work among the utilities and PURC include increased and sustained collaboration and discussion among the members of the Steering Committee, greater knowledge of the determinants of damage during storm and non-storm times, greater knowledge and data from wind collection stations and post-hurricane forensics in the State of Florida, and continued state-to-state collaboration with others in the Atlantic Basin Hurricane Zone.